Enhancing mental health practice in Sierra Leone: A social intervention development study
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#### **Abstract**

Inadequacy in mental health care in low and middle-income countries has been an important contributor to the rising global burden of disease. The evidence base is building for innovative solutions to reduce the mental health treatment gap. However, what has largely been missing is the development of interventions which incorporate the nature of the social environment that contributes to the risk, cause, and maintenance of mental health conditions. This thesis aimed to explore the potential for social interventions to reduce the mental health treatment gap (greater than 95%) and the burden on resource-poor services in Sierra Leone. This thesis presents a methodological framework for social intervention development in lowresource settings. First, a feasibility and acceptability study examined stakeholder perceptions (n=59) using rapid ethnographic methods. Second, the evidence base and feasibility findings were modelled and validated in focus groups with Sierra Leone stakeholders (n=9) and members of the United Kingdom the Diaspora community (n=5). Third, a pilot study assessed the impact of the adapted intervention on district level mental health nurses' knowledge, skills, attitudes, and behaviour (n=20) using qualitative data and a training evaluation tool developed co-productively with stakeholders. The intervention model endured several iterations as the context in the country changed due to the Ebola outbreak. The pilot study showed post-training improvement of skills in communicating and building relationships with service users, identifying assets and linking to community resources. Barriers to embed the model into nurse practice were identified such as stigma, reluctance to change from district health managers and policy makers, and significant financial and time constraints. This study suggests that it is important to harness local understanding of mental health conditions, build capacity of the existing workforce and enhance community engagement with services for mental health social intervention strategies to be effective.

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#### **Declaration**

I confirm that the work presented in this thesis is my own. Where information has been derived from other sources, I confirm that this has been indicated in the thesis. This work has not previously been presented for an award at this, or any other, university. All sources are acknowledged as references.

Meredith Fendt-Newlin

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Co-authored publications with contributions arising from this thesis

- 1. Fendt-Newlin, M. & Webber, M. (2015). Effectiveness of knowledge translation of social interventions across economic boundaries: a systematic review. *European Journal of Social Work*, 18(4), 543-568.
- 2. Fendt-Newlin, M. & Webber, M. (2015). One size does not fit all, but we can offer a framework for alterations: tailoring mental health social interventions for diverse contexts. *Forum*, issue 39, 20-21.
- 3. Fendt-Newlin, M. (26 August 2015) 'As Sierra Leone waits for Ebola all-clear, its emotional scars will take longer to heal', The Conversation.
- 4. Intervention Model Video (21 September 2015). Sababu model and introduction. Retrieved from <a href="https://youtu.be/i8mj2qnNSvg">https://youtu.be/i8mj2qnNSvg</a>. Published on YouTube. Funded by University of York Rapid Response Fund and produced by Digifish.
- 5. Training Programme Video (23 September 2015). Impact of Ebola on mental health. Retrieved from <a href="https://youtu.be/IaTg5r3LnAw">https://youtu.be/IaTg5r3LnAw</a>. Published on YouTube. Funded by University of York Rapid Response Fund and produced by Digifish.
- 6. Feasibility Video (28 October 2013). Improving mental health care in Sierra Leone. Retrieved from <a href="https://youtu.be/XIXSQMNldF8">https://youtu.be/XIXSQMNldF8</a>. Published on YouTube. Funded by University of York Centre for Chronic Diseases and Disorders (C2D2) and the Wellcome Trust and produced by Digifish.

# Glossary of abbreviations

APA American Psychiatric Association

ACT Assertive Community Treatment

CBT Cognitive Behavioural Therapy

CBR Community based rehabilitation

CHW Community health workers

CMHT Community mental health teams

COMAHS College of Medicine and Allied Health Sciences, Sierra Leone

CPI Connecting People Intervention

DALY Disability adjusted life year

DFID Department for International Development, United Kingdom

DMHU District Mental Health Units

DMO District Medical Officer

DSM-V Diagnostic and Statistical Manual of Mental Disorders, 5<sup>th</sup> edition

EAMH Enabling Access to Mental Health

EBP Evidence-based practice

EVD Ebola Virus Disease

GBD Global burden of disease

GDP Gross domestic product

GMH Global mental health

HDI Human Development Index

HIC High-income countries

HIV/AIDS Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome

IASC United Nations Inter-Agency Standing Committee

IASSW International Association of Schools of Social Work

ICD-10 International Classification of Diseases, 10<sup>th</sup> edition

ICMHSR International Centre for Mental Health Social Research

IFRC International Federation of Red Cross

IFSW International Federation of Social Workers

IPT Interpersonal Psychotherapy

KSLP King's Sierra Leone Partnership

LMIC Low- and middle-income countries

MDG Millennium Development Goals

MHC Mental Health Coalition Sierra Leone

mhGAP Mental Health Gap Action Programme

mhGAP-IG mhGAP Intervention Guide

MHPSS Mental health and psychosocial support

MI Motivational interviewing

MNS Mental, neurological and substance use

MOHS Ministry of Health and Sanitation, Sierra Leone

MOSW Ministry of Social Welfare, Sierra Leone

MRC Medical Research Council, United Kingdom

MSF Médecins Sans Frontières

NGO Non-governmental organisation

NICE National Institute for Health and Care Excellence, United Kingdom

NPT Normalisation Process Theory

PFA Psychological First Aid

PHU Peripheral Health Unit

PSS Psychosocial Support

PTSD Post-traumatic stress disorder

RCT Randomised controlled trial

Sababu A Krio term meaning benefiting from connections with other people

SDG United Nations Sustainable Development Goals

SEP Socioeconomic position

SLPH Sierra Leone Psychiatric Hospital

ToC Theory of Change

TOT Training of trainers

UK United Kingdom

UN United Nations

UNHCR United Nations High Commissioner for Refugees

US United States of America

WHO World Health Organization

YLD Years lost to disability

YLL Years of life lost

# **Chapter 1: Introduction**

# 1.1 Background

Inadequacy in mental health care in low and middle-income countries (LMIC) has been an important contributor to the rising global burden of disease (GBD) (GBD 2015 Disease and Injury Incidence and Prevalence Collaborators, 2016; World Health Organization, 2017). The effective mental health treatment gap in LMIC has been well researched, and a strong evidence base is rapidly building through numerous epidemiological and intervention studies in resource-poor settings (Dua et al., 2011; Mehta et al., 2015; Petersen et al., 2016). An international network of individuals and institutions have put forward the ambitious goal to address mental health needs globally by calling for efforts to scale up evidence-based services around the world, particularly in low-resource settings where prevalence is highest and need for services the greatest (Chisholm et al., 2016; McInnis & Merajver, 2011). However, what has largely been missing from this call to action is the contribution of interventions that focus on socioeconomic and cultural factors contributing to the risk, cause, and maintenance of mental health conditions (Newlin, Webber, Morris, & Howarth, 2015).

Intervention research has shown that some of the burden of mental health conditions might be prevented by strengthening individuals, their friends and families, and the communities in which they live (Webber & Fendt-Newlin, 2017). There is some evidence, predominantly from high-income countries (HIC), that social interventions have the potential to improve quality of life (Webber, Huxley, & Harris, 2011), community engagement (Milton et al., 2012) and positively impact the social functioning (De Silva, Cooper, Li, Lund, & Patel, 2013) of people with mental health conditions. Central to shaping mental wellbeing and recovery from distress is the wider community in which a person lives but there is a lack of evidence around how to translate this link into effective and cost-effective interventions that promote social engagement. There is an even greater knowledge gap in applying mental

health social interventions in settings where health and social care services have limited resources and infrastructure is poor (Newlin et al., 2015).

The author of this thesis, with a background in psychology and experience working for non-governmental organisations (NGOs) in sub-Saharan Africa, was interested in finding a solution to the mental health treatment gap which could draw upon local expertise and community engagement. The evidence base for mental health social interventions, even in HIC, is limited. Few interventions articulate the process that social workers and other professionals may take to improving mental house outcomes by reducing social isolation and promoting networks and participation. Working as a research assistant on the Connecting People Intervention (CPI) study in the United Kingdom (UK), the author hypothesised that a similar approach might be beneficial to communities in sub-Saharan Africa with a high incidence of mental illness.

#### 1.1.1 The Connecting People Intervention

Recognising the insufficient evidence of the effectiveness of social interventions that support people with mental health conditions, Webber and colleagues (2015a) set out to develop the CPI to articulate good practice and enhance the evidence base for mental health social work in the UK. The CPI is a social intervention model centred on the partnership between a health worker and a service user with mental health conditions, his/her family, and the surrounding community (Webber et al., 2018). It is based upon the principles of coproduction, whereby workers and service users work together to improve an individual's wellbeing and connections with other people. The CPI model is not prescriptive, but the practice guidance informs the process of identifying potential new networks and engaging service users with their community (geographical, interest or personal). The CPI model implies the need for a multi-level approach to psychosocial interventions that consider the individual, the family and the whole community.

Given that most mental health research has been undertaken in narrow settings worldwide, where only a minority of the population lives, it must be acknowledged that straightforward extrapolation of the existing evidence-base is not always appropriate.

Determining the most effective intervention strategies within a given context is an important opportunity to harness local meanings, initiatives and contextual factors in addressing mental health conditions. Therefore, social interventions such as the CPI may be uniquely able to help to fill the treatment gap for people experiencing mental distress in LMIC. This is also where the fields of global mental health and social work may intersect, reflecting an important opportunity to facilitate participation, empowerment and social perspectives in the development of solutions for the mental health treatment gap (Orr & Jain, 2014).

# 1.2 Research aims and objectives

This thesis aims to contribute to the evidence base by examining the potential for social interventions to address the mental health treatment gap in low-resource settings. This has been addressed through the adaptation of the CPI and creation of a social intervention model and training programme for mental health workers in Sierra Leone. The study uniquely applies core social work strategies to understand how mental health worker's knowledge, skills, attitudes, and behaviour may be enhanced to provide better treatment and care in the community. Specifically, this study has the following objectives:

- 1. To critically examine stakeholder perceptions of the feasibility and acceptability of developing a social intervention that addresses an under capacity of mental health professionals in Sierra Leone.
- 2. To amalgamate findings from the feasibility study in the development of a coproduced mental health social intervention model and training programme for nurses in Sierra Leone. Components of the intervention are informed by the evidence base and the local practice context.

3. To test intervention content within the limited scope of mental health practice in Sierra Leone. Effectiveness of the intervention is determined using qualitative data and a training evaluation tool developed for the target population.

## 1.2.1 Study setting

Sierra Leone was selected as the setting for this study for several reasons. It is one of the world's least developed countries, having suffered from a decade-long civil war and recent outbreak of Ebola Virus Disease (EVD). Consequences of which include reports of high prevalence of mental health conditions as well as the breakdown of social cohesion and community trust. Mental health treatment coverage is one of the lowest in the world (World Health Organization, 2015a), providing a clear rationale for intervening in mental health services. The country's recent history points to the potential for socially robust intervention strategies to make a significant impact (see Chapter 4 for more information).

Sierra Leone also provides the setting for the thesis because of critical research partnerships that were built between the author and colleagues at the King's Sierra Leone Partnership (KSLP) and Enabling Access to Mental Health (EAMH). When this study began in October 2012, EAMH had been working in the country for several years, pioneering mental health service development with the establishment of the Mental Health Coalition (MHC). KSLP first opened its doors at the main referral hospital in Freetown, Connaught Hospital, in January 2013. Both partner organisations had links to policy makers and practitioners, and were actively seeking effective and cost-effective strategies to address the mental health treatment gap.

#### 1.3 Structure of the thesis

Chapter 2 of this thesis explores the established argument that, along with genetic and biological factors, social determinants and contextual factors such as deprivation, poverty,

urbanisation, migration, and violence negatively affect individual and population mental health (Fryers, Melzer, Jenkins, & Brugha, 2005; Ribeiro et al., 2017). It is the poor who are disproportionately affected by mental health conditions (Fryers et al., 2005). Whilst over 80% of the world's population live in LMIC (World Health Organization, 2016c), these countries lack financial resources, workforce and infrastructure for mental health services (Rathod et al., 2017). Within societies, the prevalence of mental health conditions corresponds to a gradient of economic disadvantage (Campion, Bhugra, Bailey, & Marmot, 2013). People with mental health conditions and their families are also challenged by stigma that further worsens their quality of life, affects social inclusion, impedes their ability to learn and to engage productively in the economy, and interferes with help seeking. Chapter 2 ends by outlining gaps in existing knowledge of how social factors may contribute to the cause and maintenance of mental health conditions, particularly in low-resource settings.

In order to address this gap, Chapter 3 presents a systematic review assessing knowledge translation of social interventions for adults with mental health conditions across economic boundaries. Whilst mental health social interventions are gaining traction in HIC, for example the CPI, findings from the review in Chapter 3 found this evidence is not being translated to low-resource settings. The review, and associated publication (Newlin et al., 2015) explained that simply translating interventions from high to low resources settings is missing an important opportunity to harness local meanings, initiatives and contextual factors in addressing mental health conditions.

Chapter 4 provides the rationale for selecting Sierra Leone as the study site. The chapter also reports evidence that manmade and natural disasters, such as armed conflict, earthquakes, epidemics (e.g. EVD), increase the incidence of mental and emotional health problems in the affected communities, and at the same time, they divert limited resources to areas other than mental health. Cultural views and institutional biases against women and certain sections of communities (e.g., religious, certain castes) increase the burden of illness

in these population subgroups. The theory of social capital is revisited as it relates to the changing norms, levels of trust and social cohesion during humanitarian emergencies. Evidence is building to suggest that social capital may have an inverse association with mental health conditions, and that related constructs, such as social networks may be psychologically protective (Noel, Cork, & White, 2018). This evidence points to the need for intervention development methodology which captures the social context.

Chapter 5 introduces the methodological framework which has guided the adaptation of the CPI for the Sierra Leonean context. In order to address the limitations to the existing complex intervention frameworks available e.g. United Kingdom Medical Research Council (MRC) framework for complex interventions (Campbell, 2000), this thesis proposes a three-phased framework to social intervention development. The framework reflects an understanding of "what works, for whom and under what circumstances." It provides a method for social intervention design and adaptation in low-resource settings. It includes input of evidence and theory, a feasibility and acceptability phase to assess the sociocultural context, modelling of intervention components and pilot study to evaluate the intervention's impact in the local setting. The phases of the framework form three distinct but connected phases of research which are then presented in Chapters 6-8 with more detail on study design and procedures.

The first phase of the intervention development framework addresses the first research objective. Chapter 6 details an exploration of stakeholder views on the feasibility and acceptability of co-producing a social intervention for mental health care delivery in Sierra Leone. Rapid ethnography was used to better understand the context of mental health in Sierra Leone—both in terms of the explanatory models of mental illness and the services available—from the country's key mental health stakeholders. This was achieved with 31 individual interviews and four focus groups involving 36 participants with a strong

representation of the state of services in the country to date. Qualitative data were collected and analysed using a framework approach that drew upon the core components of the CPI.

To address the second research objective, the second phase of the intervention development framework is the process of developing a culturally relevant intervention model to meet the needs of the local community. An adapted intervention was modelled in Chapter 7 which drew on social capital theory, the wider evidence base for mental health social interventions in low-resource settings, and especially the CPI. It was culturally appropriate to the local context and mental health service needs in Sierra Leone. The intervention model was then tested through focus groups with members of the Sierra Leone Diaspora community in London, who were also working in UK mental health services.

The third phase of the intervention development framework addressed the last research objective by the testing of the intervention model in a pilot study, described in Chapter 8. In this study, the adapted intervention model was tested through a training programme with 20 mental health nurses in Sierra Leone, the country's sole mental health workforce at the district level. The nurses were followed-up for nine months as both quantitative and qualitative data were collected to assess the impact training had on their practice. Findings are presented across Kirkpatrick's levels of training evaluation (Kirkpatrick, 1959) and case examples from the nurses' practice.

Chapter 9 synthesises the main findings of the thesis. The chapter reflects on the three phases of research, drawing on the quantitative and qualitative results, in accordance with each research objective and gaps in knowledge the thesis aimed to fill. It outlines the limitations and strengths of the intervention model and the methodological approach. The chapter concludes with a discussion of the challenges encountered in Sierra Leone during the course of this study and potential solutions for future study or service development based on the lessons learnt.

The final chapter reviews the contribution to knowledge that is made by this research. The findings from this study elucidate the role that social work and social interventions may have in addressing the mental health treatment gap and contributing to the emerging field of global mental health. The methodological framework for designing locally adapted strategies, and the application of this approach during a humanitarian emergency, make an important contribution to the research, practice and policy implications for improving mental health services in LMIC. Chapter 10 concludes by describing how this research is being taken forward and ideas for future application of this approach in Sierra Leone and internationally.

# 1.4 Summary

This thesis presents an iterative learning process and impetus that formed the basis of a methodological framework for mental health social intervention development. Intervention development is a complex process; one that is especially challenging when responding to the sociocultural context of a post-conflict low-resource setting such as Sierra Leone. This study is inter-disciplinary, weaving together fields of global mental health and social work to address the complex social challenges faced by people with mental health conditions with little access to quality care. It acknowledges that the design of this research also involves an integration of several different approaches, that no existing intervention development framework fully addressed the complexity of this mental health social intervention.

# **Chapter 2: Conceptual background**

#### 2.1 Introduction

Chapter 2 provides conceptual background to this study by investigating broad, interdisciplinary themes in the fields of global mental health and social work. The chapter begins
with an overview of the epidemiology of mental health conditions and its classification.

Cross-cultural understandings of mental health are explored as manifestations of mental
illness are linked to the sociocultural context in which they present. The chapter then provides
a brief description of the burden of mental health conditions, considering the prevalence of
these conditions around the world and the large gap that exists between the number of people
in need of treatment and those who receive care.

The field of global mental health (GMH) is described for its approach to addressing the treatment gap in low-resource settings. Its limitations are mentioned, such as how the standardised interventions developed in HIC may not be sufficient for tackling the burden of mental health conditions where the local idioms of distress and coping are vastly different to those where interventions were initially developed. On the other hand, the field of social work places emphasis on the socioeconomic and cultural context to explain and intervene on the wider social environment that impact mental health. But, partly due to social work's local nature, such concepts have not been readily applied to addressing the mental health treatment gap globally.

The chapter then argues that neither global mental health nor social work fields sufficiently addresses the treatment gap, and that the widely accepted biopsychosocial model (Babalola, Noel, & White, 2017) is, in practice, not addressing the social components sufficiently. To connect the fields of GMH and social work, the concept of social capital may have some traction in supporting people with mental health conditions in low-resource settings. The chapter presents the argument that mental health conditions require interventions that are locally, contextually, and culturally relevant. However, social interventions have not

historically played a key role in the evidence base for global mental health. The findings from this chapter are used to construct the research questions that are explored further in a systematic review in Chapter 3.

## 2.2 Epidemiology of mental health

Mental health is defined by the World Health Organization (WHO) as "a state of wellbeing in which every individual realises his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community." This definition explains that mental health is paramount to personal wellbeing, because it enables people to do and be things they have reason to value. For instance, the absence of mental disorder does not necessarily mean the presence of good mental health. Likewise, people living with mental health conditions can also achieve good levels of wellbeing – living a satisfying, empowered, meaningful, contributing life within the constraints of painful, distressing, or debilitating symptoms.

Research conducted in recent years has brought to attention that mental health inherently affects physical health and physical health affects mental health. The two are inseparable in terms of achieving a more complete state of wellbeing. The WHO proposition that there can be "no health without mental health" (World Health Organization, 2005a) has now been endorsed globally. The terms "mental health" and "mental illness" are increasingly being used interchangeably, however, a fundamental difference is that everyone has some level of mental health, just like physical health, whereas it is possible to be without mental illness.

In this thesis, the term "mental health conditions" is used to denote a range of mental and behavioural conditions that meet the threshold for a case according to psychiatric classification. These include disorders that cause a high burden of disease such as depression, bipolar affective disorder, schizophrenia, anxiety disorders, dementia, substance use

disorders, intellectual disabilities, and developmental and behavioural disorders with onset usually occurring in childhood and adolescence, including autism. The term "mental health condition" is used as universal way of also accounting for emotional distress. Many people experience sub-threshold mental disorders, which means poor mental health that does not reach the threshold for diagnosis as a mental disorder. Mental disorders and sub-threshold mental health conditions affect a large proportion of populations (GBD 2015 Disease and Injury Incidence and Prevalence Collaborators, 2016).

#### 2.2.1 Classification of mental health conditions

Mental health conditions are generally categorised using the International Classification of Diseases (ICD-10) or the Diagnostic and Statistical Manual of Mental Disorders (DSM-V) (American Psychiatric Association, 2013; World Health Organization, 1992). The aim of psychiatric classification for many years has been similar to those employed in physical medicine: to find an independent set of biological markers that indicate the presence of disease and can therefore confirm clinical impressions and serve to compare the mental health of different populations. This approach was first developed by German researchers in the late 19th century, most notably by Emil Kraepelin (1899–1990), who believed that conditions like schizophrenia reflect naturally occurring phenomena that can best be studied through the scientific method.

Assumptions about the classification of mental health conditions have been carried forward by modern psychiatrists, however there has been a split between those who adhere to DSM-V, arguing it has been more productive in promoting research classification, and those who adhere to ICD-10 because it allows more clinical discretion in making diagnoses (Tyrer, 2014). Presently, the ICD-10 is the official world classification and used by the WHO. It has been poorly resourced and not been able to generate the same degree of research data as the

DSM-V, but has steadily improved over the years and, with arguably better descriptions and definitions, is likely to be used more widely and accurately.

Whilst elaboration of a standardised nosology for mental health conditions have afforded a major impetus for research on psychopathology and innovation in treatment, it has also generated particular problems in the manner in which they are understood, diagnosed, and treated (Kawa & Giordano, 2012). Not surprisingly, in the developed world mental health conditions are the focus of well-resourced psychiatric services. Most psychiatric research takes place in universities and research institutes of HIC, whereas poor countries simply do not have the resources to develop alternatives to biomedicine. In the second half of the 20th century, many new treatments were developed for patients, including antipsychotic and other drug therapies (Healy, 2004), and also psychological treatments such as cognitive behavioural therapy (CBT) (Hofmann, Asnaani, Vonk, Sawyer, & Fang, 2012).

Perhaps one of the most striking consequences of the symptom-based, somaticallyorientated descriptive approach fostered by the DSM-IV and ICD-10 is research in the
neurochemistry and pharmacology of specifically defined psychopathological conditions.

This has resulted in the pharmaceutical industry developing drugs that target biological
markers associated with such conditions and an increasing number of people in the developed
world have received psychopharmacological interventions. For example, more than one-infive adult United States (US) citizens was on at least one mental health medication in 2010,
up 22 percent from ten years earlier, according to *America's State of Mind Report*, an analysis
of trends in the utilisation of mental health-related medications by Medco Health Solutions,
Inc. (World Health Organization, 2011). Whilst this has provided appreciable therapeutic
benefit to scores of patients, the pharmacological approach has been likened to "disease
mongering" in the marketing of various drugs (e.g., selective serotonin reuptake inhibitors)
for such conditions as mild social anxiety which is been described as a "medicalisation of
shyness" (Scott, 2006). To a great extent such criteria and definitions may be cultural, and

Sandel (2009) has written persuasively about the problem of relying upon both Western constructs of, and technological approaches for addressing and attempting to resolve what may otherwise be termed "social ills."

Similarly, the medicalisation of emotion, cognition and behaviour has also generated discourse- if not controversy- about the interpretation of what constitutes "normal" or "optimal" function within the context and expectations of society and culture. Several classic studies in social psychiatry have illuminated the important role that cultural beliefs play in shaping societal responses to people with mental health conditions. For instance, as far back as 1958, Hollingshead and Redlich introduced the concept of "lay appraisal" to indicate that, long before the involvement of mental health professionals, people such as family, friends, colleagues, and, of course, the individual, appraise the early signs of mental health conditions and make decisions about what (if anything) should be done (Nunes, 2010). Higginbotham and Marsella (1988) described what they considered to be little more than a manifestation of neocolonialism in the domain of mental health. Their study found that psychiatric care varied little in the capital cities of Southeast Asia, despite large cultural and linguistic differences between the people of these cities. Indeed, international mental health education and service development has conceptual foundations in Western psychiatry, for which the anticipated effect would be better patient care. But, as that study illuminated, the diffusion of Westernbased knowledge also undermined local indigenous understanding, healing systems and practices (Thomas, Bracken, & Yasmeen, 2007). In this way, classification of mental health conditions risks an assumption that Western psychiatry, or the evidence from HIC, is appropriate in all contexts globally.

## 2.2.2 Cross-cultural psychiatry

Cross-cultural psychiatry is a branch of psychiatry that developed from an understanding that symptoms, diagnosis or healing practice for mental health conditions

reflect social, cultural and moral concerns and could give rise to fundamental differences in psychopathology around the world (Kirmayer, 2006). It can be approached from two different perspectives, which have been defined as the emic-etic paradigm (Brislin, Lonner, & Thorndike, 1973). The etic or "outside" approach assumes that mental illness is similar throughout the world; that psychiatric taxonomies, their measuring instruments and models of care designed in the West are globally applicable. Data obtained in this way are comparable across all countries of the world. Its value is demonstrated by the WHO mental health Gap Action Programme (mhGAP) which supports training of a non-specialist workforce to diagnose and treat priority mental health conditions (World Health Organization, 2008). The mhGAP Intervention Guide (mhGAP-IG) has been implemented in over 100 countries and translated into more than 20 languages globally (Keynejad, Dua, Barbui, & Thornicroft, 2018).

Some concerns raised about this approach are that it contributes to the medicalisation of social and psychological problems, and narrowly focuses on primary care without sufficient attention given to strengthening other levels of the health care system, notably community-based care and care at district levels (Mills & Fernando, 2014). Critics of the etic approach claim that it relies on untested assumptions—that mental illness, as described in HIC, occurs everywhere, that the syndromes show the same core features, and that the current classification arrangements are useful.

Contrastingly, the emic or "inside" perspective starts with concepts from within the culture and seeks to understand the meaning of that which is studied and its associations with other factors using that cultural framework. Sensitivity to the emic perspective in a culturally diverse setting refers to the meaning of concepts within a particular culture. The emic perspective follows the tradition of psychological studies in folk beliefs and anthropologists seeking to understand culture from the native point of view (Morris, Leung, Ames, & Lickel, 1999).

The divide between these two perspectives persists in the field of cross-cultural psychiatry, however, neither of these approaches are supported by cross-cultural research. For example, purely emic studies are unable to provide data which can be compared across cultures whereas purely etic studies tend to exclude a significant number of people who may experience mental health conditions but who do not meet the predetermined diagnostic criteria (Patel, 1995). It is therefore increasingly recognised that the future of cross-cultural psychiatry lies in advancing etic and emic approaches with equal value. Kirmayer (2006) describes this process as: (a) being inherently multidisciplinary (involving psychiatric epidemiology, medical anthropology, and social psychology), breaking down the nature/culture dichotomy with an integrative view of culture as a core feature of human biology; (b) attends to psychological processes but understands these as not exclusively located within the individual but are fundamentally social; and (c) critically examines the interaction of both local and global systems of knowledge and power.

Methodological limitations in cross-cultural psychiatric epidemiology have been cited as a primary reason why cultural differences have not translated into treatment practices (Kessler & Ustun, 2004). For example, cultural differences in schizophrenia that have been identified by earlier research, have done little to alter classification or treatment of the disorder (McLean et al., 2014). The phrase "cultural concepts of distress" is a new addition to the DSM-V and refers to ways that cultural groups experience, understand, and communicate suffering, behavioural problems, or troubling thoughts and emotions (American Psychiatric Association, 2013). A recent systematic review (Kohrt et al., 2014) found that across 45 studies, the literature on cultural concepts of distress and psychiatric disorders is characterised by low methodological rigour and lack of reporting key aspects of explanatory models (e.g. course and severity of distress, and association with impaired functioning). Higher quality studies demonstrated weaker associations of cultural concepts of distress and psychiatric disorders. Authors argued that ultimately, "combining the strengths of psychiatric

epidemiology and cultural psychiatry will foster equitable, feasible, and effective global mental health services" (Kohrt et al., 2014, p. 365).

#### 2.2.3 Burden of disease

Despite discrepancies in classification and conceptualisation, mental health conditions are prevalent in all regions of the world and are major contributors to morbidity and premature mortality. Worldwide, mental health conditions present a growing public health concern and have been estimated to impact up to 450 million people. Mood and anxiety disorders tend to have the highest prevalence rates and it has been projected that major depressive disorder will be the second leading disease burden worldwide by 2020 (Moussavi et al., 2007). However, almost three quarters of the global burden of neuropsychiatric disorders is in LMIC, where services for mental and substance use disorders have typically been neglected, and segregated from mainstream health care with resourcing not commensurate with the burden (GBD 2015 Disease and Injury Incidence and Prevalence Collaborators, 2016).

Mental health conditions have not historically been a global health priority, especially when compared with communicable diseases and other non-communicable diseases such as cancer or cardiovascular disease. The first GBD study in 1990, by the World Bank, moved to incorporate the relative burden associated with disease morbidity, rather than mortality alone (Whiteford et al., 2013). This shift in focus was accompanied by an important research measure called disability-adjusted life years (DALYs), referring to the sum of years of potential life lost due to premature mortality and the years of productive life lost due to disability, which combines premature mortality as years of life lost (YLLs) and disability as YLDs. Mental health conditions, which are highly disabling, rise in importance when disability is taken into account. Also, sound epidemiological information around mental health conditions is an essential starting point for that policy response (Baxter, Patton, Scott,

Degenhardt, & Whiteford, 2013). Therefore, the introduction of this measure was key in emphasising the importance of mental health conditions globally.

Recent estimates from the GBD study in 2015 indicates the global burden of mental illness accounts for 21.2% of YLD and 7.1% of DALYs (GBD 2015 Disease and Injury Incidence and Prevalence Collaborators, 2016). However, Vigo, Thornicroft and Atun (2016) argue that the global burden of mental health conditions is underestimated, and that a more accurate estimate indicates the global burden of mental health conditions account for 32.4% of YLD and 13.0% of DALYs. Authors reallocated YLD of neurological disorders, self-harm and chronic pain syndrome. Five types of mental illness appear in the top 20 causes of GBD: major depression (second), anxiety disorders (seventh), schizophrenia (11th), dysthymia (16th), and bipolar disorder (17th) were leading causes of YLD (Vigo et al., 2016). Rapid economic, demographic, and epidemiological transitions mean a growth in populations that are living longer worldwide, but with greater morbidity and disability.

Estimating prevalence data using population-based studies provides understanding of the health-need required for effective public health policy and service-planning. However, the majority of information on incidence, remission and mortality is found in Western Europe and North America while data is scarce to non-existent for other regions, and particularly for LMIC. In a review of 77,000 data sources (Baxter et al., 2013), fewer than 1% could be used for deriving national estimates of prevalence in mental health conditions. The study found that although some efforts are being made to strengthen epidemiological research in the international mental health community (Kessler et al., 2005), good data are absent for 64% of the world's population. There are major limitations in producing reliable prevalence data as few countries routinely collection data on mental health conditions in national health and social information systems (Jordans et al., 2016).

Frustrated by the lack of consistency in the measurement of the many non-diagnostic variables and seeking cross-national comparisons of the results obtained in community

epidemiological surveys, the WHO World Mental Health Survey Initiative was created. The WHO Composite International Diagnostic Interview (CIDI) (Robins et al., 1988) was used to estimate the prevalence and correlates of ICD-10 and DSM-III disorders in the most comprehensive study of the international prevalence data (Kessler & Ustun, 2004). Despite consistency in measurement, researchers found that the prevalence of having any mental health conditions in the prior year varied widely across the 28 countries involved, from 4.3% in Shanghai to 26.4% in the United States. Discrepancy in prevalence and incidence data points to the lack of consensus with regards to standard indicators of mental health conditions and potentially to the role that culture and language play in clinical interviews and taxonomy.

#### 2.4 Global mental health

Global mental health (GMH) is a relatively new but rapidly growing and highly influential field that has emerged from an awareness that there is "no health without mental health" (Prince et al., 2007) and that there is a need for mental health care that can be scaled up in communities across the globe (Chisholm et al., 2016).

GMH has relied on a number of pre-existing fields of study. First, multi-national epidemiological studies have shown that mental health conditions are prevalent across the globe but are often underdiagnosed and undertreated (World Health Organization, 2017). The treatment gap between the number of people in need of mental health services and those that receive them is widest in low- and middle-income countries, exceeding 90% in sub-Saharan Africa (Kohn, Saxena, Levav, & Saraceno, 2004). Second, community psychiatry has highlighted social integration as a key outcome for mental health services (Baumgartner & Susser, 2013) and studies in psychiatric anthropology, including work with refugees, have emphasised that interventions need to include an appreciation of the relevant socio-cultural context (de Jong, Komproe, & van Ommeren, 2003).

In the last decade, there has been increasing acknowledgment that mental health should be addressed on a global scale. The Lancet series on GMH first published in 2007 and updated in 2011 provided a benchmark of evidence and a renewed call to action to scale-up mental health services worldwide. This call emphasised evidence-based, cost-effective and culturally appropriate interventions to address the mental health treatment gap (Lancet Global Mental Health Group, 2007, 2011). A second landmark publication which galvanised the field of GMH was the WHO's flagship programme on mental health launched in 2008, mhGAP, which produced an intervention guide for scaling-up interventions by non-specialist providers (World Health Organization, 2010). These guidelines comprehensively addressed a range of care components including psychological and pharmacological, though its authors recognised that the challenge of translating evidence-based solutions to diverse context remain.

It is clear that substantial progress has been made in developing an evidence base for innovative treatments which have been shown to work. For example, "best practice" and "good practice" interventions for prevention and promotion of mental health conditions have recently been identified at the population and community-levels (Petersen et al., 2016, p. 256), including success from anti-stigma campaigns and awareness raising programmes (Thornicroft et al., 2016). Meta-analyses have been conducted to establish packages of care for LMIC using diagnostic criteria for schizophrenia (Mari, Razzouk, Thara, Eaton, & Thornicroft, 2009) and depression (Patel & Thornicroft, 2009). Studies have shown success in scaling up services amid resource-poor health systems (Chisholm et al., 2016). Furthermore, the GMH movement has made strides to bolster recognition of the true global disease burden of mental health conditions (Vigo et al., 2016) and renewed the national and international efforts to galvanise governments and United Nations (UN) Member States to take action in reforming mental health systems.

Despite these improvements, there is as yet little evidence of how to implement these in real-life settings beyond those already identified in recent studies. The questions that

remain are far broader than that of scaling-up transportable technologies: they involve issues of cultural contexts, health systems challenges, and interfaces between seemingly incompatible sets of demands and needs of societies, such as competing health priorities and limited resources (Braathen, Vergunst, Mji, Mannan, & Swartz, 2013).

A key contributor to the treatment gap is the meagre investment in public mental health. Data from WHO's Mental Health Atlas 2014 survey (2015a) suggest that most LMICs spend less than US\$2 per person annually on the treatment and prevention of mental health conditions compared with an average of more than \$50 in HIC. As a result, the large treatment gap affects not just the health and wellbeing of people with mental health conditions and their families, but also has inevitable consequences for communities and governments as a result of diminished productivity at work, a reduction in labour participation, and increased health and other welfare expenditures (Chisholm et al., 2016).

Findings from studies (Trautmann, Rehm, & Wittchen, 2016) have also shown the enormous economic challenge mental health conditions pose to communities and society at large. For example, depression, which is the most common mental health condition among adults, is known for its economic impact. Relative to other diseases common in working-age adults, depression has an earlier age of onset (often twenties) and higher chronicity.

Depression impacts economic gains through its association with work and decreased productivity (30% decline with mild depression) (Woo et al., 2011). An estimated US\$ 2.5–8.5 trillion worldwide in lost output was attributed to mental, neurological and substance use disorders (Bloom et al., 2011). This sum is expected to double by 2030 which is why the promotion of mental health and wellbeing have been explicitly included in the United Nations' Sustainable Development Goals (SDGs) (United Nations, 2015).

#### 2.4.1 Limitations of global mental health

There is widespread critique that psychiatry, and the GMH movement in particular, construct distress as symptomatic of "neuropsychiatric disorders" rather than as responses to the socio-cultural, political and economic conditions of chronic poverty, conflict, and entrenched social inequality (Mills, 2014). This view - reducing complex matters of living, behaving and thinking to disorder - is strongly contested by groups of service users and survivors of psychiatry, or those who identify as psychosocially disabled, and by academics and professionals in the field of cross-cultural psychiatry (Fernando, 2014). This is where cross-cultural psychiatry, described in section 2.2.2, may be at odds with the GMH movement.

A 2011 article in *Nature* entitled "Grand Challenges in Global Mental Health" identified mental health priorities for research in the next 10 years, sparking controversy and debate about the appropriate methods for establishing priorities, research themes, and interventions in GMH (Collins et al., 2011). The article described and promoted the approach of the GMH movement, which led to a contentious meeting in Montreal where many academics in transcultural psychiatry expressed serious misgivings (Bemme & D'souza, 2014). In the meeting, discussion about the nature and vision of the GMH agenda oscillated between two antagonistic poles. One side described it as a bottom-up, public health movement driven by local knowledge and priorities, with the aim of providing access to mental health care for everyone. In the other, GMH was seen as a top-down, imperial agenda exporting Western illness categories and treatments that would ultimately replace diverse cultural traditions for interpreting mental health. Subsequent comments critical of the movement appeared (Campbell & Burgess, 2012; Das & Rao, 2012), and a letter in *Openmind* referred to the fact that *Nature* had refused to publish an editorial critical of the ideas presented in the article by Collins et al. (2011), thereby raising the possible political nature of the GMH movement.

Arguably, the push for a "global norm for mental health" (Shukla et al., 2012, p. 292), and a "standard approach for all countries and health sectors" (Patel, Collins, et al., 2011, p. 1442), not only ignores local realities, but also works to discredit and replace local frameworks for responding to distress. Ethan Watters' book *Crazy Like Us: The Globalization of the American Psyche* (2011) describes the loss of cultural diversity in understanding and responding to distress worldwide as one that leaves everyone the poorer, not just people in LMICs. For example, local knowledge of distress is traditionally embedded in religion or spirituality which is unique to that culture.

Das and Rao (2012) critique the individualist focus of the Western diagnostic system, taking the individual as its unit of analysis, which serves as a fundamental basis for the GMH movement's approach to scientific evidence. They argue it distracts attention away from the social context, failing to address adequately the social determinants of health. Likewise, with a focus on WHO policies, such as mhGAP (2008), White and Sashidharan (2014) argue that the over-reliance on the scale up of medical resources and prominence of diagnoses within such policies diverts attention from the social and cultural determinants of distress. White and Sashidharan argued that GMH also strengthens hospital-based care to the detriment of community support.

### 2.5 The role of social work

By presenting an apparently authoritative, generalisable model based on a narrow range of settings, the GMH recommendations potentially lend themselves to practice and policy that override local meanings, initiatives and contextual factors (Orr & Jain, 2014). Social work's distinctive theoretical focus on socioeconomic and cultural context could provide a valuable antidote to this concern. Although the features of social work vary hugely across the world, social work's theoretical propensity for psychosocial informed knowledge, service user rights and participation, as well as the strong values-based commitment to

empowerment, are consistent strengths of the profession which may offer correctives to the "one-size-fits-all" prescription of GMH. The following sections describe features of social work that may play an important role in addressing the mental health treatment gap in low-resource settings.

#### 2.5.1 Promoting wellbeing and equality

The WHO definition of health encompasses the concept of wellness, noting that health is "a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity" (1946). While there is increasingly good data on certain interventions for psychiatric disorders (for example, antidepressants for severe depression), there is a paucity of data on the efficacy and effectiveness of interventions for wellbeing (Stein & Giordano, 2015). GMH is likely to focus initial research efforts on the prevention and treatment of diagnosable disorders, rather than on maximising wellbeing in the community (Collins et al., 2011).

Contrastingly, social work reflects the promotion of social and economic equalities. Ruth Allen, in her position paper, *The Role of the Social Worker in Adult Mental Health Services* (2014) describes social work as focusing on the "person as a whole – their fundamental human potential and the opportunities they could access to bring about change" (p. 39). The importance of the social determinants of mental distress throughout the life course that are often missed in purely medical, illness approaches (e.g., trauma, loss and abuse, experiences in childhood) are more prominent in the social work discipline. Working daily with life at its extremes, social workers are witnessing the highs and lows of human capabilities and behaviour. For many people, the opportunities for—family inheritance and place of birth (i.e., locality, community or country) and access to resources—are determining factors for mental health and wellbeing.

#### 2.5.2 Human rights and social justice

In December 2006, the United Nations adopted the Convention on the Rights of Persons with Disabilities (UN General Assembly, 2007). Its purpose is to "promote, protect and ensure the full and equal enjoyment of all human rights and fundamental freedoms by all persons with disabilities, and to promote respect for their inherent dignity" (p. 2). A general principle of the document is that persons with disabilities, including those with mental health conditions, have a right to full and effective participation and inclusion in society. Therefore, it showed that changing attitudes towards—and practices—in mental health care is not only a necessity, but also an obligation under international human rights law. The inclusion of mental health in the landmark SDGs to ensure that, by 2030, there is a reduction by one third of premature mortality through prevention and treatment and promotion of mental health and wellbeing (United Nations, 2015). The WHO has also endorsed the need to promote human rights and quality of mental health services globally, with the development of the QualityRights initiative (Funk & Drew, 2017). Freedom from coercive interventions and promotion of those that respect the right to legal capacity, choice, community inclusion and recovery are at the core of the QualityRights initiative.

As a reflection of these policy directives, social inclusion is now considered a key principle of mental health service provision in many countries (Coombs, Nicholas, & Pirkis, 2013; Department of Health, 2011), the aim of which is to improve the opportunities for people with mental health conditions to engage in society equally to others. Indeed, the global commitment to respect human rights and support social inclusion is at the centre of social work, promoting the dignity and worth of people (Allen, Balfour, Bell, & Marmot, 2014). Trained to work in partnership with people using mental health services, their families, and caregivers, social work practitioners support social inclusion through their advanced relationship-based skills, focus on personalised care, and working collaboratively with local

communities to enhance participation of people with mental health conditions (Baumgartner & Susser, 2013).

### 2.5.3 Values based commitment to empowerment

A recurring anecdote to the GMH movement has been "nothing for us, without us", coming out of the social activist era of the 1960's United States to include service users with disabilities in decision making about their care (Beresford & Croft, 2001). The voice of the consumer and user involvement movements in mental health social work has played a crucial role in disability studies in general and is particularly relevant to mental health concerns. Social perspectives are rooted in acknowledging the importance of peoples' own expertise about their care needs. This reflects the increasingly influential consumer-oriented perspective of the mental health recovery movement that seeks to establish and enhance patient empowerment (Frost et al., 2017). Social work practice often involves working alongside people closely, using empathy and relationship-building skills to hear and see through the eyes of the service user, their family and friends.

### 2.5.4 Working towards development and community sustainability

Social work actions may be with individuals, groups and communities in policy, advocacy and social change. In the *Global Agenda for Social Work and Social Development Commitment to Action*, the International Federation of Social Workers (IFSW) and the International Association of Schools of Social Work (IASSW) have committed members "to supporting, influencing and enabling structures and systems that positively address the root causes of oppression and inequality" (2012, p. 1). Initiatives as the IASSW Global Agenda (International Federation of Social Workers, 2012), social work practice is now also unavoidably both local and global. Social workers must be cognisant of globalisation trends in their practice, trends that provide a way of understanding the social circumstances of

peoples' lives on a day to day basis, and a context within which to act (Pockett & Beddoe, 2015).

Social indicators of development, including gains in literacy, health conditions and services, and provision of housing are fundamental to the professional intervention of social workers. Social workers can generally mediate the process of development through enabling individuals and the society to mobilise and deliver a wide range of services, drawing upon the existing resources available in the community. For example, social workers are expected to assist in restoring, maintaining and enhancing the social functioning of individuals and the society; this responsibility entails the development, procurement and/or delivery of resources and services to meet the many and varied needs of the people. The role of social workers in helping people to build relationships and strengthen their connections with their local community has also been emphasised (Huxley, Evans, Beresford, Davidson, & King, 2009).

It is through these features, promotion of wellbeing and quality, human rights and social justice, empowerment of service users and integration with the wider social environment that the field of social work may be particularly suited to addressing the current limitations of GMH. The following sections illustrate the critical need to address the social factors involved in mental health, and how existing theories may be used to develop social interventions in LMIC.

#### 2.6 Social determinants of health

Social determinants of health are the conditions under which people are born, grow, live, work, and age (Commission on Social Determinants of Health, 2008). The term is often used to refer broadly to any nonmedical factors influencing health, including health-related knowledge, attitudes, beliefs, or behaviours (e.g., smoking). They have a direct impact on the health of individuals and populations; they also influence lifestyle choices and behaviours, which interact to produce health or disease. There is an increasing emphasis on understanding

and addressing the fundamental causes, or upstream factors, of poor health and inequities (Williams, Costa, Odunlami, & Mohammed, 2008). Upstream social determinants refer to the macro factors that comprise social structural influences on health and health systems, such as government policies and characteristics of the physical and social environments that offer or limit opportunities for health (e.g., neighbourhood conditions) (Link and Phelan, 1995).

It is increasingly known that people's social and economic circumstances affect their health. Differences in social, economic, cultural, political and environmental circumstances lead to health inequities, which are defined as inequalities that are systematic, socially produced (and therefore modifiable), and unfair (Whitehead & Dalhgren, 2006). The WHO Commission for Social Determinants of Health brought together a global evidence base of what could be done to reduce health inequities, demonstrating that well-executed economic and social policy could improve health and health equity (Commission on Social Determinants of Health, 2008).

### 2.6.1 Social determinants of mental health and illness

Mental health disparities are driven by social structures such as stigma, discrimination, social exclusion, poverty, low educational attainment and the overall health of our living, working and playing environments (World Health Organization and Calouste Gulbenkian Foundation, 2014). There is good evidence that common mental health conditions (depression and anxiety) are distributed according to a gradient of economic disadvantage across society (Campion et al., 2013) and that the poor and disadvantaged suffer disproportionately from common mental disorders and their adverse consequences (Marmot, Friel, Bell, Houweling, & Taylor, 2008; Meltzer, Vostanis, Goodman, & Ford, 2007).

Therefore, certain population subgroups are at higher risk of mental health conditions because of greater exposure and vulnerability to unfavourable social, economic, and environmental circumstances, interrelated with gender. To illustrate, a woman's capabilities

are severely restricted if she is unable to complete her education, is subjected to domestic violence, works for low pay in the informal labour market, and faces difficulties in providing for her or her family's basic needs. Such a woman is at higher risk for low mood and feelings of hopelessness associated with depression, than a woman who is not exposed to these risk factors. Although evidence is building to support the link between social determinants and the incidence of mental health conditions, this knowledge has not been readily translated into effective interventions (Johnson, 2017).

#### 2.6.2 Socio-economic inequalities

Socioeconomic position (SEP) is commonly conceptualised as encompassing both social class (referring to social relations of ownership and control over productive assets) and socioeconomic status (referring to the ordering of persons along a continuum and is often measured as a combination of education, income and occupation) (Muntaner, Eaton, Miech, & O'Campo, 2004). SEP is therefore neutral with respect to the relational/ordinal distinction that sets social class apart from socioeconomic status. Examinations of SEP often reveal inequities in access to resources, plus issues related to privilege, power and control (Phelan, Link, & Tehranifar, 2010).

The social gradient in health is one of the most consistently replicated findings in public health research (Kroger, Pakpahan, & Hoffmann, 2015). Inequalities exist both between and within countries and often follow a social gradient, occurring both along a continuum and affecting everyone in the population, not only the poorest or most disadvantaged (Marmot & Allen, 2014). Disadvantage starts before birth and accumulates throughout life, and is interrelated with gender. Those in the middle of the social gradient – typically defined as those of average socio-economic position – generally experience worse outcomes than the best-off in society, but better outcomes than the worst-off. However, the poor and disadvantaged suffer disproportionately from ill-health and its adverse

consequences. Thus, a child who grows up in a slum in Nairobi, Kenya is far more likely to die before the age of five than a child from a wealthier part of the city. For this reason, the WHO (2014) emphasises the need for a life course approach, taking into account critical or sensitive periods in differential experience and impact of social determinants throughout life as well as dynamics related to cumulative exposure.

#### 2.6.3 Socioeconomic position and mental health

The negative relationship of SEP with mental illness has been well researched: the lower the SEP of an individual is, the higher is his or her risk of psychiatric morbidity, disability, and poor access to health care (Campion et al., 2013). Interacting as a negative cycle, mental ill-health impedes people's ability to learn and to engage productively in their economies, and poverty in turn increases the risk for developing mental health conditions, and reduces people's ability to gain access to health services.

In high income countries, there is a relatively well-established body of literature regarding the association between poverty and mental health (Saraceno, Levav, & Kohn, 2005). In a meta-analysis comparing the lowest socioeconomic group with the highest in 51 studies (Lorant et al., 2003), results indicated that low-SEP individuals had higher odds of being depressed (odds ratio = 1.81, p < 0.001) and also remaining depressed than the highest socioeconomic group (odds ratio = 2.06). Income inequality (Pickett, James, & Wilkinson, 2006); unemployment (Pharr, Moonie, & Bungum, 2012); adverse neighbourhood characteristics (O'Campo et al., 2015); have all been shown to be associated with negative mental health outcomes in HIC.

Using data from the World Health Surveys, Scott and colleagues (2014) assessed associations of DSM-IV mental health conditions with subjective social status, reflecting self-reported evaluations of SEP on indicators of income, educational level, and occupation in terms of their place in the social hierarchies of 18 countries in Asia, South Pacific, the

Americas, Europe, and the Middle East (n=56,085). The study found graded inverse associations between subjective social status and all 16 conditions. This pattern of association was evident in almost all countries but was significantly stronger in high- than in lower-income countries.

A systematic review of the epidemiological literature in LMIC found that of 115 studies reviewed, more than 70% reported clear and positive associations between poverty and common mental disorders (Lund et al., 2010). The review also uncovered methodological explanations for studies that have questioned the association between poverty and mental ill-health in LMIC. For example, variables such as education, food insecurity, housing, SEP and financial stress exhibit a relatively consistent and strong association with mental health conditions, others such as household income, employment and particularly consumption are more equivocal (Lund et al., 2010).

#### 2.6.4 Theoretical explanations

Despite the evidence of the negative relationship between SEP and mental illness, there have been remarkably inconsistent findings concerning the causal structure of this relationship. Do poor socioeconomic conditions predispose people to mental health conditions? Or do pre-existing, biologically based mental disorders result in the drift of individuals into poor socioeconomic positions? Although the guiding assumption of many researchers is that this is an interactive and nonlinear relationship, involving multiple conditions and particular types of mental health conditions, even the best available longitudinal data sets do not permit adequate tests of the relevant theories (Hudson, Puterman, Bibbins-Domingo, Matthews, & Adler, 2013).

#### 2.6.4.1 Social causation hypothesis

The social causation hypothesis claims that circumstances in higher socio-economic positions are more beneficial to health than in lower socio-economic positions. Therefore, conditions of poverty such as heightened stress, negative life events, social exclusion, malnutrition, increased risk of violence and trauma, reduced access to health care and stigma are thought to precipitate or maintain mental ill-health. In 1972, Kohn argued that social class is related to schizophrenia since the conditions of life built into the lower social class are conducive to this disorder (e.g., environmental adversity, such as discrimination; disadvantage, including unemployment; and stress) (Kohn, 1972).

### 2.6.4.2 Social selection-drift hypothesis

In contrast, the social selection or social drift hypothesis argues that people with mental illnesses are at increased risk of drifting into or remaining in poverty through increased health expenditure, reduced productivity, stigma, loss of employment and associated earnings (Dohrenwend et al., 1992). Support for the social selection-drift hypothesis appears strongest for severe mental health conditions such as schizophrenia (Saxena, Thornicroft, Knapp, & Whiteford, 2007); whereas the social causation pathway might apply more readily to common mental disorders such as depression or anxiety (Muntaner et al., 2004). These pathways are complex, and evidence suggests that they move in both directions for most mental, neurological and substance misuse disorders.

Research has provided some support for the above theories, suggesting strength and direction of the relationship can vary by the type of mental health condition and level of SEP (Mossakowski, 2014). Overall, both social causation and selection/drift are important in advancing our understanding of the influence of social inequality on people's lives. The social environment is acknowledged as a social determinant of health that can promote or harm health (Wilkinson & Pickett, 2009). Another explanation of how the social environment affects health is the theory of social capital.

### 2.7 Social capital

Social capital is a concept that captures both a buffer function of the social environment on health, as well as potential negative effects arising from social inequality and exclusion (Uphoff, Pickett, Cabieses, Small, & Wright, 2013). Studies have shown that social capital may be an upstream determinant of mental health also, and may be particularly beneficial when aiming both to prevent the development of mental health conditions and to promote wider economic development (Ehsan & De Silva, 2015).

### 2.7.1 Defining social capital

At the basis of social capital is the notion that people invest in social relationships with expected returns (Lin, 1999). The World Bank (The World Bank, 1999) has adopted a definition of social capital: "Social capital is not just the sum of the institutions which underpin a society – it is the glue that holds them together." While theorists tend to agree upon this underlying understanding, the specific definitions and measurements used in the social capital literature are often disputed.

One point of contention is whether social capital ought to be considered as an individual or as a group attribute. For example, the individual is considered to possess social capital according to the power of his social connections, or social capital is treated as a property of the collective whereby resources embedded in the social structure (e.g. an organisation or a workplace) facilitate the actions of individuals in them. The sixth edition of the Dictionary of Epidemiology describes social capital according to both group and individual level possession (Porta, 2015, p. 263):

(1) "The resources—for example, trust, norms, and the exercise of sanctions—available to members of social groups. The social group can take different forms, such

as a work place, a voluntary organization, or a tightly-knit residential community.

Social capital is conceptualized as a group attribute, and

(2) "The resources—for example, social support, information channels, social credentials—that are embedded within an individuals' network. In this approach, social capital is conceptualized as an individual attribute as well as a property of the collective."

Discrepancies in the definition have existed since the very first attempts to define social capital beginning in the late 1980s and early 1990s. Pierre Bourdieu (1986), James Coleman (1988) and Robert Putnam (1995) are often referred to as early theorists of social capital, and their approaches have influenced the ways in which social capital is viewed in health and social sciences today (Bassett & Moore, 2013). Reflecting their disciplinary backgrounds (i.e., sociologists, economists and political scientists), each of these theorists has conceptualised social capital differently and this has generated debate in the literature about how social capital should be defined and measured.

Bourdieu was interested in the networks and connections between individuals that can provide support and resource. Defining social capital as the sum of the resources, actual or virtual, that are distributed within society, this theoretical explanation illustrates that like economic or cultural capital, social capital was unequally distributed among individuals and groups thus leading to inequalities (Bourdieu, 1986). Coleman's approach to social capital was similar to Bourdieu's in that they both emphasised the importance of examining social networks. James Coleman (1988) was explicit about conceptualising social capital as being a resource of the social relations that exist between families and the communities that they are linked to. Viewed in this way, social capital consists of the resources embedded in the social structure (e.g. an organisation or a workplace) which facilitate the actions of individuals in them.

Rather than considering structural measures of social networks, as Bourdieu and Coleman suggested, Putnam focused on relational factors, defining social capital as a characteristic of communities including community cohesion, reciprocity and trust. Some argue that the most accessible definition of social capital used in the health sciences originates with Putnam (De Silva, McKenzie, Harpham, & Huttly, 2005). He states that social capital consists of five main principles (1) community networks—the number and density of voluntary, state, and personal networks; (2) civic engagement—the amount of participation in civic networks; (3) local civic identity—a sense of belonging, solidarity, and equality with other members; (4) reciprocity and norms of cooperation—a sense of obligation to help others, and confidence in return of assistance; (5) community trust—the degree of trust held by individuals within the network (Putnam, 1995).

Despite advances in social capital, there has tended to be a divide between those who follow approaches that are more in line with Putnam's work and those who support Bourdieu or Coleman's definitions of social capital. While a more nuanced debate about the conceptualisation of social capital continues, theorists such as Kawachi and Lin have sought a more pluralistic approach that attempts to unify key elements emerging from the various traditions. This has resulted in relative consensus that social capital includes those elements of social networks that can bring about positive social, economic and health development (Kawachi, Subramanian, & Kim, 2007) and this can occur at the micro (individual, family/household) and macro (community, national and international) levels (Almedom, 2005).

### 2.7.2 Dimensions of social capital

In order to measure and utilise social capital in research, an initial distinction can be made between cognitive and structural social capital (Villalonga-Olives & Kawachi, 2015). Cognitive social capital refers to the individual perceptions of interpersonal trust and social cohesion keeping networks together. It is measured by subjective indicators such as trust,

social support and neighbourhood satisfaction. By contrast, structural social capital refers to objectively observable or measurable activities and resources such as participation in neighbourhood activities, election turnout or membership of a religious group. It facilitates sharing of knowledge and collective action.

Social capital is also deconstructed into bonding, bridging and linking components (Uphoff et al., 2013). Bonding social capital refers to close relationships between family members or good friends, measured by indicators such as social support. These relationships form a strongly tied network based on a shared social identity. Bridging social capital is based on Granovetter's idea of "weak ties" (1983) and refers to relationships between people who have a distinct social identity and are more loosely connected, for example neighbours or colleagues. Linking social capital is often used to describe relationships with power differences, such as the hierarchical relationship between employer and employee, or between citizen and government. The distinction between these concepts is important because in many disadvantaged communities, members are often constantly helping each other, yet they can end up being trapped in poverty so long as they lack access to social capital outside their bonded network, i.e. lacking bridging ties (Villalonga-Olives & Kawachi, 2015).

### 2.7.3 Social capital and health inequality

In research on health inequalities, the social environment is widely acknowledged as a multi-faceted social determinant that can promote or harm health through multiple mechanisms (Uphoff et al., 2013). There is increasing evidence to confirm the relationship between different measures of social capital and health, and some evidence that social capital mediates the relationship between income inequality and health (Kawachi et al., 2007).

Societies with a higher level of social equality seem to have better health outcomes and higher levels of reported social capital (Wilkinson & Pickett, 2009). This "social gradient" in which each step down the social ladder is associated with worse health outcomes,

suggests that social inequalities in health do not only reflect material disadvantage due to socioeconomic status, but also a psychosocial pathway associated with social position (Marmot et al., 1991).

At the individual level, there exists a large body of literature suggesting that caring social relationships and meaningful community connections have powerful beneficial effects on health (Rocco & Suhrcke, 2012). Social capital can counteract the negative effects of stress or improve one's ability to cope with stress by enhancing financial or emotional support through access to resources (Cattell, 2001). At the community level, the influence of social networks and norms could have an effect on health, according to the notion that the social space, rather than the individuals who live in it, is the source of social capital. It is also thought to facilitate community self-help, allowing communities to more easily work together to solve collective (health) problems (Wakefield & Poland, 2005). Therefore, social capital is seen as an important facilitator—and outcome—of community development.

However, certain types of social capital might benefit the health only of those who have sufficient economic capital to access bridging social capital and it may harm the health of those who are excluded from participation in the relevant networks. For example, not everyone has access to the same sources of social capital and not everyone will benefit in the same way. Both Bourdieu and Coleman argue that social capital might improve health but may also exacerbate inequalities. For this reason, the key may be to distinguish between the effect of individual social resources on health and the health effects that can be attributed to characteristics of the wider environment.

### 2.7.4 Social capital and mental health

Mental health inequalities are strongly associated and embedded within the broader social and economic context. Since Durkheim's classic work on suicide (1897), the importance of social integration and social capital has been recognised for population

wellbeing. It has been proposed that high levels of social capital result in improved mental wellbeing in both individuals and communities and that enhancing the social resources of groups may allow for improvement in overall population mental health (Bassett & Moore, 2013). A recent systematic review of 39 studies on the association between different types of social capital (individual cognitive and structural, and ecological cognitive and structural) and mental health conditions showed that individual level cognitive social capital is protective against common mental disorders, and that ecological level social capital is associated with less risk of developing mental health conditions (Ehsan & De Silva, 2015).

Positive mental health also has an important social value, contributing to the functioning of society, including overall productivity and development (Jenkins, Baingana, Ahmad, McDaid, & Atun, 2011). It is an important resource for individuals, families, communities and nations, contributing to human, social and economic capital. Beddington (2008) describes the use of a relatively new term in social capital literature, "mental capital" which comprises intellectual and emotional resources which can be built up or damaged through life. It includes people's cognitive ability; their learning capacity; and their emotional intelligence, or social skills and resilience in the face of stress. The term therefore captures a key dimension of the elements that establish how well an individual is able to contribute to society and to experience a high quality of life.

Collective mental capital has been argued as an important concept for countries wishing to maximise development for their populations. It is generally recognised that the measures of the human development index (life expectancy, literacy and gross domestic product), fail to capture other important aspects of human development, such as mental health and wellbeing (Ranis, Stewart, & Samman, 2005). In turn, the failure to address this link between mental health and development results in a lack of appreciation or action from policy makers, particularly in LMIC which are most in need of harnessing human development (Jenkins et al., 2011). But the contribution of better mental health to development goes

beyond a reduction of clinical symptoms and disability, and greater workplace productivity.

Cohesive and productive groups of individuals are considered to be more than just the sum of their individual human capital.

Robust evidence exists to illustrate that people with mental health conditions are the most excluded in society and they frequently have restricted social networks due to marginalisation and stigmatisation in the community (Webber et al., 2014). Analyses that have examined social networks and depression have shown that individuals who report being socially isolated are more likely to have depression than those who report more network ties (Fujiwara & Kawachi, 2008; Webber et al., 2011). Informal social networks are influential in helping unemployed people find work and help to build social capital which can lead to greater occupational prestige, income and political influence when mobilised (Lin & Erickson, 2008). Meaningful leisure participation is a pro-active facilitator in holistic recovery on a range of outcomes such as social connectedness, health, positive emotions (Iwasaki, Coyle, & Shank, 2010) and has been linked to social skill development, community functioning, and accomplishing goals (Lloyd, King, McCarthy, & Scanlan, 2007).

However, it is not only the number of network contacts that may be important for mental health, but also the quality of relationships within social networks. In a prospective controlled study of community mental health services in South London, Becker et al. (1998) found that quality of life appraisal tends to improve with an increase in social networks but may level off after optimal network size is reached, therefore pointing to the salience of meaningful engagement with others when promoting recovery in services. Rosenquist, Fowler and Christakis (2011) investigated the spread of depression through social networks. Findings suggest that people with several core ties and those who were located centrally within their networks had lower rates of depression. Researchers also reported that depressive symptoms do spread within social networks, such that having close ties with depression doubled the probability that the respondent will develop depressive symptoms themselves.

It has also been suggested that internalised stigma, self-belief in negative stereotypes, may cause individuals with schizophrenia "to act less confidently and more defensively with others" ultimately leading to avoidance and isolation, hampering recovery (Link & Phelan, 2006, p. 528). Individuals need to receive the benefits of social interaction, and also believe that their contribution to the relationship is valued (Snethen, McCormick, & Van Puymbroeck, 2012).

### 2.7.5 Measurement of social capital and mental health

Part of the trouble in reaching consensus on how to measure social capital has been that the concept is multi-faceted, and therefore a variety of proxies have been used to link aspects of social capital. Researchers have measured social capital both ecologically and individually, as they may have different effects on mental health. Studies of depression occupy a central part of the literature on social capital and mental health. The high prevalence rates of depression and the ease of measuring depression through short questionnaires likely contribute, in part, to prominence of this research (Bassett & Moore, 2013).

Individual social capital is most commonly measured by asking individuals about their participation in social relationships (e.g., membership in groups) and their perceptions of the quality of those relationships. The Resource Generator-UK (Webber & Huxley, 2007) measures an individual's access to social resources within their social network. This measure has been found to have good reliability and validity both with common mental health conditions such as depression (Webber et al., 2011) as well as severe mental illness (Sweet et al., 2017).

Ecological social capital has been most often measured by aggregating the responses of individuals in population surveys to the community level. For example, by asking a representative sample of the community the individual social capital questions and then aggregating these to the community level to produce average levels of civic engagement or

trust in a community (Ehsan & De Silva, 2015). There is, however, an acknowledged need for contextual ecological measures that do not require aggregation of individual responses or rely on individual perceptions, for instance using voting rates (McKenzie & Harpham, 2006).

Although contested, the measurement of social capital and assessment of its dimensions (section 2.7.2) make an important contribution to mental health research. Until recently, evidence linking social capital and mental health has been largely cross-sectional, making it hard to determine a causal relationship. However, several reviews have recently emerged to better understand the impact of interventions that promote social capital for people with mental health conditions (Ehsan & De Silva, 2015; Noel et al., 2018). Further research is needed on the development of such interventions and this is also where social work may play an important role.

### 2.8 Evidence-based intervention development

In social work, increasing pressure towards scientific-evidence and the development of interventions on sound evidence is crucial to the sustainability of the field in today's neoliberal environments (Driessens, Saurama, & Fargion, 2011). This alludes to evidence-based policy and practice, which has become the dominant paradigm within medicine, and social care also (Orr & Jain, 2014).

Intervention research involves the use of scientific methods to show that a particular change strategy is both efficacious and effective. Efficacy focuses on assessing outcomes of interventions in highly controlled settings, where most alternative explanations of causality can be eliminated and the researcher has confidence that the intervention was responsible for the observed outcomes. Such studies are almost always randomised and the researcher provides direct supervision of the delivery of the intervention. Although effectiveness studies have a similar level of rigour they differ from efficacy studies in that they attempt to implement an intervention under real-world practice conditions (Tibbits, Bumbarger, Kyler,

& Perkins, 2010). Often tested at several sites, effectiveness studies evaluate replicability for implementation in different contexts.

Interventions may be developed at the individual, family, group, organisational, community, and societal levels. Social work practice is comprised of interventions that range from single techniques such as motivational interviewing (MI) to multicomponent programmes such as assertive community treatment (ACT). Historically, practice was influenced by the authority of clinicians and through experience, which led to the development techniques that could be used in various circumstances (Fraser et al., 2011). Over the past decade there has been a burgeoning interest in research-informed, evidence-based practice in social work and health care. The link between science and social work has reached the point that the two concepts are intertwined in the very definition of the discipline, as provided by the International Federation of Social Workers.

"...Social work bases its methodology on a systematic body of evidence-based knowledge derived from research and practice evaluation, including local and indigenous knowledge specific to its context..." (International Federation of Social Workers, 2000, p. 1).

The failure of science to readily transfer to service settings has led to greater interest in the processes needed to move science to service successfully. Evidence-based practice (EBP) is the process of inquiry intended to guide practitioners in making the best possible decisions about interventions or services for people, informed by rigorous and effective methodology (Webber, 2014). EBP is making some inroads in social work education, particularly in American graduate social work programmes (Thyer & Myers, 2010). However, it remains to be seen if EBP will provide an enduring foundation for professional social work practice, as the latest effort to make social work a genuine example of an applied social science.

In a US survey, Mullen and Bacon (2004) found that social workers were poorly informed about practice guidelines, infrequently read research papers, and viewed supervisors as the conduit for practice knowledge. Cooke et al.'s (2008) survey of UK social care workers, indicated poor implementation of research in practice, finding that less than 15% of their sample had access to research-based practice guidelines and of these only one-third reported using EBP. A systematic review exploring social workers' EBP attitudes, adoption, knowledge, and skills found numerous challenges to EBP implementation (Scurlock-Evans & Upton, 2015). These included time management, research accessibility, and misperceptions of the role of evidence in decision making.

In the UK, the social work contribution to the mental health evidence base is sparse, suffering from a combination of structural, economic, and academic constraints (McCrae, Murray, Huxley, & Evans, 2005). For example, without a budget for research the local authority setting is regarded as lacking research opportunities for social workers.

Consequently, mental health services rely upon evidence from psychiatry and psychology to inform practice and policy.

Webber (2014) argues that without an evidence base of its own, social work in UK mental health services is becoming marginalised to statutory roles, whilst health clinicians deliver interventions recommended by clinical guidelines. The National Institute for Health and Care Excellence (NICE) develops guidelines for UK practitioners about evidence-based interventions. However, the guidelines are predominately composed of randomised controlled trials (RCT) evidence which results in very few mental health social interventions being included. Therefore, a rigorous process of intervention development, grounded in the reality of real-world practice, may improve the effect of mental health social interventions and facilitate its subsequent implementation into routine practice (Anderson, 2008).

#### 2.8.1 The Connecting People Intervention

Recognising the insufficient evidence on the effectiveness of social interventions that support people with mental health conditions, Webber and colleagues (2015a) set out to develop the CPI to articulate good practice and enhance the evidence base for mental health social work. The CPI is communicating the process of a mental health worker assisting an individual to enhance their social network and engage in their community.

Whilst the social capital literature is building to show a clear link between social relationships and mental wellbeing, there was a paucity of evidence in this area of practice (Newlin et al., 2015). The relationship of the worker and the service user is central to the CPI model, as an evolving, mutual relationship which is not typical of traditional "clinician—patient" roles (Webber et al., 2015a). Instead of the worker treating the individual with a particular therapy, as most psychosocial interventions do, the individual is supported to pursue his or her interests through social activities. The agency in which the intervention occurs is seen as a core element to the intervention's success. Barriers to this way of working include self-stigma or discrimination toward the individual, and a lack of local knowledge, insufficient time or resources to engage on the worker's side.

A quasi-experimental pilot study evaluated the effect of the CPI on access to social capital, social inclusion and mental wellbeing for 155 people with a mental health problem or a learning disability receiving care and support from health and social care practitioners in the UK (Webber et al., 2018). Participants exposed to practice with high fidelity to the CPI model had significantly higher access to social capital (p=.03, partial  $\eta^2$ =.05) and perceived social inclusion (p=.01, partial  $\eta^2$ =.07), and lower service costs (-£1,331 (95%CI=-£69 to -£2593), post-test than those exposed to low fidelity to the model. All participants had significantly higher mental wellbeing post-test (p<.001). High fidelity CPI was only achieved in one National Health Service / Local Authority setting. These preliminary results suggest that when fully implemented the CPI can improve social outcomes for people with a mental health problem or learning disability.

The application of evidence-based social interventions and those that promote social capital, such as the CPI, may have potential to enhance practice of mental health workers and improve outcomes for people with mental health conditions globally. Social interventions have been neglected in the field of GMH but may better capture the local social environment and its impact on mental health conditions.

#### 2.9 Conclusion

Given that most mental health research has been undertaken in narrow settings worldwide, where only a minority of the population lives, it must be acknowledged that straightforward extrapolation of the existing evidence-base is not always appropriate. But one of the primary challenges of implementing mental health interventions is to determine the most effective intervention strategies within a given context and to promote the application of research.

The field GMH has resulted in a growing evidence base, leadership and policy change, as well as funding for crucial mental health service development to a number of countries worldwide (Patel, Collins, et al., 2011). A dual focus on improving both the human rights of people with mental health conditions and access to mental health care worldwide has characterised this movement. But critiques of GMH have been that it emphasises a top-down approach, exporting illness categories and psychiatric diagnoses that would ultimately replace diverse cultural environments for interpreting mental health (Mills, 2014). This is where social work and the concepts described in this chapter, such as the impact of social determinants on mental health and social capital, may be able to uniquely fill a current gap in knowledge.

Intervention research has shown that some of the burden of mental health conditions might be prevented by strengthening individuals, their friends and families, and the communities in which they live. Interventions that are designed to strengthen individuals with

mental health conditions include promotion of self-efficacy, social and emotional skill development, motivation and purpose, and by developing and maintaining strong social networks (Jenkins et al., 2011). Social interventions have the potential to improve quality of life (Webber et al., 2011), community engagement (Attree et al., 2011) and positively impact the social functioning (De Silva et al., 2013) of people with mental health conditions.

In order for knowledge to be disseminated outside the narrowly circumscribed scientific community, it needs to be "socially robust" to capture the nature of wider communities (Driessens et al., 2011). For service users, care providers and policy-makers, local data are important. Research and action into the "know" and "how" of mental health conditions may vary across economic boundaries; such information is crucial to our understanding of health and social care needs in a given setting. Therefore, social interventions may be uniquely able to help to fill the treatment gap for people experiencing mental distress in LMIC.

# **Chapter 3: Systematic Review**

#### 3.1 Introduction

To understand whether or not social interventions may be a suitable approach to addressing the mental health treatment gap in LMIC, a systematic review of peer-reviewed literature was needed. The aim of this review was to understand the extent to which mental health social interventions had previously been used in LMIC, as well as the mechanisms to translate evidence across economic boundaries, with potential adaptation of the CPI in mind. Studies were included if they translated knowledge between richer and poorer countries and reported a social component (as opposed to purely health) which aimed to improve social outcomes for adults with mental health conditions. The initial review included 23 studies which met inclusion criteria. In January 2018, an additional 6 studies were added to the synthesis of findings. The results from this review provide evidence for the successful translation of locally adapted social interventions to LMIC, though the specific knowledge translation mechanisms varied greatly. This chapter has been adapted and updated from a systematic review, published by the PhD candidate and supervisor in the first year of study (Newlin & Webber, 2015).

#### 3.2 Background

Most of the global burden of mental illness falls to the poorest nations, but on average LMIC invest less than 1% of their health expenditure to mental health, resulting in poorly developed mental health policies and research infrastructure (Kohn, 2004). Whereas in HIC countries, considerable resources are devoted to mental health research and production of new knowledge. Policy makers and practitioners are challenged to deliver care involving the use of research evidence combined with clinical knowledge and reasoning to inform practice. For this to occur knowledge provision is integral; however, the terms knowledge "transfer" and

"translation" both acknowledge the complexities of transmission between researcher and user, and yet inconsistency in the use of the terms requires clarity.

There exists a breadth of literature available on knowledge transfer and can be defined as "the process of getting knowledge used by stakeholders" (Graham et al., 2006, p. 16). Several frameworks have been developed for knowledge transfer strategies that generally focus on the activities directed by researchers including: a) promoting public awareness, b) dissemination to the target audience, c) implementation with the goal of creating behaviour change (Davis et al., 2003).

The term knowledge transfer has been criticised because it implies unidirectional flow of knowledge. Whereas knowledge transfer refers to the point at which research findings are delivered, the term knowledge translation has been used to describe a broader multi-dimensional concept involving partnerships, interaction and exchanges throughout the creation of knowledge, development and implementation of research (Graham, Tetroe, & Group, 2007). This involves interaction between stakeholders in both countries throughout the research process to ensure, in intervention research, for example, appropriate adaptation for different, social, cultural and economic contexts.

Despite widespread agreement that knowledge translation is needed, there are few published studies of how to effectively translate knowledge of psychosocial interventions, particularly those aimed at improving social outcomes for mental health populations. Previous systematic reviews of mental health interventions involving LMIC have largely been limited to studying the effectiveness of RCTs for individuals with schizophrenia and depression (De Silva et al., 2013; Mari et al., 2009; Purgato, Cipriani, & Barbui, 2012) though a focus on social interventions is largely absent. Several reviews have evaluated task shifting interventions for mental health, or those that train non-specialist workers in low-resource settings (Barnett, Gonzalez, Miranda, Chavira, & Lau, 2017; Hoeft, Fortney, Patel, & Unutzer, 2018). Evidence has also been synthesised to better understand the link between

poverty and mental health conditions in LMIC (Iemmi et al., 2016; Lund et al., 2010; Wahlbeck, Cresswell-Smith, Haaramo, & Parkkonen, 2017) although the translation of knowledge as it relates to economic boundaries has not been reviewed.

Knowledge translation in social work is underdeveloped in contrast to other disciplines such as medicine. This is particularly true of international social work as research is frequently confined to national boundaries, reflecting policy and practice within jurisdictions. This review aims to provide a baseline of current knowledge about the translation of social interventions for mental health conditions across economic boundaries against which progress can be benchmarked. In synthesising the available literature, it also aims to build a case for the strengthening of knowledge translation in social interventions, recognising the importance of context-specific characteristics. This synthesis of international literature therefore aims to provide policy makers, researchers and practitioners with evidence to inform decisions about how to plan effective interventions and to identify future research needs.

#### 3.3 Methods

#### 3.3.1 Selection criteria

The review included psychosocial interventions with a social component (non-pharmacological/physical) which aimed to improve social factors for adults experiencing mental health conditions that had been translated across economic boundaries. Psychosocial interventions were defined as any intervention that emphasises psychological or social factors rather than biological factors, and specifies a social component (Ruddy & House, 2005). This comprised psychotherapies or collaborative stepped-care approaches aimed at enhancing an individual's social skills, relationships or network. This definition allows for the inclusion of interventions that appear in any format, e.g. groups, individual, or family; and within the immediate social context of the individual rather than wider social context. Furthermore,

policy analyses, system-level research, and evaluation of existing care practice that had not been translated through intervention were also excluded from the analysis.

In order to determine whether an intervention had been translated across economic boundaries or simply executed in more than one setting, the theoretical or conceptual foundation that informed the intervention development was combined with the mechanisms pursued by the researchers to implement it in another country.

To be included, studies needed to measure social outcomes attributable to the intervention. This incorporates measures of social capital, social functioning, social support, or social network development but is not limited to validated tools as access to measures adapted for LMIC is limited. Social capital is increasingly being recognised as important for health and mental wellbeing (Kawachi et al., 2007). Defined by Nan Lin and others as the resources that are embedded within social networks (Lin, 2001; Lin & Erickson, 2008), this conception is an extension of social network theory and emphasises the importance of network members' resources, such as wealth, power and status, to an individual. As such, studies with social outcome measures that broadly assessed an individual's social development were included in this review.

### 3.3.2 Search strategy

Relevant peer reviewed studies were identified in a three-staged approach. Firstly, a search was conducted in MEDLINE, Pubmed, EconLit, Web of Science and PsycINFO using Medical Subject Headings (MeSH) terms or equivalent adaptations to reflect different indexing, search functions, and syntax (example search strategy Appendix A). The search strategy employed three independent variables linked by "AND" statements: (1) indexed, fully exploded geographical term covering "developing countries" or countries identified by the World Bank as LMIC (annual gross national product (GNP) per capita less than \$12,476); (2) indexed, fully exploded term covering "mental disorders;" (3) a final term that was either

indexed, covering "interventions," or unindexed, for example: "Random\*adj control\*adj trial\*". Search terms related to the social nature of the interventions were not included in the strategy so as to not miss studies which measured social factors that may not be reported in the keywords and abstract.

Secondly, hand searches were conducted to review tables of contents for *British Journal of Psychiatry, British Journal of Social Work, Community Mental Health Journal, European Journal of Social Work,* the *Lancet,* and *Social Work in Mental Health.* Thirdly, reference sections of key articles were reviewed. Language and publication year limits were not applied, however only full-text papers in English were included in the final review. The searches covered the full range of publication years available up to April 2014 and were rerun in January 2018.

## 3.3.3 Data extraction and analysis

Data were extracted from eligible studies using an adapted version of the standardised SCIE Data Extraction Tool for intervention evaluation (Rutter, Francis, Coren, & Fisher, 2010). The tool was adapted such that in addition to collecting details about the *nature of the study* (e.g. user/stakeholder involvement, sample characteristics, recruitment procedures, analyses), *nature of the intervention* (e.g. intervention aims, theoretical framework, main features, delivery), and *outcomes* (e.g. main measures, summary of findings, strengths/limitations, cost effectiveness reported), the tool also contained a series of coding categories to facilitate systematic data analysis and synthesis (Appendix A).

# 3.3.4 Quality appraisal

The quality of included studies was appraised to establish methodological rigour. Studies were appraised using a set of pre-determined criteria from SIGN50 guidelines (Appendix A).

Whilst the quality appraisal stage did not affect the inclusion of studies, the process was used to generate an overall quality score of ++, + or —.

## 3.4 Results

A total of 3,924 unique studies were identified through database and hand searching (Figure 1). Where it was not obvious from titles and abstracts, full text was obtained in screen 2. Of the 123 studies reviewed at screen 2, most were excluded when it became apparent they did not meet the specific inclusion criteria, and additional four were unavailable by full text. Thus, 29 studies met selection criteria and were included in this review.

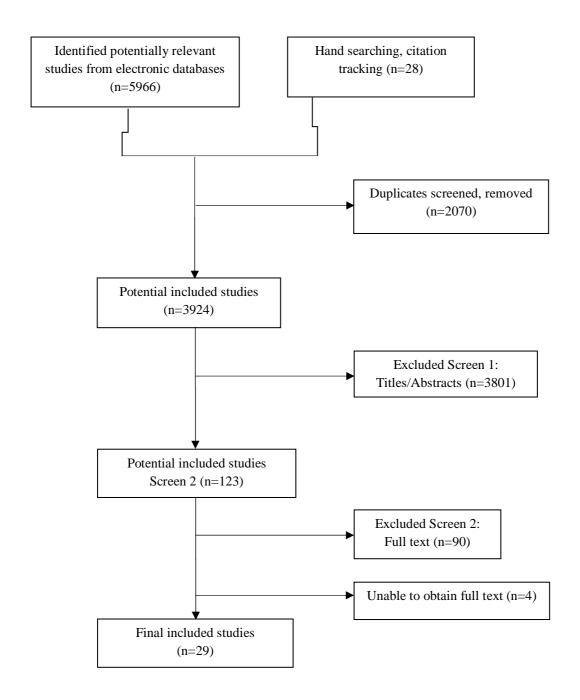


Figure 3.1 Application of selection criteria

#### 3.4.1 Characteristics of included studies

Although each study reported the social outcomes attributable to intervention effects, the knowledge translation mechanisms, methodologies, instruments employed, and results varied greatly. It was therefore not possible to analyse the studies quantitatively and meta-analysis was deemed impossible. Instead, the data extraction tool formed the basis of narrative synthesis, which was conducted to summarise the impact of intervention translation.

Two papers report on outcomes from the same RCT, one reporting post-intervention data (Bolton et al., 2003) the other reports six-month follow-up data (Bass et al., 2006). For purposes of this review, both studies met inclusion criteria though participant data has been reported only once. Characteristics of 29 included studies are presented in Table 1.

**Table 3.1 Study characteristics** 

Study characteristics  Study characteristics	Number of studies
Location	
Africa: Kenya (n=1) South Africa (n=5) Uganda (n=3)	(n=9)
Asia: China (n=3) India (n=9) Malaysia (n=1)	(n=13)
Eurasia: Georgia (n=1) Turkey (n=1)	(n=2)
Latin America: Brazil (n=1) Chile (n=2) El Salvador (n=1) Mexico (n=1)	(n=5)
Study design	
Case studies	(n=6)
Case control studies	(n=4)
Cohort studies (before and after)	(n=6)
Randomised controlled trials	(n=13)
Mental health condition	
Common mental disorders	(n=6)
Severe mental illness	(n=3)
Unipolar Depression	(n=6)
Schizophrenia	(n=10)
Substance misuse	(n=3)
Intervention type	
Assertive Community Treatment (ACT)	(n=2)
Interpersonal Psychotherapy (IPT)	(n=5)
Multicomponent Community Care	(n=8)
Multicomponent Collaborative Care	(n=5)
Multicomponent Structured Care	(n=9)
Setting	
Hospital in-patient	(n=4)
Hospital out-patient	(n=8)
Primary health care	(n=8)
Community	(n=10)
Delivery mode	
Individual	(n=7)
Group	(n=8)
Mixed: individual + family	(n=3)
Mixed: individual + group	(n=7)
Mixed: group + family	(n=4)
Quality appraisal	
(++) Low risk of bias	(n=17)
(+) Moderate risk of bias	(n=10)
(-) High risk of bias	(n=2)

#### 3.4.2 Study samples

All 29 included social interventions which were translated from HIC to LMIC in the past 20 years. The majority of studies (n=13) were conducted in Asia, most of those from India (n=9); one-third of the studies were conducted in Africa; the remaining studies were from Latin America (n=5) or Eurasia (n=2). A total of 5,801 adult participants contributed to the 29 studies, ranging from one to 2,367 per study. The most common mental health problem for the participants in the studies was schizophrenia (n=10), followed by unipolar depression (n=6), common mental disorders (n=6), severe mental illness (n=3) and substance misuse (n=3).

Studies varied in design, roughly half (45%) were RCTs, six were case studies, four were case-control (non-randomised before and after intervention), and six were cohort studies. Half of the included studies were hospital-based (eight out-patient; four in-patient). Although the majority of studies were delivered in the community (n=10), one study took place in both the community and a hospital out-patient unit (Chatterjee, Patel, Chatterjee, & Weiss, 2003) and the remaining were delivered in primary care settings. Eight studies were delivered in groups, seven individually, and the remaining 14 studies were mixed delivery.

#### 3.4.3 Measurement of social outcomes

Table 3.2 summarises the social outcome measures employed across the review sample. Lack of consensus in the literature regarding measurement of social outcomes was evidenced by 13 different scales with 16 studies using quantitative measures, eight using qualitative measures, and five employing mixed methods. Social outcome measures were taken from HIC often with little translation for the local context. Whilst most scales were validated, only five were locally developed or specifically adapted for LMIC and two papers reported on instruments developed specifically for the study. The social domains measured

across the 13 scales varied greatly, though no tool measured all domains: social activities and participation (n=12); social functioning (n=12); interpersonal relationships (n=13); social networks (n=3); social engagement and isolation (n=8); employment or study (n=5); communication (n=4).

Overall, 14 of the 18 quantitative studies reported significant results on social outcomes; three studies that did not reach statistical significance still reported improved social outcomes to a lesser degree. The domains of social outcomes that saw marked improvement included: interpersonal relationships, engagement in social activities, social participation, social functioning, and employment status. Qualitative studies also reported improvement in social network development and interpersonal communication skills.

**Table 3.2 Social outcome measures** 

Scale	Description	Valid/ Reliable	For LMIC	Number of studies using this scale	Social activities	Social functioning	Interpersonal relationships	Social network	Social participation: engagement/withdrawal	Employment/ Study	Communication
Global Assessment of Functioning (GAF)	Rates subjectively the social, occupational, and psychological functioning of adults, e.g., how well or adaptively one is meeting various problems-in-living (100 items)	Yes	No	4	X	X	X			X	
Global Assessment Scale (GAS)	Rating scale for evaluating the overall functioning of a subject during a specified time period on a continuum from psychological or psychiatric sickness to health, developed from GAF (100 items)	Yes	No	2	X	X	X				
Life skills profile (LSP)	Instrument to assess social functioning and includes domains of social contact, communication (39 items)	Yes	No	1		X	X	X	X		X
Nurses' Observation Scale for Inpatient Evaluation (NOSIE)	Psychosocial functioning and behaviour designed for individuals on a psychiatric inpatient unit (30 item)	Yes	Yes	1	X	X	X		X		
Qualitative Measure	In-depth interviews or focus groups	NA	Yes	13	X	X	X	X	X	X	
Social Disability Screening Schedule (SDSS)	Assessment of social disability, developed from WHO-DAS (10 items)	Yes	Yes	1	X	X	X		X	X	
Social Functioning Scale (SFS)	Developed to assess areas of functioning that are crucial to the community maintenance of individuals with schizophrenia (79 items)	Yes	No	1	X	X	X		X	X	X
Social and Occupational Functioning Assessment Scale (SOFAS)	Assessing overall severity of psychiatric disturbance in adults, developed from GAF (100 items)	No	No	1	X	X	X				
Short-Form 36 social functioning scale (SF-36)	Consists of eight scaled scores, measures the extent to which health problems interfere with social activities (36 items)	Yes	No	3	X	X					

World Health Organization Disability Assessment Scale (WHO-DAS II)	Generic assessment instrument for health and disability, produces standardized disability levels and profiles across six domains	Yes	Yes	6	X	X	X	X	X		
Locally developed social functioning scale	Sex-specific measure to assess social functioning, describing activities important to the local culture (9 items)	Yes	Yes	2	X	X	X				
Social Behaviour Scale (SBS)	Measuring social behavioural difficulties (21 items)	Yes	No	1		X	X		X		X
Indian Disability Evaluation Assessment Scale (IDEAS)	Semi-structured interview measuring social relationships, activities, communication	Yes	Yes	1	X		X				X
Short Inventory of Problems (SIP)	Measuring problems people face because of drinking, including social, emotional and interpersonal problems	Yes	No	1	X		X		X	X	

### 3.4.4 Key findings

In total, there were five types of social interventions to treat mental health conditions reported, all of which had been derived from HIC and translated to LMIC. The most common type of intervention was multicomponent structured care (n=9), consisting of more than one therapeutic component such as pharmacotherapy, psychoeducation, or structured family therapy, used in combination with social enhancement strategies (Katon et al., 1996). As part of this, three studies used MI combine with another form of psychosocial intervention (Lawrence, Fulbrook, Somerset, & Schulz, 2017). Five studies used multicomponent collaborative care, which is defined as an intervention using case managers to link health and social care providers in order to increase the type and frequency of support for adults with mental health conditions, addressing a variety of psychosocial factors (Thota et al., 2012). Used in five of the included studies, *interpersonal psychotherapy (IPT)* reviews a person's current social ties focussing on four social problem areas to improve relationships associated with the onset or perpetuation of mental health conditions (Krupnick et al., 2008). IPT focuses on feelings in interpersonal situations, helping people to understand them as useful signals of interpersonal encounters. Studies of IPT have been included in this review based on their measurement of social factors related to these interpersonal encounters, such as the reduction of social isolation. Eight studies evaluated multicomponent community care interventions, combining psychosocial therapies in a community-based setting where non-specialist human resources are utilised to reduce constraints on low-resourced health systems (Patel, Farooq, & Thara, 2007). Assertive community treatment (ACT) was used in two included studies, which is a social skill training that includes elements of culturally/context-appropriate assertive behaviours targeting behavioural, cognitive, emotive components of social skills (Marks, 1986).

Although the aims of each study varied, and most were designed to improve overall mental health which included social outcomes either primarily or secondarily, there were

many similarities in the common social themes which emerged from the review (Table 3).

These themes point to specific translational strategies that had been adapted to the local context of the LMIC, suggesting potential approaches for future translational work.

**Table 3.3 Summary of key findings** 

Study	Country	Study Aims	Summary of main findings, social outcomes	Quality Appraisal	
Araya et al. (2003)	Chile	To compare the effectiveness of a stepped-care programme with usual care in primary-care management of depression in low-income women	Results showed large and significant difference in favour of the stepped-care programme, consistent across all assessed outcomes, stable during six months follow-up. [SF-36 social functioning difference in mean scores between groups: 19·32 (CI=13·11 to 25·53) p<0·0001].	(++)	
Balaji et al. (2012)	India	To evaluate a lay health worker delivered community based intervention	Self-help support groups (service users, families, peers) address feelings of isolation and low self-esteem, were an opportunity to expand social networks. Care focussed on social skill training, engagement in treatment, referral to community resources, facilitating social relationships.		
Bass et al. (2006)  Uganda  To determine whether the substantial treatment benefits found immediately following the formal intervention were maintained six months later (connected with Bolton, 2003)		benefits found immediately following the formal intervention were maintained six months later	Marked improvement in functional outcomes sustained six months later [adjusted differences in mean score between intervention and control groups: 4.97 (3.56-6.38) p<0.001]. Results did not report quantitative social functioning scores. Development of income-generating projects in the community. Groups used for informal counselling, discussing how each person was doing socially/emotionally, advising about problems.		
Bolton et al. (2003)	Uganda	To test the efficacy of group IPT in relieving depressive symptoms and improving functioning	Improvement in function scores was greater among the intervention groups across between and within analyses (p<.001). The mean change in intervention group was slightly higher for women (20.46) than men (14.43). Locally developed measure for social outcomes included activities for men and women where intervention groups saw higher mean scores (indicating better functioning) in the following areas: [(men) participation in community development activities; attend local meetings; socialise; (women) participation in community development activities*; attend meetings*].	(++)	
Botha et al. (2010)	South Africa	To determine the impact of a tailored, assertive treatment service on readmission rates and other measures of outcome in psychiatric services in a developing country	The mean SOFAS score was significantly higher in the intervention group (p=0.02). Authors conclude ACT may impact on the severity of psychopathology and level of functioning. Also, ACT may be more effective where community services are less comprehensive, however it is in these settings that it may not be affordable nor feasible.	(++)	
Brooke- Sumner et al. (2017)	South Africa	To develop and evaluate a community-based psychosocial rehabilitation programme for service users with schizophrenia	Qualitative interviews reflected themes: improved self-esteem, a reduced social isolation, more supportive social environment, improved mental health symptoms, improved knowledge and adherence. Acceptability of the intervention was enabled by group support, positive perceptions of facilitators, and appropriate content. Barriers included challenges to participation, difficulties	(++)	

			understanding content, negative family involvement, need to work and earn income, logistics and health system issues.	
Chatterjee et al. (2003)	India	To compare the effectiveness of community-based rehabilitation (CBR) with that of outpatient care (OPC) in the treatment of people with chronic schizophrenia, and to test the hypothesis that CBR would produce superior clinical and disability outcomes compared with standard outpatient care	Intention-to-treat analyses comparing CBR and OPC groups showed significant improvement in CBR social functioning [Social CBR=10.7 (9-12), OPC= 6.7 (5-8), p<0.0001]. As members of the local community, workers communicated effectively with service users and families, using shared cultural idioms and generating a positive social milieu that facilitated recovery, also it empowered them to become informed partners in rehabilitation strategies. Social and cultural factors unique to men and women might differentially influence the recovery process. Treatment completer analyses comparing CBR and OPC groups across both men and women: [Social CBR= 14.1 (13-15), OPC=10.6 (9-12), p< 0.01]. There were also significant differences found between compliant and partially-compliant service users.	(++)
Chatterjee et al. (2009)	India	To describe the scaling up and impact of a CBR programme for people with psychotic disorders in a very-low-resource setting	Marked improvement in IDEAS scores was reported for 50% (n=118) of participants, and 40% (n=95) showed moderate improvement. The remaining 10% (n=23) showed minimal improvement. The social outcomes of the cohort, assessed at end-point, indicated that the majority of participants had been taking part in normative community activities such as attending marriages (82.6%), participating in community festivals (81.3%) and visiting relatives in another village (84.3%). Most participants had attended the gram sabha (village development council meetings) (64.7%) and voted in village elections (75.2%). The most common economic asset (63%) gained by families during the course of the programme was additional livestock, followed by home appliances; 68.2% also secured employment. Most importantly, these groups supported the social inclusion of people with psychosis in mainstream community activities and reduced discrimination.	(+)
Gomes et al. (2016)	India	To assess a culturally adapted IPT as an intervention to treat common mental disorders in a 54-year-old primary care patient struggling with depression and heart-related problems after his wife's death, this study was part of the MANAS trial, an RCT, aimed to test the effectiveness of a stepped care intervention led by lay health counsellors in primary care settings in Goa, India.	By restoring the patient's confidence, helping him re-establish relationships with significant others, and teaching him coping skills to make effective adjustments and problem solve, IPT enhanced the patient's overall functioning, making him believe in his ability to efficiently manage his responsibilities.	(+)
Guo et al. (2010)	China	To evaluate the effectiveness of antipsychotic medication alone vs combined with psychosocial intervention on outcomes of early-stage schizophrenia.	Those receiving combined treatment showed significantly greater improvement on 4 domains of the SF-36 (role-physical, general health, vitality, and role-emotional; p<.02). Significantly higher proportion of individuals receiving combined treatment obtained employment or accessed education (30.1% in the	(++)

			combined treatment group vs 22.2% in the medication-alone group; p<.001).	
Hirdes & Kantorski (2002)	Brazil	To approach care systematization in two individuals with psychiatric disorder who attended services in the community, focussing on: permanence in their environment, allowing service users to remain close to their families and social spheres; and social reinsertion	(1) Enormous progress in communication skills, talking to neighbours, involved in social activities, as previously he refused to frequent the institution. (2) She is not as isolated, talks with the other people and participates in the proposed activities. The individualized therapeutic project must not be considered a merely normative process, but must respond to the proposed objectives. Thus, some characteristics are necessary: flexibility, re-dimensioning, evaluation.	(-)
Sekar (2011) based case management approach as a psychiatric social work intervention in India		based case management approach as a psychiatric	In the 6-month follow-up the client practised prayer & meditation, sought the help of family and members of the community. Her relationship with her husband improved dramatically. Authors emphasise the importance of taking cultural sensitivities into account when employing such interventions in the future.	
Li & Arthur (2005)	China	To conduct a longitudinal experimental study examining the effect of service user and family education in a sample of Chinese people with schizophrenia	ANCOVA for psychosocial behaviour revealed no significant difference between the two groups 3 months after discharge, but there was a significantly higher mean in the experimental group at discharge and at 9 months after discharge. The overall psychosocial functioning of service users was significantly improved in both groups between discharge and 9 months FU, experimental groups continued to improve.	(++)
Lund et al. (2013)	Kenya	To evaluate mental health, economic and quality of life outcomes for participants of Basic-Needs' Mental Health and Development programme in rural Kenya	Authors conclude findings present compelling evidence that not only are such programmes feasible, but they lead to significant improvements in mental health, quality of life, social functioning and economic activity. [Social relationships at baseline=9.8 (9.4–10.2), 12months=11.6 (11.3–12.0), 24 months=14.4 (14.1–14.7); p<0.01].	(+)
Murthy et al. (2005)	India	To examine the costs associated with a community outreach programme for people with schizophrenia living in rural area, to assess its impact on the personal functioning of individuals and burden on families	After the initial marked improvement across all domains at the first follow-up, there is relatively little change in the domains of mobility and self-care, but sustained improvements in the domains of cognition, life activities and participation in society.	(+)
Nadkarni et al. (2015)	India	To test the effectiveness of Counselling for Alcohol Problems, a brief psychological treatment for delivery by lay counsellors in routine primary care settings to men with harmful drinking in India.	The amount of alcohol consumed in the past 2 weeks and alcohol-related problems were all lower in the intervention arm compared to the control, but the between-group adjusted mean differences were not statistically significant. Prior to the RCT, the study also conducted focus groups to identify barriers and adapt the intervention to the local context.	(++)
Nadkarni et al. (2017)	India	To assess the effectiveness and cost-effectiveness of a Counselling for Alcohol Problems treatment when used in primary care; as part of the	The intervention was associated with strong effects on abstinence and remission 3 months after enrolment, but had no effect on other alcohol-related outcomes. There was no evidence of an intervention effect on Short Inventory of Problems	(++)

		PREMIUM (Program for Effective Mental Health Interventions in Under-Resourced Health Systems) study.	(AMD -0.03 [-1.93 to 1.86] p=0.97), WHODAS-II (AMD 0.62 [-0.62 to 1.87]; p=0.32), days unable to work (Count ratio 0.92 [0.59–1.43] p=0.70), suicide attempts, perpetration of intimate partner violence, and percentage of days drinking.	
Nickles et al. (2016)	El Salvador	To explore whether and to what extent the Family Education, Support and Empowerment Program (FESEP) is perceived as potentially effective and satisfying by its participants.	Several also noted clear improvements, which they attributed at least in part to participation in the FESEP programme. Focus group members' participation in mental health programmes beyond FESEP or in civil society groups was minimal. Effectiveness, satisfaction and sense of belonging were all rated highly. Effectiveness of the FESEP at improving the mental health wellbeing for programme participants was rated 4.5. The focus group's average level of trust was 3.3, that is, this sample of programme participants felt that they could sometimes or often trust in others.	(+)
Patel et al. (2011)	India	To test the effectiveness of an intervention led by lay health counsellors in primary care settings (the MANAS intervention) to improve outcomes of people with common mental disorders	The intervention showed benefits in reduction of disability days (days of no work or reduced work) and weaker effects on overall disability scores in these participants.	(++)
Petersen et al. (2011)	Uganda	To understand how the use of the common implementation framework assisted in the development of district/sub-district mental health services in Uganda, this study focussed on the results from user/carer focus groups	The group was reported to be very beneficial for the participants: enabling user engagement in other psychosocial rehabilitative activities, which in turn assisted in promoting social inclusion and reducing stigma and discrimination, assisting with the development of social skills, and the group also facilitated access to resources for agricultural production and economic gain.	(++)
Petersen et al. (2012)	South Africa	To assess the feasibility of the adapted IPT intervention for women with depressive symptoms that could be delivered by trained community health workers within a task shifting approach	At 12 weeks, intervention participants showed significant improvement in overall psychological functioning [mean HSCL-25 score of (i=1.85) compared to controls who showed no improvement (c=2.68)]. Increased coping mechanisms amongst participants through the development of positive cognitions, improved interpersonal skills. Group intervention improved capacity to cope with stressful situations at an interpersonal level, enhancing social support. Strengthened social and the accompanying benefits of health enhancing social support also reported to have been sustained post the intervention.	(++)
Rojas et al. (2007)	Chile	To compare clinical outcomes achieved with this improved programme with those from usual care for postnatal depression in primary-care clinics in Santiago, Chile	Significant differences were noted in the SF-36 scores [3 months MCI=82·2, UC=63·9; 6 months MCI=51·6, UC=44·5; Group-time interaction effect -14.5; (p=0·002)]. Although the magnitude of these differences between groups diminished after 3 months, gains in the multicomponent intervention group remained better than in the usual care group at 6 months in all models.	(+)
Razali et al. (2000)	Malaysia	To assess the efficacy of the Culturally Modified Family Therapy (CMFT) against the Behavioural Family Therapy (BFT) in the management of schizophrenia in a developing country	At 12 months, individuals who received the CMFT were better than those in the control group in all the variables, though improvements do not reach statistical significance. GAF score [6 months CMFT= 61 (SD 9), BFT=63 (SD 10), non-significant; 1 year CMFT=74 (SD 12) BFT=71 (SD 11), non-significant] SBS	(+)

			Score [6 months CMFT=32.5 (SD 7.3), BFT=30.7 (SD 6.6), non-significant; 1 year CMFT=23.9 (SD 5.6), BFT=26.0 (SD 6.4), non-significant].	
Sorsdahl et al. (2015)	South Africa	To assess the acceptability and initial substance use outcomes of a blended MI and problemsolving therapy (PST) intervention, delivered by peer counsellors for patients presenting to emergency room settings in Cape Town, South Africa.	Findings from the pilot study suggest that a blended MI-PST intervention holds promise for improving problem-solving skills and reducing substance use among people who are largely poorly educated and unemployed. The intervention seemed to provide participants with insight into the consequences of substance use as a way of coping with problems. Several respondents enjoyed the opportunity to think about the problems that were affecting their lives.	(++)
Uys & Zulu (1996)	South Africa	To link services to the individual and co-ordinate various system and community components through case management	No significant differences before and after the intervention for social life skills outcomes, and no significant difference between experimental and control groups. It would seem the groups were weakest on improvement to the social contact subscale.	(-)
Valencia et al. (2010)	Mexico	To determine the cross-cultural effectiveness of a psychosocial skills training (PSST) treatment for schizophrenia that was developed and validated in the United States and adapted for use with people with schizophrenia in Mexico	Service users receiving PSST improved one categorical level of functioning on the GAF Scale, increasing from the 41-50 range at baseline ("Serious impairment in social, occupational, or school functioning") to the 51-60 range at the end of treatment ("Moderate difficulty in social, occupational, or school functioning"). Standardized effect sizes for change in global functioning for the psychosocial rehabilitation and customary care groups were 1.3 and .30, respectively. The adjustments that were made to the social skills training and family psychoeducation were instrumental in building trust with the therapists, reducing participants' anxiety, and establishing rapport.	(++)
Xiang et al. (2007)	China	To evaluate the effectiveness of the Chinese version of the Community Re-Entry Module (CRM; a module of a standardised, structured social skills training programme) for people with schizophrenia compared with standard group psychoeducation	CRM group fared significantly better in social functioning at the 6-month, 12-month, 18-month and 24-month follow-up assessments. Significant improvement in terms of social functioning and re-employment. Social functioning in the CRM group significantly improved between the 6-month follow-up and the 24-month follow-up and was significantly better than in the psychoeducation group after controlling for pre-intervention scores. Authors conclude it seems that people in the CRM group could successfully use the social skills learnt in the programme in the community to restore impaired social functioning [24months CRM= 4.47 (1.77), Grp Psycheduc=6.97 (2.07), p<0.001].	(++)
Yildiz et al. (2004)	Turkey	To investigate the role of the comprehensive model of psychosocial skills training on social functioning and quality of life of people with schizophrenia	There were prominent differences between two groups at endpoint [GAF: interpersonal relations (z=3.964, p<0.001); instrumental role functioning (z=2.103, p<0.035); intra-psychic foundations (z=3.366, p<0.001); common objects and activities (z=3.083, p<0.002)]. Sub-scales of the SFS, reported significant differences in interpersonal behaviour (z=3.117, p<0.002); pro-social activities (z=2.806, p<0.005); recreation (z=3.127, p<0.002); and independence-performance (z=2.102, p<0.036)]. There were no significant differences in social withdrawal, independence-competence, and employment/occupation.	(++)

Zavradashvili	Georgia	Evaluating the feasibility, outcome and cost-	Having a social worker on the team, which was not common in standard care,	(+)
et al. (2010)		effectiveness of ACT piloted in Tbilisi	ensured that almost all service users achieved social benefit. Achievement of	
			social assistance was an important outcome for psychiatric service users.	

<sup>\*</sup>Behavioural Family Therapy (BFT); Community-based rehabilitation (CBR); Community Re-Entry Module (CRM); Culturally Modified Family Therapy (CMFT); Out-patient care (OPC); Problem-Solving Therapy (PST); Psychosocial Skills Training (PSST)

The first common theme is that many studies incorporated elements of social participation such as culture-specific community activities—particularly those that generate income—a mutually beneficial strategy for individuals with mental health conditions and wider community development. In one RCT (Bass et al., 2006; Bolton et al., 2003), a locally developed tool addressing social outcomes measured engagement in gender-specific activities that were typical for the sample. Socialisation was an activity more commonly attributed to male participants than females who had stronger roles in the home. Qualitative results illustrated that the development of income-generating activities in the community were especially important to enhancing mental health outcomes in the sample.

A multicomponent community intervention in India for people with schizophrenia reported social outcomes after four years, the longest follow-up for mental health service intervention in LMIC to date (Chatterjee, Pillai, Jain, Cohen, & Patel, 2009). The programme facilitated social participation whereby participants were engaging in context-specific community activities such as festivals, attending marriages, and voting in local elections. The groups were found to support social inclusion and addressed economic concerns through linkages with microcredit facilities and employment schemes, thus providing mutual benefit for service users and the community. This was also evidenced by qualitative accounts of IPT implemented in Uganda with a user-carer support group, the intervention assisted with social skill development and facilitated access to community resources for agricultural production to enable group members to end the vicious cycle of poverty and mental illness (Petersen, Sebunnya, Bhana, & Baillie, 2011).

One study trained social workers in South Africa in a manual-based group intervention to support community rehabilitation for people living with schizophrenia (Brooke-Sumner, Lund, Selohilwe, & Petersen, 2017). The intervention included one session on income-generating activities and half of group members felt being part of the group had encouraged them to budget more effectively. But the study reported a key barrier to

acceptability was the lack of provision of income generating opportunities. Thus, the intervention was unable to facilitate participant's plans to find employment in the community.

Secondly, interventions commonly addressed the impact on social network development, promoting wider community involvement and social relationships outside mental health services, thus breaking down stigma through advocacy and community acceptance. For example, Chatterjee and colleagues (2003) reported the intervention empowered community members to engage in rehabilitation, attributable to the lay health workers being members of the community whose influence generated positive social milieu regarding mental health. Lund et al. (2013) evaluated the implementation of the community-based BasicNeeds Mental Health and Development programme, created by an international NGO. This was the first programme to combine mental health, social support, and poverty alleviation in Africa, uniquely mobilised the community through awareness raising engagement meetings which also served as an opportunity to recruit participants to self-help support groups.

Thirdly, a common theme across the studies was an emphasis on culturally appropriate social and behavioural skill development, most often measured by social functioning, but also including communication and interpersonal relationship skills. Such social skills outcomes reflect how patients live, function, and perform various roles in society. Chavis and Newbrough (1986) defined social functioning as "the ability of a person to do what is appropriate in a social setting" (p. 19). The development of locally relevant social skills was a strategy used across a number of the included studies when translating interventions.

This was illustrated in a multicomponent collaborative care intervention for women with depression was compared with usual care in Chile, and aimed to be as feasible as possible for the local setting in order to improve existing care using standardised protocols (Araya, 2003). Delivered in groups and focusing on several treatment components: social and behavioural skills training, psychoeducation, and where necessary pharmacology, results

indicated statistically significant between and within group differences in social functioning scores. Similar improvement to social functioning and skills were found in a Ugandan trial of IPT with participants suffering from local depression-like symptoms, *yo'kwekyawa* and *okwekubazida*, translated as "self-loathing and self-pity" (Bass et al., 2006).

Contrastingly, two studies reported no significant differences between intervention and control groups on social function scores, though authors explained it takes time for patients and families to integrate new social skills into daily life, and as symptoms and social problems reappear individuals are changing coping behaviours to modify relationships (Li & Arthur, 2005; Uys & Zulu, 1996). It is possible that limited gains in social skills could also be understood from further examination of the extent to which interventions were adapted and evaluated for the local context. Both studies included elements of psychoeducation for schizophrenia, but did not address explanatory models for the illness in China and South Africa.

Lastly, a number of studies reported tailoring interventions to the local community through task-shifting: restructuring services by redistributing tasks among health care workers and utilising the community resources already available. Studies identified by this review utilised task shifting strategies to employ non-specialist, lay health workers (Balaji et al., 2012; Bass et al., 2006; Chatterjee et al., 2003; Patel, Weiss, et al., 2011; Petersen, Bhana, & Swartz, 2012; Petersen et al., 2011), reduce the size of caseloads and frequency of visits (Botha, Koen, Joska, Hering, & Oosthuizen, 2010), and operate temporary outreach camps in the community (Chatterjee et al., 2009). Task shifting was also shown to increase job satisfaction and reduce feelings of isolation and burn out when staff were trained in new strategies (Uys & Zulu, 1996).

# 3.4.5 Quality appraisal

The appraisal process revealed a range of methodological biases across studies, with 59% studies deemed at low risk of bias, 34% at moderate risk of bias, and 7% at high risk of bias (Tables 1 and 3). Some did not provide adequate detail of randomisation procedures, allocation concealment, and blinding to exposure. Poor reporting of outcome assessment was evidenced by limited information regarding the social outcomes and details of tool adaptation for the local context, as well as few studies reporting effect sizes to determine the strength of the outcomes, although author reports of both significant and non-significant results was deemed a methodological strength in several studies. Although there were numerous limitations in study designs, the overall included studies were judged as at low to moderate risk of bias.

## 3.5 Discussion

This overview of literature on the translation of social interventions across economic boundaries reflects an important gap in the translation of knowledge. The paramount finding that no published literature from social interventions developed in LMIC has been translated to HIC points to wider issues surrounding GMH. That, across the globe there are numerous developments in mental health research but richer and poorer countries are not necessarily learning from one another. Results indicate that some strategies to ensure knowledge is translated into policy, practice and improved health have been developed, but the evidence base for the effectiveness of those strategies is limited in HIC and relatively sparse in LMIC.

One exception to this is IPT, which was originally developed in HIC, translated to a low-income country by Bolton and colleagues (Bolton et al., 2003) and has since been adapted based on the lessons learnt in Uganda so the intervention components may be applied in other contexts. A guide on IPT, published in 2017, outlines the ways in which the intervention has undergone cultural adaptation since the studies in Uganda, and has been applied to a variety of population groups in low, middle and high-income countries

(Weissman, Markowitz, & Klerman). For example, an adapted version of IPT is being used to treat Syrian refugees living in Lebanon and the WHO manual for use in primary care (World Health Organization and Columbia University, 2016) is being adapted for Muslim countries in the Eastern Mediterranean.

# 3.5.1 Overall intervention findings

The included studies in this review provide evidence for the successful translation of social interventions across LMIC in order to improve social outcomes for adults with mental health conditions. However, it is difficult to ascertain if these concepts are universally applicable or transferrable across economic boundaries. Mental health social research is local in character; strategies to improve care must be locally developed and influenced by the communities in which they are measured. The common features identified incorporate findings from a diverse range of countries across Africa, Asia, Latin America and Eurasia, which help to provide evidence for the application of social interventions in other countries.

In many cases the interventions described in this review were locally adapted which enabled an appropriate evaluation of the resource implications, and thus provides relevant data for planning and implementation in similar settings. It appears, however, that the effectiveness of these strategies is highly variable and dependent on the setting and that success hinges on the extent to which strategies have been tailored. Graham (2006) explains, if research evidence is produced in a rigorous and transparent way, it may be more readily applied. This issue is further complicated by marked cultural, religious, and societal differences between many low, middle, and high-income countries; and is especially important as the concept of therapeutic treatment may be culturally unfamiliar, foreign, and stigmatising to many ethnic communities.

Findings of significant improvement for people with a variety of mental health conditions are consistent with other surveys in developing countries (Mari et al., 2009;

Razzouk et al., 2010; Sheriff, Adams, Tharyan, Jayaram, & Duley, 2008). Comparative studies have actually demonstrated better long-term outcomes for schizophrenia in LMIC, particularly for individuals living in rural areas (Leff, Sartorius, Jablensky, Korten, & Ernberg, 1992). In one included study, authors point to the finding that people in Asian, African, and Latin American countries tend to live with their extended families whereby family involvement in care may be more important than in Western cultures (Guo et al., 2010). This is further explained by the use of antipsychotic medications, which have been shown to be effective against symptoms, and in Western medicine they are now the foundation of treatment for schizophrenia. Nevertheless, Western medicine and psychological therapy is arguably not universally appropriate, particularly in resource-limited settings where medications are unavailable. Explanations for this phenomenon point to the social environment including: a) greater inclusion in communities, b) availability of close communal networks, c) involvement in traditional healing rituals which might reaffirm communal solidarity, d) valued roles in society which are adaptable to lower levels of functioning (Rosen, 2006).

There is international consensus that care for mental illness should largely be delivered in the community for best outcomes as this strategy enables people to maintain connections with family, friends, and wider community (Padmavati, 2012; World Health Organization, 2010). In a survey of village health workers, family, friends and neighbours were viewed as most likely to be helpful to people experiencing mental health conditions, and the role of psychiatrists in the provision of mental health care was less well recognized (Kermode et al., 2009). In many cases the first "port of call" for an individual with mental health conditions in LMIC is the traditional healer or religious leader; and the rural family often provides a major portion of the care. However, family has been seen as a substitute for professional care, possibly due to the inaccessibility of mental health services in most rural settings and the stigma attached to having a family member consult a psychiatrist. Consistent

with aforementioned GMH priorities by WHO and other international organisations, results indicate the majority of interventions were undertaken in community care settings, with further primary care and outpatient units prevailing as the preferred setting for mental health social interventions, where available.

With regards to findings of task-shifting when translating interventions across economic boundaries, simple mental health training for local providers represents one effective strategy for improving the detection and treatment of common mental disorders (Hoeft et al., 2018). The multicomponent community care intervention demonstrates the importance of training non-specialist, low-cost human resources to implement care, which is often more feasible in settings where capacity building with community health workers (CHW) can promote social participation with limited funding (Chatterjee et al., 2003; Chatterjee et al., 2009; Lund et al., 2013; Xiang et al., 2007). It has been argued that the single largest barrier to scaling up efficacious treatments in LMIC is inadequate human resource (Kakuma, 2011). By engaging community members in mental health care provision, programmes support social inclusion and lead to the second strategy found across the studies: that developing social ties across communities has the power to promote greater tolerance for mental illness, thus improving social milieu and destignatising individuals with mental health conditions (Rosen, 2006).

The strength of social interventions to mutually address economic concerns and community development alongside patient recovery was illustrated by the strategy utilised in a number of studies which combined elements of culture-specific community activities and income generation. Given that social interventions emphasise a person's social context and relationships as determinants that cause or maintain symptoms, such a strategy is particularly salient when translating interventions to LMIC. Whilst some researchers purport poverty is an issue that exacerbates rather than triggers depression (Bolton et al., 2003), initial qualitative results from Petersen and colleagues (2011) suggested that the stress and worry of not being

able to provide basic necessities was directly related to depression. These findings are congruent with local views in many LMIC regarding the causes of mental distress, which are largely thought to be social and economic; and a number of studies have found psychosocial interventions which include the provision of interpersonal and financial support were viewed by the majority of participants as the most helpful response (Kermode et al., 2009).

The recent study by Chisholm and colleagues (2016) demonstrated that substantially scaling up effective treatment coverage for depression and anxiety disorders over the next 15 years would conservatively lead to 43 million extra years of healthy life, estimated at an added economic value of USD\$ 310 billion. Studies such as this one make a strong case for investing in mental health as a development strategy. In the past few years there has been a proliferation of research published in the field of GMH. But funding for mental health in low-resource settings remains woefully inadequate, receiving little attention despite being a major cause of disease burden. In a review of development assistance for mental health between 1995-2015, Charlston and colleagues (Charlson, Dieleman, Singh, & Whiteford, 2017) report mental and substance use disorders and its broader category of non-communicable disease received less than USD 1 of development assistance funding per DALY (figure 2).

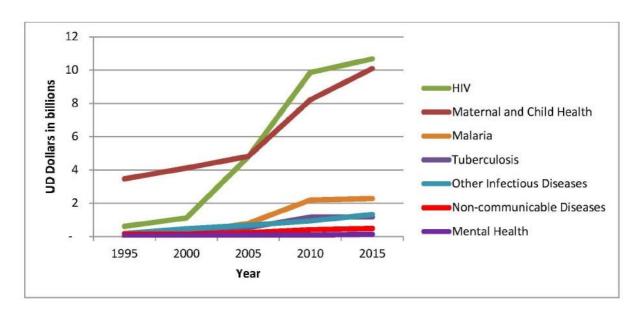


Figure 3.2 Development assistance by health focus, 1995 to 2015

Notes: Sourced from (Charlson et al., 2017)

It is noteworthy that only two of the included studies were published in a social work journal (Brooke-Sumner et al., 2017; Jaganathan & Sekar, 2011), with the others coming from psychiatry or psychology journals. While this largely reflects academic publishing convention in mental health research (researchers typically publish in journals with higher impact factors, which are usually from the health disciplines), it highlights a potential dearth of mental health social work intervention research. Not only are social workers minimally involved in articulating and defining mental health social interventions in HIC, highlighting the need for improving their research capacity (Webber, 2013), there is limited evidence of their leadership in translating this knowledge to LMIC.

## 3.5.2 Limitations of this review

Several limitations need to be considered when interpreting results of this review. Firstly, the review focussed only on published peer-reviewed literature. A systematic review of grey literature on immunisation strategies in LMIC by Batt and colleagues (2004), found the quantity of available evidence nearly doubled, and interventions in the grey literature cover a different geographical spread, but the inclusion of unpublished literature can introduce bias and grey literature has been found to have an overall lower intervention effect, and therefore was not included (Higgins & Green, 2011). Secondly, publication bias may limit the conclusions that can be drawn from this review, as there is potential for non-statistically significant findings to be under-represented as researchers and academic journals traditionally minimise the importance of such results (Quintana & Minami, 2006). Thirdly, the selection criteria were deliberately narrow in order to capture only social interventions for individuals with mental health conditions as the primary focus as defined above. This restricted a body of literature targeting the mental health of individuals with, for example, HIV/AIDS as the primary focus, or post-conflict experiences, for which recent systematic reviews have been published (Noel et al., 2018; van Luenen et al., 2018). Some of the

restrictions on this body of literature stem from the fact that controlled studies would be unethical in these population groups or settings. Instead, more research is needed on models of care and approaches that integrate mental health and social services. Additionally, the selection criteria excluded cross-sectional studies which offer a breadth of information comparing mental illness across economic boundaries but fail to draw causal inferences.

The narrowly defined selection criteria therefore excluded interventions such as the Friendship Bench, a brief psychosocial intervention delivered by supervised "grandmother health providers" who received training in problem solving therapy and behavioural activation and provided the intervention outside health clinics primarily serving people living with HIV in Zimbabwe (Chibanda, Verhey, Munetsi, Cowan, & Lund, 2016). It also excluded studies for survivors of violence (Bolton et al., 2014) or those exposed to conflict or in refugee settings (Neuner et al., 2008), thus missing an important opportunity to better understand the impact of mental health social interventions on vulnerable populations globally. Another example of this is sociotherapy, adapted from a model used in clinical settings for refugees in the Netherlands and used in Rwanda to alleviate tensions between people and (ethnic) groups following the genocide where collective violence resulted in a major determinant of mental distress (Jansen et al., 2015). Sociotherapy aims to build trusting and supportive group environments to facilitate recovery from both individual and social distress (Richters, Dekker, & Scholte, 2008). Arguably mental health conditions are secondary to other health and social problems; however, these studies did not focus on the primary aim and therefore did not meet the criteria for this review.

# 3.5.3 Limited research capacity

Where health care delivery is scarce, so too is the research evidence for addressing the mental health needs of individuals from LMIC. Approximately 90% of the global population lives in LMIC but these countries are represented in only 10% of the world's health research

(Saxena, 2006) and only 3-6% of the mental health research published in high-impact journals (Sumathipala, Siribaddana, & Patel, 2004). There has been tendency for those in LMIC to be viewed as recipients of mental health knowledge, rather than generators of knowledge (White, Jain, & Giurgi-Oncu, 2014).

This is true for mental health research as well as social work, which is increasingly being found to transcend jurisdictional boundaries. There is a growing perception that social work can address the critique that its interventions lack rigour and robustness by recognising knowledge as local and embedded, but also dynamic, interactive and "flowing" across boundaries. Hardy and Jobling (2015) argue this is evident from the rise of evidence-based practice, and translation of concepts, programmes and policies internationally. This synthesis of evidence shows that few mental health social interventions are being developed and evidenced in LMIC but that those developed in HIC are found to be most effective when adapted to the social context.

However limited the published literature, evidence shows that poorer countries, precisely because they have fewer resources, learn to engage people and communities in care. Nigel Crisp, in his book *Turning the World Upside Down* (2012), illustrates how in disparate countries such as Uganda and India, health leaders are using natural strengths of their countries such as strong sense of community and familial ties to promote health care. They are finding ways to support women as natural health leaders, and reconcile traditional healing practices with Western strategies. To redress the apparent imbalance in knowledge exchange, White et al. (2014) explores "counterflows" of knowledge or ideas that have originated from LMIC that are influencing mental health practice in HIC. The challenge is not merely of knowledge from HIC reaching under-resourced communities globally, but also of exporting knowledge in the other direction, from LMIC to richer countries. As some authors point out, mental health services in HIC are also in need of strategies to adopt strategies that have been effective in reducing the burden on limited services, such as task-shifting models

(Sashidharan, White, Mezzina, Jansen, & Gishoma, 2016), and those that draw upon cultural coping from LMIC. For example, mindfulness which is sometimes misappropriated in Western contexts (Huang, Fay, & White, 2017). This requires acceptance of other ways of seeing and understanding interventions to address mental health conditions, and is applicable to research, policy and practice knowledge.

## 3.6 Conclusion

Meaningful findings across the 29 included studies in this review suggest that this area merits further research, taking into account the gap in knowledge translation that have been raised, with no studies translating interventions from LMIC to HIC. More research is needed to understand the key strategies to improve care that harness local sociocultural factors that impact mental health. This thesis aims to fill these gaps in knowledge by testing the local adaptation of a mental health social intervention in a low-resource setting.

Arguably, findings from this review exemplify the need to make important changes in mental health social research, to cross economic boundaries and move from seeing ourselves as "the creators of generalizable knowledge" to co-develop locally-appropriate interventions (Driessens et al., 2011, p. 82). This way of conceiving research offers benefit to all partners involved and a stimulus for conceptualising new strategies to address emergent issues. There remains a shortage of economic data to support discussions of resource allocation when translating interventions. Consequently, there is a need to address the cost-effectiveness of intervention strategies and planned in accordance with cultural factors such as explanatory model of mental illness and health-seeking behaviour.

# **Chapter 4: Study setting in Sierra Leone**

## 4.1 Introduction

The gaps in knowledge identified in the previous chapters elucidated the need for further study of how social interventions may be able to address the mental health treatment gap in LMIC. In this chapter, the rationale for the setting of this thesis is presented, the West African country of Sierra Leone. In the first part of the chapter, the political, economic and demographic profile of Sierra Leone is outlined, and the current situation with regards to health and social systems of care. The state of mental health care in Sierra Leone is also described, paying particular attention to gaps in the system and barriers to accessing care. These factors make the case for supporting the development of Sierra Leone's mental health services.

In the second part of the chapter a focus is placed on the impact of humanitarian emergencies on mental health, and describes how this affects the social fabric of communities and their access to social capital. This research began in Sierra Leone before the recent Ebola outbreak but the outbreak's consequences for communities, such as a lack of trust, increased stigma and mental distress, and reduced social cohesion, may be uniquely addressed by a locally-adapted mental health social intervention. Chapter 4 sets the scene for the description of the methodological framework to develop mental health social interventions in low-resource settings provided in the next chapter, and provides context for the quantitative and qualitative analyses from study phases presented in Chapters 6 through 8.

## 4.2 Overview of Sierra Leone

Sierra Leone is a small country in West Africa which is home to approximately 6.2 million people (United Nations, 2017). Sierra Leone is bordered by Guinea to the north and northeast, Liberia to the south and southeast, and the Atlantic Ocean to the west. For administrative purposes the country divided into four major areas, namely Northern,

Southern, Eastern regions and the Western Area where the capital Freetown is located. The regions are divided further into 14 districts, which are in turn sub-divided into chiefdoms, governed by local paramount chiefs, a structure of community leadership dating back to the 1896 British administration (Shackman & Price, 2013). Today, the authority of chiefs is much stronger in rural communities than in urban community where central governance is more strongly felt and post-war Paramount Chiefs can be seen more as moral leaders than authoritative decision-makers (Reed & Robinson, 2013). There are also geographical differences in community structures and leadership, with Southern provinces permitting female Paramount Chiefs, while Northern provinces do not.

Sierra Leone's geographic diversity is complemented by its significant ethnic diversity: the country is populated by 16 ethnic groups with the primary religion being Islam 60-70%, Christian 20-30% and a remaining 10% indigenous and other religious beliefs (United Nations, 2013). The vast majority of the population identify as religious, with traditional and religious leaders having great influence in their different communities. The official languages are English and Krio, an English-based creole language, is the most widely spoken of the 25 local languages.

Decades of economic decline, 11 years of armed conflict and most recently the Ebola outbreak had dramatic consequences on the economy. The United Nations Human Development Index (HDI) is a composite statistic that uses data on life expectancy, education, and gross national income to rank countries according to how developed they are. Sierra Leone has consistently been ranked one of the least developed countries in the world. In 2016 the HDI reported life expectancy at birth was the lowest in the world at 51.3 years. The literacy rate is 41.8% with an average number of years spent in school at just over three years. Poverty remains widespread with more than 57% of the population living on less than US\$ 1.25 a day and high unemployment, especially among youth (United Nations Development Programme, 2016). 38% of the population is living in cities and the current population has a

large youth bulge with over 41% of the population under 15 years of age, and only 5.5% over 60 years of age (United Nations, 2017).

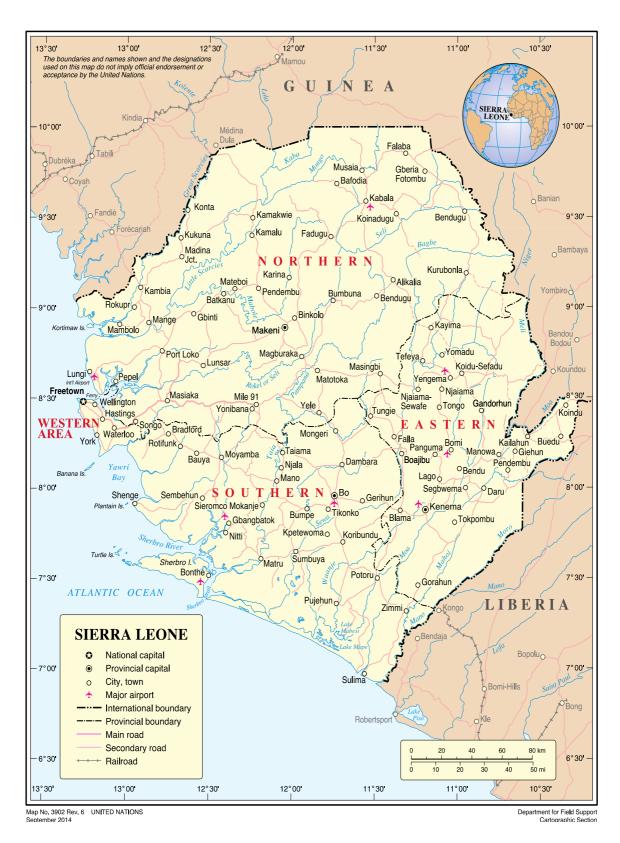


Figure 4.1 Map of Sierra Leone showing its location in West Africa Notes: Sourced from (Kaldor & Vincent, 2016)

## 4.2.1 Health services in Sierra Leone

According to HDI (United Nations Development Programme, 2016) the public health expenditure is one of the lowest in the world, 1.9% of Gross Domestic Product (GDP). In 2010, Sierra Leone introduced a free healthcare initiative to support progress toward the Millennium Development Goals. In this context, and with the backing of several donors, the Government of Sierra Leone abolished health care costs for pregnant women, new mothers and children under five. This reflects the fact that a high proportion (about 70%) of total health expenditure in Sierra Leone is from out-of-pocket spending (Alemu et al., 2012). A review commissioned by the Ministry of Health and Sanitation in 2007 established that even modest charges tended to exclude over 50% of the population from seeking health care and exemption systems in current use do not seem to work (Ensor, Lievens, & Naylor, 2008).

Save the Children's Health Worker Reach Index (2011) ranked Sierra Leone in the top 20 countries (144 out of 161 countries) facing the most severe shortages of health workers. In 2008, the country had just two health workers per 10,000 population, which does not meet the WHO benchmark of 23 health workers per 10,000 people for providing essential health services (World Health Organization, 2015a) and is significantly lower than the average of 14 health workers per 10,000 population on the African continent (Save the Children, 2011).

As a result of this lack of funding and subsequently inadequate human resource, Sierra Leone has some of the poorest health indicators in the world, with life expectancy at birth just 51 years, an infant mortality rate of 87.1 per 1,000 live births, an under-five mortality rate of 120 per 1,000 live births and a maternal mortality ratio of 1,360 per 100,000 births (HDI 2016). A majority of the causes of illness and death in Sierra Leone are preventable, with most deaths attributable to nutritional deficiencies, pneumonia, anaemia, malaria (108.7 per 100,000 population, and tuberculosis (45 per 100,000). The greatest burden of disease is on

rural populations, and on females within the rural population. Women are also more likely to have to stop their economic activities due to illness than men.

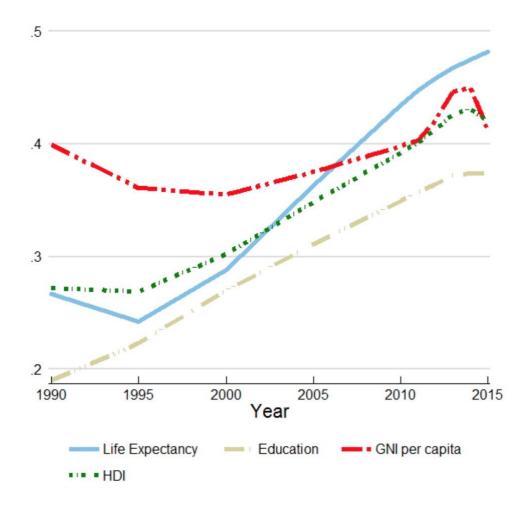


Figure 4.2 Trends in Sierra Leone's HDI component indices 1990-2015 Notes: Sourced from (United Nations Development Programme, 2016)

# 4.3 Mental health in Sierra Leone

In February 2017 WHO released prevalence data for depression and anxiety disorders estimating 3.9% and 2.8% of the population, respectively (Table 4.1). The last comprehensive survey of mental health conditions in Sierra Leone was conducted in 2002 by the World Health Organization's country office, which estimated that 442,000 people were affected by mental health conditions; 4% of the population suffering from severe depression, 4% substance misuse, 2% psychosis, 1% living with a developmental disability; and 1% epilepsy (Alemu et al., 2012). Based on the WHO 2002 prevalence estimates and availability of mental

health services, the treatment gap for mental health conditions in Sierra Leone was estimated at 99.5% (Alemu et al., 2012).

Table 4.1 Prevalence and disease burden of depression and anxiety in Sierra Leone

PREVALENCE				HEALTH LOSS / DISEASE BURDEN			
Depressive Disorders		Anxiety Disorders		Depressive Disorders		Anxiety Disorders	
Total cases	% of population	Total cases	% of population	Total YLD	% of total YLD	Total YLD	% of total YLD
243,895	3.9%	172,958	2.8%	44,266	7.9%	16,063	2.9%

Notes: Sourced from (World Health Organization, 2017)

Cumulatively, these rates are approximately four times higher than the estimated global prevalence of 3% for severe mental illness (GBD 2015 Disease and Injury Incidence and Prevalence Collaborators, 2016). In 2013 the WHO estimated the disability-adjusted life years, the number of "healthy" years lost to disability (per 100,000 population) at 2,370, representing about 4.1% of the country's all-cause disease burden (Figure 4.3). This can be understood as a measurement of the gap between current health status and an ideal health situation (see section 1.3.1).

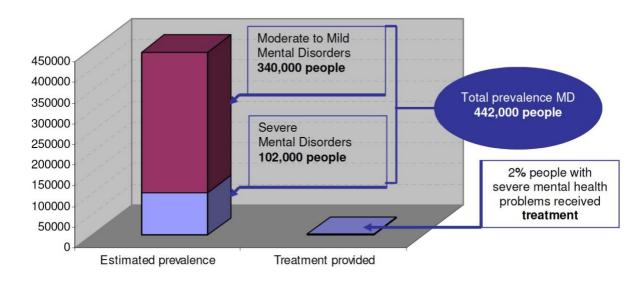


Figure 4.3 Mental health treatment gap Sierra Leone in 2013

Notes: Sourced from (Alemu et al., 2012)

According to a one-year service evaluation conducted by study partners, King's Sierra Leone Partnership (KSLP), 140 service users were seen in one of the clinics between March 2015 to February 2016 (unpublished paper). In this particular service, based in Connaught Hospital, Freetown, 67% were referred by staff at Connaught Hospital and 17% of service users were self-referred or brought in by relatives. 52% were women. The majority of service users were between the ages of 25 and 34 (29%). Seven service users (5%) were Ebola survivors and 13 (9%) were directly affected by the disease. The service accepts referrals from a range of sources including self-referral, traditional and faith healers, district and community level health services, social welfare services, the Sierra Leone Psychiatric Hospital, non-governmental organisations, Ebola treatment centres and Ebola related occupational groups such as psychosocial teams.

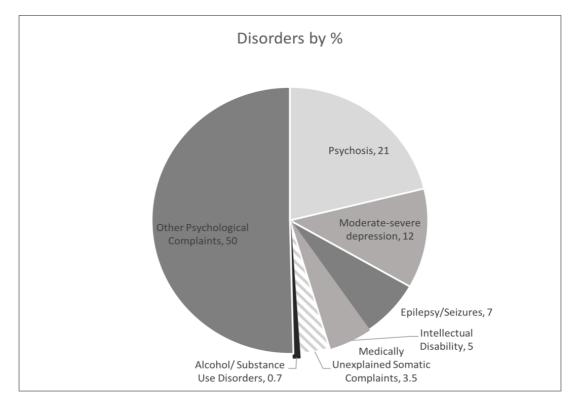


Figure 4.4 Mental health conditions according to UNHCR grading Notes: Sourced from (unpublished paper)

Mental illness diagnoses were recorded according the UNHCR Health Information System Case Definitions (United Nations High Commissioner for Refugees, 2010). Over 12 months the most common diagnosis was "other psychological complaints" (50%, n=71) which includes mild distress/ depression, anxiety disorders, grief and social problems. The other diagnoses were: psychosis (21%, n=30), moderate-severe depression/emotional distress (12%, n=17), epilepsy/seizures (7%, n=10), intellectual disability (5%, n=7), medically unexplained somatic complaints (3.5%, n=5), alcohol and other substance use disorder (0.7%, n=1). Although this is an exemplar from one service in Freetown, and not necessarily generalisable to the rest of the districts, patient records show a clear indication of the difference in access around the country and attitudes toward enhancing services.

The country faces mental health issues arising directly or indirectly from high unemployment, domestic violence, trauma, depression associated with chronic diseases such as HIV/AIDS and tuberculosis, and substance misuse (Alemu et al., 2012). There is also a high rate of both production and consumption of alcohol and illicit drugs in Sierra Leone, particularly among the young population. In 2008, it was estimated that about 90% of admissions to the Sierra Leone psychiatric hospital were drug-related (Hughes, 2015). Alcohol also represents a significant public health concern in Sierra Leone, with Sierra Leoneans consuming on average 9.7 litres of alcohol per capita in 2005, as opposed to 6.2 litres per capita for the rest of the WHO African region. From the economic and social perspective, there is strong evidence that this has a detrimental effect on a country's development and is a significant barrier to achievement of the global development objectives (GBD 2015 Disease and Injury Incidence and Prevalence Collaborators, 2016).

## 4.3.1 Mental health services

The government has not allocated budget for mental health, although this is in-line with other West African countries such as Guinea and Liberia (World Health Organization, 2015a). There is no separate division for mental health under the Ministry of Health and Sanitation. Mental health services and personnel are lacking, even for the most severe mental

health conditions (Table 4.2).

Public mental health care is institutionalised and concentrated in Freetown. There is one psychiatric hospital that is grossly understaffed and no formal mechanism for referrals in the health system. The hospital employs one retired consultant, one medical officer, two psychiatric nurses, limited substance abuse treatment, and no capacity for community follow-up services or specialised therapy (Song, van den Brink, & de Jong, 2013). There is one parochial community residential facility for those with mental illness or substance abuse problems, if their families can afford to send them. In 2010, a qualified clinical psychologist began a private practice. Some primary health care staff, CHW and peripheral health unit staff (PHU), had received one week training in mental health care, but due to the high demand of other health needs were unable to devote substantial time to mental health services. A certificate and diploma course in psychiatric nursing was offered in 2012 for the first time in country at the College of Medicine & Allied Health Sciences (COMAHS). From which a total of 21 mental health nurses graduated, representing the first steps towards specialty mental health training in Sierra Leone.

Table 4.2 Mental health human resources in Sierra Leone

	<b>Total Number</b>	Rate per 100,000 population
Psychiatric hospital	1	
Number of beds	200	
Total health workers	104	1.4
Psychiatrists		0.03
Medical doctors, not specialised in psychiatry		0.03
Nurses, not specialised in psychiatry		1.31
Psychologists	0.00	0.00
Social workers	0.00	0.00
Occupational therapists	0.00	0.00
Other health workers		.31

Notes: Sourced from (World Health Organization, 2015a)

The current legislation on mental health consists of the Lunacy Act (1902), which needs to be reviewed in a new legislation protecting confidentiality and informed consent,

promoting voluntary admissions and least restrictive alternatives. Mental health was one of the 10 priority health problems identified in the 2002 National Health Policy, and one of 15 topics included in the Basic Health Package released in 2010 (Government of Sierra Leone, 2012). A mental health policy has been developed, finalised and printed in 2010. It was launched formally in 2012, but is yet to be fully implemented. However, there has been significant success in mainstreaming mental health in other sectors, for example the national Poverty Reduction Strategy's Health Pillar (following co-ordinated advocacy by the National Mental Health Coalition).

Sierra Leone has no national body for assessing human rights of people in mental health services. Stigmatisation is a major issue in mental health in Sierra Leone and it affects every aspect of service delivery including attendance at clinics, compliance with medication and particularly the availability of social support for people who are mentally ill. One research effort in a Sierra Leone community found that the majority of inhabitants believed mentally ill people to be evil, violent, lazy, stupid, and unable to marry or have children and unfit to vote (Asare & Jones, 2005). An ethnographic study conducted at the Sierra Leone Psychiatric Hospital (Van Gog, 2009) described that many patients were chained to their beds either to control aggressive behaviour or to stop them from running away. Some patients were kept in isolation cells for months. Facilities were without electricity, suffered from poor sanitation and hygiene and had food shortages wherein patients went without eating for several days. These gross human rights abuses of people with mental health conditions are important factors in the need to intervene through local partnerships and with leaders who can advocate for better treatment and care.

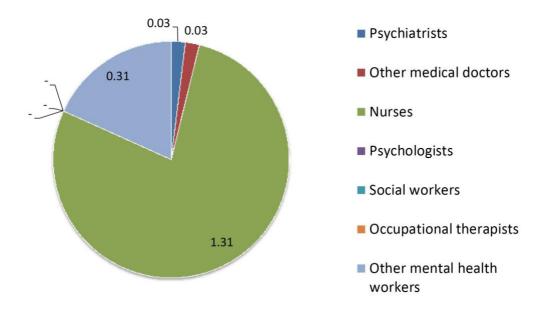


Figure 4.5 Sierra Leone's mental health workforce Notes: Sourced from (World Health Organization, 2015a)

Outside of the limited government health services, several other efforts to enhance mental health care have been made in Sierra Leone. The Mental Health Coalition-Sierra Leone (MHC) (Shackman & Price, 2013) was founded in August 2011 in response to the ongoing challenges in mental health in Sierra Leone. Its membership includes service users and their family members, service providers, non-governmental organisations (NGOs), government officials, and civil society. The stated purpose of the MHC is to create a national body that empowers stakeholders to advocate for their needs, thus raising the profile of mental health in Sierra Leone. The MHC is also acts as a focal point to coordinate external, short-term trainings and visiting experts in the field. Members of the MHC supported advocacy efforts towards launching the National Mental Health Policy and Strategic Plan in 2012.

The country also has some privately funded services, such as a faith-based residence called City of Rest, which primarily focuses on rehabilitation from substance misuse, and a few private clinics in Freetown, one is run by the country's only local psychiatrist. There are collaborative programmes with local and international organisations for addressing mental

health needs in Sierra Leone. One such is example is the partnership between King's College London (KCL) and Enabling Access to Mental Health (EAMH), a European Commission funded project aimed at promoting inclusion and empowerment of people with mental health conditions. Another is *commit and act*, a local NGO that works in collaboration with international NGOs (e.g. Caritas, Don Bosco), and public-sector services to provide training and supervision using a psychosocial intervention called Acceptance and Commitment Therapy. Evaluations of this approach in Sierra Leone showed that training 57 non-specialist workers in the use of Acceptance and Commitment Therapy was found to be acceptable by participants and resulted in application of the therapy's techniques in their clinical work (Stewart et al., 2016).

#### 4.3.2 Barriers to care

In Sierra Leone, there has been considerable progress made in rebuilding the health sector since the end of its prolonged civil conflict in 2002. Mental health was woefully neglected while other branches of health care have moved forward in Sierra Leone due to sustained input from national leaders and international donors. The few initiatives undertaken by local and international organisations to enhance mental health services were mainly focused on needs during the immediate post-war period. As a result, most of them eventually disappeared.

Key obstacles to developing better mental health care in Sierra Leone include a severe lack of professional workforce, a historic neglect of mental health issues in policy, low salaries, inadequate career advancement opportunities and flaws in the management of the recruitment process (Vesel, Waller, Dowden, & Fotso, 2015). Strategies are needed to increase capacity and retention of health workers. A number of studies in sub-Saharan Africa have identified the lack of motivation of health staff as a major health workforce barrier (Alhassan et al., 2013; Mbindyo, Gilson, Blaauw, & English, 2009). Apart from financial

incentives, factors negatively influencing motivation include workforce shortages, lack of inter-professional exchanges and supervision, and underappreciation and distrust from the community being served (Mbindyo et al., 2009). However, most training offered by NGOs and other organisations to enhance skills in mental health have been conducted without significant co-ordination between stakeholders thus limiting their sustainability. As a result, the quality of mental health care is very poor and psychological treatment and support is lacking in most parts of the country.

The physical distance to health facilities for rural communities still represents a major barrier to care, as the distribution of functional health services remains heavily skewed towards urban centres. For example, over 50% of primary care clinics have their nearest road over 5 miles away (90 minutes walking time), and the mean time from clinics to district hospitals was over 2.5 hours (Reed & Robinson, 2013). District health services form the core component of health care. They are composed of a network of Peripheral Health Units (PHUs), the district hospital and the District Health Management Team (DHMT). The PHUs are the first line health services, and are further sub-classified into three levels - basic maternal and child health posts for small villages, community health posts for small towns, and more comprehensive community health centres for larger Chiefdoms. There is a weak referral system between PHUs, secondary and tertiary health care levels.

Due to the lack of capacity and resources at the systems level, religious groups, healers, and NGOs contribute greatly to mental health delivery. Whilst health care is being provided in the country, people are still seeking care from traditional healers (Shackman & Price, 2013). Partly, this practice is due to the lack of health care services in the country which is not accessible to the overall population. It is also due to the pervasive traditional beliefs about the causes and treatment of mental illness. For example, Yoldi (2012) asserted that it is an on-going belief among the people of Sierra Leone that mental illness is seen as either brought upon oneself as punishment for certain actions such as the breaking of taboos,

or as being cast upon someone by spells and witchcraft. These beliefs become barriers to the people acquiring knowledge about the truths and familiar views of psychiatric evidences and causes of mental health disorders.

# 4.4 Humanitarian emergencies

## 4.4.1 Mental health in emergencies

Humanitarian emergencies have a major impact on mental health, worsening preexisting conditions and leading to the development of new psychosocial problems (Allen et
al., 2014; Marmot et al., 2008). There is now a clear consensus that humanitarian assistance
should include mental health care and psychosocial support (United Nations High
Commissioner for Refugees, 2013). For example, in humanitarian emergencies over recent
years, including the earthquake in Haiti, the on-going humanitarian crisis in Syria, and
infectious disease outbreaks such as EVD in West Africa and Zika in South America, the
mental health and psychosocial impacts of conflict, disaster, disease and displacement have
been widely recognised, and the provision of a range of interventions to support individuals
and communities in dealing with the impacts of emergencies have occurred in the early stages
of humanitarian response.

However, the impact of mental health care and psychosocial support interventions is limited where the state of the mental health system prior to a crisis is already poor (World Health Organization, 2013a). In LMIC, pre-existing mental health services are often inadequate to deal with crisis, typically based on institutional models where patients are held for long periods under deprived conditions without suitable treatment (Abas, Vanderpyl, Robinson, & Crampton, 2003; Van Ommeren, Saxena, & Saraceno, 2005). People with pre-existing or emergency-induced mental health conditions can be especially vulnerable in humanitarian emergencies, as health care facilities are often directly affected by emergencies, causing disruption of regular services and interruption of ongoing treatments. Currently, most

health agencies in LMIC do not routinely address these needs. A meta-analysis of mental health and psychosocial support activities in humanitarian settings found most interventions took place and were funded outside national mental health systems and included community support of vulnerable individuals (Tol et al., 2010).

WHO estimates that after an acute onset major emergency about 1 in 6 people (10–15%) will suffer a mild to moderate mental disorder and about 1 in 30 people (3–4%) will have a severe mental disorder that impairs their ability to function in a chaotic environment (Van Ommeren et al., 2005). Humanitarian emergencies cause major psychological and social suffering that undermines the long-term mental health and wellbeing of the affected populations (van Ommeren, Hanna, Weissbecker, & Ventevogel, 2015). This is observed by:

- 1. Producing acute stress and grief as psychological reactions to adversity and loss
- Triggering common mental disorders such as depression and anxiety, and in some cases posttraumatic stress disorder
- Exacerbating pre-existing chronic mental health conditions such as psychosis and placing people who need long term care at increased risk of neglect
- 4. Increasing misuse of alcohol and drugs, consequently increasing health and social problems
- Disrupting functioning for an individual to complete daily tasks, including, for example, fulfilment of relevant social roles, as a family and community member, attending religious events and providing support for community members (Valle, 2016).

Emergencies create a wide range of problems experienced at the individual, family, community and societal levels. At every level, emergencies erode normally protective supports, increase the risks of psychosocial problems and tend to amplify pre-existing problems of social injustice and inequality (Inter-Agency Standing Committee (IASC), 2007). Humanitarian emergencies may cause social issues such as family separation,

destruction of community structures and social networks, and psychological issues including depression, grief, anxiety and post-traumatic stress disorder (PSTD) related to exposure to trauma and displacement (Inter-Agency Standing Committee (IASC), 2007). For example, infectious disease outbreaks typically have a disproportionate impact on poor people, who may be living with many family members in homes with poor infrastructure, thus contributing to the spread of the disease.

But not everyone has or develops significant psychological problems in emergencies. Many people show resilience, that is the ability to cope relatively well in situations of adversity, influenced by numerous interacting social, psychological and biological factors (Siriwardhana et al., 2015). Betancourt et al. (2010) studied post-conflict factors contributing to adverse or resilient mental health outcomes in Sierra Leone's former child soldiers.

Authors recommend sustainable services to promote community acceptance, reduce stigma, expand social supports and educational access in addressing post-conflict factors in addition to war exposures.

The IASC Guidelines on Mental Health and Psychosocial Support (MHPSS) in Emergency Settings, developed in 2007, represent an important step towards generating consensus around minimum standards of MHPSS in emergencies (Inter-Agency Standing Committee (IASC), 2007). The Guidelines are based on six key principles: human rights and equity; participation; do no harm; building on available resources and capacities; integrated support systems; and multi-layered supports. The Guidelines are then comprised of a matrix of interventions. Perhaps the single most influential component of the Guidelines has been the Intervention Pyramid (Figure 4.6), reflecting the principle that mental health services should be co-ordinated to provide multi-layered, complementary support.

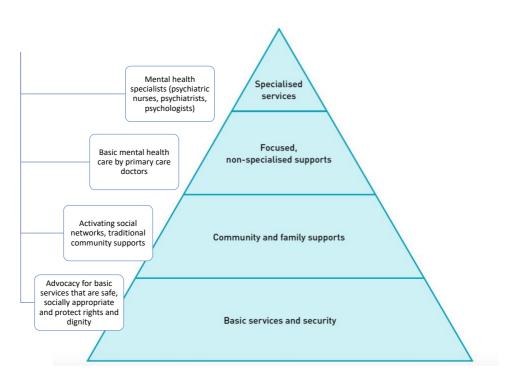


Figure 4.6 Intervention pyramid for MHPSS in emergencies

Notes: Adapted from (Inter-Agency Standing Committee (IASC), 2007)

The IASC guidelines was perhaps the first time that social work and psychiatry came together in the promotion of psychosocial support and wellbeing in emergencies. Even in the early stages of an emergency, a key principle of IASC guidelines is the importance of building local capacities, supporting self-help and strengthening the resources already present. Whenever possible, humanitarian actors should build both government and civil society capacities. The inclusion of community mobilisation and support emphasises the key principles of participation and ensuring that implementation of MHPSS activities is done in a way that builds on local resources and support networks (Wessells & van Ommeren, 2008). At each layer of the intervention pyramid, key tasks are to identify, mobilise and strengthen the skills and capacities of individuals, families, communities and society.

Core social strategies to foster resiliency and mental health recovery typically occur at a local level involving a complex relationship between individuals and their communities, including neighbourhoods, families, churches, services and other civil society organisations. For individuals, connections within communities provide one of the mechanisms through

which people organise their activities, circumscribe their identities and assemble resources. Thus, individuals can either increase or decrease their vulnerability/resiliency to disasters by encouraging normal activities and active participation in the community (International Federation Reference Centre (IFRC) for Psychosocial Support, 2009; Mollica et al., 2004; Van Ommeren et al., 2005). For example, re-establishing cultural and religious events such as funeral ceremonies and grieving rituals involving spiritual and religious practitioners is seen as helpful, and in particular community activities that facilitate the inclusion in social networks of people who may have lost their families.

## 4.4.2 Social capital in emergencies

Complex emergencies threaten to weaken social cohesion by undermining interpersonal and communal trust, damaging pro-social norms, values and social practices, as well as affecting levels of engagement between civil society and the state (Colletta NJ, 2000; Snowden, 2005). A growing body of evidence has illuminated that social connections play a critical role during and after disasters in mitigating risk and in accelerating recovery. The theory of social capital can play an important role in recovery, emphasising the capacity of individuals, groups, communities and organisations to enhance social development, revitalising the local economy and upgrading livelihoods and living conditions. This provides a framework for recovery from disaster and local-level emergency response (Mathbor, 2007). The social and economic system as a whole tends to function better because there are ties among the individuals and institutions within it (Gittell & Vidal, 1998) which is particularly important during and after emergencies when such systems are most fragile or inaccessible.

World Bank's classification of social capital from the poverty reduction and community capacity building perspective emphasises community collaboration, co-ordination and utilisation of social networks as a driver for effective service delivery before, during and after a disaster (Dudwick, 2006). Individuals who have bonds to neighbours can receive

mutual aid at a time when many private and public sector service providers remain out of action (Aldrich & Smith, 2015). For example, people can receive food, a place to stay if their own home is damaged, and information on safe routes for evacuation. People who have more connections may have a better chance of being able to receive assistance, goods, and services when compared to those who are more isolated. Psychological First Aid (PFA) has become the flagship early intervention for disaster survivors, with its simple model of identifying people in distress, listening to their needs and linking them with available support (World Health Organization and War Trauma Foundation and World Vision International, 2011). PFA is broadly endorsed by expert consensus and integrated into guidelines for mental health and psychosocial support in disasters and extreme events, however the evidence base for its effectiveness is not conclusive (Dieltjens, Moonens, Van Praet, De Buck, & Vandekerckhove, 2014).

The community itself should be at the forefront in helping its own members because the best support comes from trusting individuals who share their culture, beliefs and values (Mollica et al., 2004). Ashutosh Varshney (2002), who examined outbreaks of sectarian violence in India, showed how "mohalla" (peace) committees helped reduce conflicts between Muslims and Hindus. During periods of tension between groups, these peace committees brought together community leaders who could share critical information and bring it back to their own communities. Such organisations, Varshney argues, also proved to be effective at preventing the outbreak of violence, for example by maintaining channels of communication across the religious groups, and by reducing rumours before they enticed riots. The emphasis in social capital on the active role of community members rather than passive victims provides an important corrective to the predominant top-down, command and control approach often dominating emergency response (Murphy, 2007).

Social capital is generally considered to be a buffer against physical and mental health impacts of disasters, and may be psychologically protective (Noel et al., 2018). When

exposed to emergencies, people tend do better in the long term with access to physical, social and emotional support (Hobfall, Freedy, Lane, & Geller, 1990). In the aftermath of the 2005 Hurricane Katrina, Adeola and Picou (2014) assessed the influence of social capital, or lack of it, on mental health outcomes. Their study reported depression, stress, and psychosocial impacts were skewed toward people with weak social networks and those from vulnerable groups (African Americans, women, less educated and older people). Findings from a recent systematic review suggest that in humanitarian emergencies individual cognitive social capital had an inverse association with mental health conditions (post-traumatic stress disorder, depression and anxiety) and that ecological cognitive social capital was positively associated with mental wellbeing (Noel et al., 2018). However, authors caution against conclusions about causal relationships as most of the evidence from 15 studies was cross-sectional.

Mollica et al. (2004) designed a mental health action plan for complex emergencies, grounded in the restoration of social capital during early intervention phases to mobilise existing community resources and the building of mental health capacity in a de-facto care system (which may only include non-professionals in some situations).

Despite regular claims about the importance of communities, the humanitarian aid system remains a top-down, centralised system which too often overlooks the power of social networks and social capital among crisis-affected people (Aldrich & Smith, 2015). Whereas the affected people instinctively take a strategic view of their situation, and may be able to more efficiently distribute aid inputs and retain dignity in their recovery. In the aftermath of the 2010 Haiti earthquake, for example, affected people consistently said that they needed primarily only two things: jobs, and education for their children (Mnookin, 2016).

In 2014, the three most costly humanitarian responses for conflict—the Syria crisis, South Sudan and Iraq—absorbed 35% of worldwide international humanitarian funding (United Nations Office for the Coordination of Humanitarian Affairs (OCHA)). Non-conflict disasters on a similar scale of funding in 2014 were the West African Ebola outbreak (16%)

and the aftermath of the November 2013 Typhoon Haiyan in the Philippines (4%). These emergencies forced prolonged displacement, subjecting people to insecurity, cutting access to aid, and impairing their normal sources of basic social services. Such emergencies conflict settings or disease outbreaks create the toughest conditions for aid deliverers: physical insecurity for staff and materials, poor passing of information, and political sensitivities. Such situations would benefit from stronger social ties precisely because they often collapse formal institutions, political and social relations, and disrupt and displace communities for extended periods of time.

Arguably, the selection of Sierra Leone as a study site meant that numerous challenges would be faced by the research team in this context. But for the reasons outlined here, there was also potential for applying social capital theory through a mental health intervention to better support people with mental health conditions and those experiencing distress. This study began in 2012, ten years after the war and just before the EVD outbreak which reached the country in 2014.

## 4.4.3 Violence and conflict in Sierra Leone

Sierra Leone was engaged in a brutal decade-long war between 1991 and 2002 that resulted in approximately one-tenth of the population murdered, maimed or raped, as well as terrorised with human rights abuses including the forced recruitment of children (Human Rights Watch, 2005). The internal strife was instigated by outside powers that had an eye on the country's rich mineral resources and led to a ten-year civil war that caused tremendous impacts to the lives of the people. Although war is typically a traumatic event, the conflict in Sierra Leone was particularly devastating for its civilians. de Jong (2007) reported on an inventory of the human loss people suffered. Data indicate that at least 50% of the respondents lost someone they knew very closely, 30% witnessed the death of a friend; 41% the death of a neighbour and an additional 7% witnessed the death of their own child.

The brutality and violence that the people had seen and experienced during the Sierra Leone war had led to several dangerous effects on their emotional and psychological health (Betancourt et al., 2010). In addition to guilt, shame, loss of family, severe physical injuries and disturbing memories of war and violence (Denov, 2010), post-conflict community factors also played a large role in the difficult mental health rehabilitation of people involved in violence due to stigma, rejection, and educational and economic marginalisation.

Experiences of mass violence have a detrimental effect first and foremost on personal relationships. Problems in marriage, family life and poor social support networks or withdrawal from society are common reactions across cultures to mass violence (Hall, Tol, Jordans, Bass, & de Jong, 2014). Mass violence affects the community's social fabric and social capital (Kawachi et al., 2007). Key people in the community such as traditional and religious leaders and village elders may lose their status. A community's set of (un)written rules on rights and obligations (or social order) can be eroded. Social cohesion can diminish as individuals withdraw, preoccupied with their own traumatic experience; and cohesive mechanisms such as traditional activities may disappear (Colletta NJ, 2000).

Following the conflict in Sierra Leone there was burgeoning interest in estimating the impact of the war on the psychosocial needs of children, particularly for child soldiers (Betancourt, Borisova, de la Soudière, & Williamson, 2011; Betancourt & Khan, 2008; Song et al., 2013). Longitudinal studies on the reintegration and rehabilitation of former child soldiers in Sierra Leone have shown mental health difficulties with both internalising (anxiety and depression) and externalising (hostility) problems, with those who injured, killed, raped, or lost caregivers associated with poor outcomes (Betancourt et al., 2011). The study also found that the civil war played a major role in the mental health outcomes among females in Sierra Leone, suggesting "in the aftermath of war, girls are confronted with gender-specific physical and psychological challenges" (2011, p. 21). Females demonstrated significantly higher scores of depression and anxiety, with many more girls scoring within the clinical

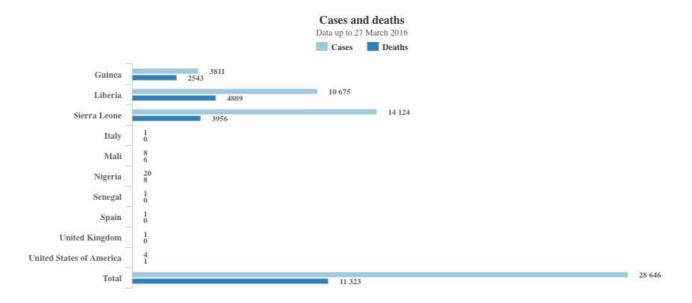
range for depression (72% vs. 55% of boys) and anxiety (80% vs. 52% of boys). Song et al. (2013) conducted qualitative interviews with 24 individuals who were providing mental health, psychosocial or governmental services to former child soldiers in Sierra Leone. Mental distress, including complex post-traumatic stress disorder (PTSD) and substance misuse, as well as gender-based violence were considered to be commonplace amongst the former child soldiers with whom they worked. One of the organisations interviewed estimated that 40% of female former child soldiers had turned to prostitution for survival as a result of lack of social, practical and economic support.

Despite increased efforts from the international community to bolster psychological support after the civil war most people were left untreated. The reintegration process for war-affected young people is complex, requiring family and community-level interventions to improve long-term psychosocial adjustment. Some post-war treatment interventions, for example substance misuse, were identified as being inadequate and potentially hazardous (Song et al., 2013). Interventions that were available tended to be community-based activity programmes or traditional healing methods, rather than therapies with an evidence-base for the treatment of mental health conditions.

The international community has dedicated various efforts during the past years to the psychosocial effects of armed conflicts and to strategies for rehabilitation of affected populations (Murthy & Lakshminarayana, 2006). They provide policies and recommendations for general frameworks for work with war affected populations, for example, (Baingana, Bannon, & Thomas, 2005). These publications focus primarily on exposure to traumatic life experiences and PTSD assessment, paying less attention to other mental health issues such as depression, suicidality, behavioural disturbances and social resources (Behrendt, 2008). Estimated rates of post-conflict mental health conditions vary due to differences in context and study methods, but a meta-analysis of methodically stronger surveys indicate average rates of 15–20% for depression and PTSD (Steel, Dunlavy, Stillman, & Pape, 2011).

#### 4.4.4 Ebola outbreak

The first case, "patient zero," of the 2013-2015 EVD outbreak was identified in the Guinean border town of Guéckédou in late 2013 (Baize et al., 2014). EVD is transmitted through contact with the body fluids of an infected person and can lead to fever, headache, joint and muscle pain, weakness, diarrhoea, vomiting, rash, impaired organ functioning, internal haemorrhaging, and death. Within several months it had spread to Sierra Leone and Liberia, two post-conflict low-income countries with long-standing and growing inequalities of access to even basic health care. Without effective isolation, each EVD patient was estimated to transmit the virus to around one to eight additional people, leading to the exponential growth of infections approximately doubling every 20 days (Meltzer, 2014).



**Figure 4.7 Confirmed, probable, and suspected EVD cases worldwide** Notes: Sourced from (World Health Organization, 2016a)

What started as a West African public health emergency was then declared a global threat to international security by the UN Security Council and quickly became the worst EVD epidemic in recorded history. Unlike in previous outbreaks in central and eastern Africa, the virus soon spread over a wide area. In a region characterised by poor public health

infrastructure, high mobility across porous borders combined with densely populated urban centres and traditional beliefs driving high-risk health behaviours, the spread of EVD would eventually take the lives of 11,323 people (World Health Organization, 2016a).

The virus has since been brought under control, but the extent of the deaths, damage to the social fabric, economic loss, disruption to normal grieving practices, and stigmatisation that it caused still presents considerable challenges to the Sierra Leone population, and to providers of mental health support. The Ebola epidemic demonstrated how little capacity existed both in the local governments and international institutions to deal with crises of this kind and the need to strengthen health systems and provision. It also showed the importance of contextualised information about psychosocial needs when responding to a humanitarian emergency.

## 4.4.4.1 Traditional beliefs, fear and the spread of Ebola

There are a number of explanations for why this was the largest known outbreak since the discovery of the virus in 1976, and why it was so much more deadly than previous outbreaks in central and east Africa. Several factors including the arrival of the disease in highly populated urban areas, poor health facilities, and a general lack of awareness of the disease among affected communities perpetuated the spread of the disease (Manguvo & Mafuvadze, 2015). Sometimes very practical issues played a part. For example, the difficulties of finding someone to care for their children or farm animals may have discouraged people from seeking help, or from fear of not being able to obtain the necessary resources to see them through a quarantine period (Elston et al., 2016). In addition, researchers (Elston et al., 2016; Manguvo & Mafuvadze, 2015) concur that the widespread traditional and religious practices among West African communities had tremendous negative effects on the spreading of the disease and difficulty encountered by the response.

An epidemic of fear in Sierra Leone led to suspicion and alarm surrounding the disease and contributed to its spread. In an opinion piece from Schultz, Baingana and Neria (2015, p. 567) authors explained that "the already resource-poor health care systems have been further challenged by myths and misinformation, often driven by erroneous news reports and inadequate public health messaging." This was made all the more likely by early public health messages that there was no vaccine or cure for Ebola; people therefore felt that they were more likely to obtain effective treatment from non-biomedical sources. Findings from a survey of 1493 individuals from across 14 districts in Guinea showed that while a majority of respondents said that they did not know the origin of EVD, 21.1% blamed it on one or more of the government, scientists, politicians, international NGOs or miners (Polygeia, 2016).

The mistrust of public health officials dates back to Sierra Leone's history as a British colony and more recent Western economic policies and projects that have left a legacy of suspicion of Western motives. Such distrust towards outsiders influenced community reactions to the Ebola response. Where people attributed the virus to divine action or sorcery for communities not respecting traditional rules and prohibitions, this did not necessarily preclude seeking medical care, but often help would be sought first, or instead, from traditional or religious healers (Manguvo & Mafuvadze, 2015).

Even the simplest interactions between people with Ebola, their families and health-care workers were complicated by the precautions needed to prevent infection. Because doctors and nurses can wear their heavy personal protective equipment only for short periods, they focus on providing treatment. Tasks such as counselling bereaved families are often left to mental health providers from aid groups. Although severe illness and death were not new to the people of Sierra Leone, the sight of health workers in personal protective equipment and body removal teams was frightening.

West African health systems were severely disrupted and overstretched by the outbreak and their capacities were significantly reduced as almost 900 health care workers

were infected with Ebola and more than 500 died (van Bortel et al., 2016). In 2015, Elston and colleagues conducted health needs assessments in two districts of Sierra Leone to identify and quantify the impact of the outbreak on the health system (Elston et al., 2016). The fear and mistrust led to a breakdown in relations between the health system and communities was demonstrated leading to marked and significant reductions in utilisation of health facilities. In addition, to the direct losses of staff, there was a diversion of resources to the Ebola response across all levels of the health system from management to health care workers and disruption of essential programmes such as childhood vaccinations, HIV/AIDS, TB and malaria. People who needed treatment for other health concerns, for instance routine pregnancy or infections, were unable to access care. A recurring theme derived from almost all interviews was that health care workers felt that they had been let down by a health system that they perceive could and should have done more (Elston et al., 2016).

Table 4.3 Moyamba government hospital admissions

	August—December 2013: mean number per month (95% CI)	August-December 2014: mean number per month (95% CI)	P-value
Maternity admissions	46.4 (38.3–54.5)	25.8 (17.3–34.3)	0.01
Paediatric admissions (urgent/ non-elective)	44.0 (29.7–58.3)	11.0 (5.6–16.4)	0.001
Paediatric malaria admissions	26.2 (23.4–29.0)	5.2 (2.1–8.3)	<0.001
General outpatient consultations	152.2 (80.4–224.0)	66 (43.0–89.0)	0.03

Notes: Sourced from (Elston et al., 2016)

## 4.4.4.2 Psychosocial needs and response

Exposure to an emergency situation of any kind, be it a natural disaster, conflict situation or an infectious disease outbreak, has a devastating effect on psychological and social wellbeing of people involved. Populations exposed to emergencies are vulnerable to a range of stress responses, including posttraumatic stress disorder as well as complicated grief, depression, somatoform disorders, and drug and alcohol abuse (Silove et al., 2008). During the EVD outbreak people were vulnerable to psychological distress:

- At the point of diagnosis and afterwards, for the infected person and family members who might have to deal with fear, grief and coping with stigma
- With the grieving process following bereavement, particularly due to the disruption to customary grieving rituals which might have helped adjustment;
- Following recovery from the virus, when stigma and fear of infection may make it difficult to reintegrate into the community;
- And, for Ebola response teams who work with the infected and their families (Polygeia, 2016).

Table 4.4 Psychosocial effects of an Ebola epidemic

Level	Acute effects	Long-term effects
Individual	Fear and/or anxiety (e.g. of infection, death, separation from or loss of loved ones) Shame and/or guilt Frustration, anger or helplessness Stigma and/or isolation Grief and/or loss	Trauma (e.g. from course of infection, witnessing death of others) Grief and/or loss Mental health problems
Community	Fear and/or anxiety Stigma and/or isolation Grief and/or loss Disruption to community and cultural life	Loss of trust (e.g. in health services) Community fracturing Grief and/or loss Loss of support or coping resources
International	Fear and/or anxiety (e.g. of infection) Trauma (e.g. of international aid workers witnessing deaths caused by Ebola virus) Stigma and discrimination Loss of economic investment, business, travel and tourism	Trauma and long-term mental health problems (e.g. of international aid workers witnessing deaths caused by Ebola virus) Stigma and discrimination Loss of economic investment, business, travel and tourism

Notes: Sourced from (van Bortel et al., 2016)

The absence of mental health services and the lack of well-trained professionals in Sierra Leone amplified the risks of enduring psychological distress and progression to psychopathology (Shultz et al., 2015). Already inadequate mental health services were unprepared to cope with the increasing need. The Ebola outbreak led to more people reporting mental health and psychosocial problems (International Medical Corps Sierra Leone, 2014). The only psychiatric hospital in the country, the Sierra Leone Psychiatric Hospital (SLPH), was closed to admissions during the outbreak. Therefore, no government facility was available for those requiring mental health care. As part of the Ministry of Health & Sanitation's (MOHS) Ebola emergency response which aimed to improve access to care, coordinated with the help of the WHO Sierra Leone Country Office, the Government created mental health units in each of the 14 districts, called District Mental Health Units (DMHU).

The nature and extent of psychosocial needs in emergency situations are such that they may exceed the immediate coping capacity of the affected community to the extent that every-day resources are insufficient in order to be able to respond effectively (Saynaeve, 2002). The key psychosocial domains threatened by disasters include: interpersonal bonds and networks (e.g., family, kinship groups, community); identities and roles (e.g., parent, worker, citizen, social leader); and institutions that confer existential meaning and coherence (e.g., traditions, religion, political and social participation); security and safety (Silove et al., 2008). Van Bortel (2016) called for EVD response strategies that included communication, education, community engagement, peer support, resource mobilisation and prevention activities (e.g. risk assessment, psychosocial support) as well as mental health care.

Establishing mental health services that addresses these domains can help to shape future mental health policy for countries experiencing and recovering from disaster.

Months after the first case in Sierra Leone, policy directives began to emphasise community engagement, coordination and mobilisation of social networks as a vehicle for

effective service delivery (Abramowitz & Kleinman, 2008; Kutalek, Wang, Fallah, Wesseh, & Gilbert, 2015). Published in September 2014, the WHO Ebola Response Roadmap dedicated one of four key pillars to social mobilisation (World Health Organization, 2014). This pillar was designed to engage and motivate a wide range of partners and allies at national and local levels to raise awareness of public health messages with the main objective to stop transmission of EVD. Recognition of the critical need to engage with local communities was apparent yet particularly challenging due to the widespread fear and mistrust.

But, in the context of Ebola using social strategies was especially challenging, as the spread of the disease is through human contact, and thus the MOHS outlawed all public gatherings (including funerals). Restrictions on how families and communities tend to ill loved ones disrupt human interactions that are considered necessary for healing and end-of-life care. Many survivors found themselves isolated, as a result of the stigma of having had the virus and the disruption of social networks caused by the deaths and disruption to communities. This was also compounded by the economic effects of the epidemic on livelihoods, with lost employment, possessions or position in the community leading to a decline in economic security and social roles (World Health Organization, 2014).

Even if people recovered from the virus, often their problems were not over. In Sierra Leone, social networks are an essential safety net, with the majority of care being conducted by close friends and relatives when someone falls ill. The death toll had already reduced social networks, but some Ebola survivors also found that they were not readily accepted back into their communities. Reintegration can be further complicated where survivors find their homes and belongings burned as an infection prevention measure, potentially leaving them destitute (World Health Organization, 2014).

#### 4.4.4.3 Post-Ebola Sierra Leone

Due to a sustained lack of investment in health systems, communities in developing countries are vulnerable to infectious disease outbreaks and their psychosocial repercussions (van Bortel 2015). In the case of Ebola, there was a failure to respond, both by the international and local communities. The severity of this epidemic and its long-lasting psychosocial consequences should prompt investment in health systems, including for mental and physical health. While there is now investment dedicated to rebuilding health systems in Sierra Leone, it is essential that the global response to humanitarian emergencies considers psychosocial needs and is committed to robust community-based initiatives so that health systems will be better prepared in future.

These developments are part of a broader shift in the global health community's attitudes toward mental health. The WHO and international NGOs such as Médecins Sans Frontières (MSF) increasingly address psychological care in its reports and are becoming more amenable to supporting mental health programmes in low-resource settings. But there is still a critical gap in addressing psychosocial needs during emergencies. Mollica et al (2004) argues donors and aid organisations should press for research and assessment in mental health to be a funding priority during complex emergencies. Whereas some have argued that research wastes limited resources and increases the likelihood that the scientific community will exploit vulnerable populations, better understanding of the effective, evidence-based mental health interventions is needed.

### 4.5 Conclusion

This chapter described the setting for the thesis and the impact of recent humanitarian emergencies including both prolonged conflict and infectious disease outbreaks in Sierra Leone. It is a low-income country with an uncertain economic future. There is a public health care system available at the community level, however out of pocket spending for health care is common, and there is a lack of commitment to general mental health services at the

government level. As a result, human resource capacity for mental health services is limited to just one (retired) psychiatrist, 19 mental health nurses (as of 2018) and a handful of community workers with just a few days of psychosocial training. The treatment gap provides a clear rationale for intervening in mental health services.

As the chapter highlighted, there is a dearth of research from Sierra Leone, although evidence does exist to explain the extent of mental health services in the country and the particular population groups that have been studied. Betancourt et al. (2016; 2008) have studied the mental health needs of former child soldiers, and people affected by EVD. Others have reported on capacity building for mental health workers in the country (Shackman & Price 2013; Stewart et al. 2016). These are important studies to build upon as they reflect the need for enhanced services and enhancing skills of the mental health workforce. The country's highly underdeveloped mental health and social services must be strengthened to respond to the reality of adversity due to both war and the recent outbreak. This chapter has provided the rationale for intervention in Sierra Leone.

In the next chapter, the methodology is described in detail for three key phases of study. These include a feasibility and acceptability study conducted in July 2013 (prior to the Ebola outbreak); the intervention model development and subsequent iterations based on the contextual changes outlined in this chapter; and the pilot study which evaluated the effectiveness of training nurses in the model.

## **Chapter 5: Overall methodological framework**

#### 5.1 Introduction

This chapter builds on the previous chapter's rationale for intervening in Sierra Leone. The chapter introduces the methodological framework which has guided the adaptation of the CPI for a low-resource setting. Drawing on the guidance from the UK MRC framework (Campbell, 2000), and building upon previously published methods for theory-informed intervention development (Hrisos et al., 2008), this chapter describes why existing frameworks were unsuitable for the study setting and outlines a method for social intervention design and adaptation in low-resource settings. The chapter includes an overview of the methods from three distinct but connected phases of research which are presented in Chapters 6-8 with more detail on study design and procedures. Each of these phases are linked to the research objectives of this thesis, with the overall aim to contribute to the limited evidence base through the adaptation of the CPI and creation of a social intervention model and training programme for mental health workers in Sierra Leone.

## 5.2 Background

A complex intervention, by definition, is built up from several interacting components. Complexity can emerge from the:

- number of, and interactions between, components within the intervention
- difficulty in delivery and implementation
- sensitivity to features of the local context
- number of groups or organisational levels targeted by the intervention and
- number and variability of intended outcomes (Craig et al., 2008).

To address some of the intricacies in defining, developing, and evaluating complex interventions, several frameworks have been proposed. Frameworks from health and social

sciences are discussed, as well as theory-driven approaches to forge the gap between intervention development and adaptation across various settings.

#### 5.2.1 Intervention frameworks in health sciences

The highly influential MRC intervention guidance (Craig et al., 2008) emphasises four phases of complex intervention development: appraisal of the evidence base, feasibility and piloting, evaluation, and implementation which take place as an iterative rather than a linear process. The guidance has been widely used by researchers, both nationally and internationally, to inform study designs evaluating the effectiveness of a complex area of practice (Figure 5.1).

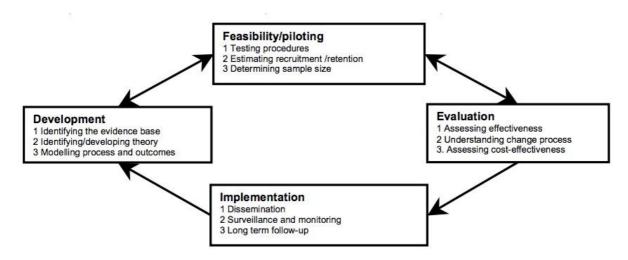


Figure 5.1 Key elements of the MRC framework

Notes: Sourced from (Craig et al., 2008)

The original framework, published in 2000, suggested a model based on the phases conventionally used in the evaluation of RCT. The RCT is a comparative study whereby participants are randomly allocated to two groups: one receives the intervention while the other receives standard care or placebo (control); the groups are then compared in terms of the outcome of interest, with relevant differences attributed to the impact of the intervention (Rothwell, 2005). Some consider RCTs as the most powerful tool in modern clinical research. This is because the use of random allocation to generate unbiased comparison groups ensures

that any observed differences between experimental and control group outcomes are likely to be attributable to the intervention rather than to other factors.

RCTs are widely accepted in medicine and health services research. However, they are often viewed as unsuitable by social scientists, who cite a variety of reasons as to why this approach to evaluation cannot be used to research social interventions (Oakley, Strange, Bonell, Allen, & Stephenson, 2006). The RCT is criticised for not being able to uncover what is truly happening underneath the surface of events and enable findings to be translated to real world practice. The rigorous standardisation of interventions and measurements that make an RCT so powerful also contribute to its limitations in relation to generalisability of its findings and its usefulness for certain evaluations. For instance, the application of an intervention in a different setting from its original inception. Furthermore, RCTs may be unethical where the outcomes of interest are adverse events (e.g. effects of smoking on lung cancer) or when the control group deprives participants of critical services.

In 2008, the MRC framework was updated to provide a more flexible, less linear model of the process. The extended and refined MRC guidance emphasised greater attention to early phase piloting (Campbell et al., 2007), a strong theoretical foundation, modelling of potential effects prior to trial and qualitative development work (Anderson, 2008). The revised framework has proved particularly useful for health service researchers (Corry, Clarke, While, & Lalor, 2013). However, there remain shortcomings in applying the MRC framework to social intervention development.

Areas where the MRC framework might be augmented by approaches more suitable to social intervention development include: (1) an understanding of "what works, for whom and under what circumstances" using methods which address the wider policy and social context (Datta & Petticrew, 2013); (2) consideration of how new research findings are sustained in practice from the stage of implementation (Eccles, Grimshaw, Walker, Johnston, & Pitts, 2005; Webber, 2014); (3) and a greater role for theoretical approaches examining underlying

mechanisms of change (De Silva et al., 2014). For this study, the MRC framework is used as a foundation from which to build a more socially robust framework for intervention development.

There is consensus that complex interventions work best if tailored to local circumstances rather than being completely standardised (Hawe, Shiell, & Riley, 2004).

Moore et al. (2015) recognised the value of process evaluation within trials which can be used to assess fidelity and quality of implementation, as well as identify contextual factors associated with outcomes. They offer a framework for conducting process evaluations, drawing on clear descriptions of intervention theory and identification of key process questions. As Blackwood (2010) points out in her critique of the MRC framework, factors beyond the intervention itself may influence its effectiveness: e.g. how it was introduced, implemented and delivered; whether the system was set up to enable its smooth operation; or if wider policy was enabling and supportive. The MRC framework suggests an incongruence between the theoretical foundations implying positive determinism by asking whether an intervention is efficacious, and the need to address questions concerning the contextual factors that affect an intervention's effectiveness. This means that statements about intervention effectiveness that fail to conduct a context evaluation, may be misleading.

### 5.2.2 Intervention frameworks in social work

The first to propose an intervention research model in social work were Rothman & Thomas (Rothman & Thomas, 1994), who outlined a six-phase systematic process to intervention development: problem analysis and planning; information gathering and synthesis; design of the intervention; early development and pilot testing; experimental evaluation and advanced development; and dissemination. Their book defined the field of intervention research in social work for 15 years but as Fraser and Gallinsky (2010) pointed out, the clear link between problem theory and intervention content was missing. They later

applied a five-phase intervention development model to prevention programmes for children: develop problem and programme theories; design materials and measures; confirm and refine programme components in efficacy tests; test effectiveness in a variety of practice settings; and disseminate programme findings and materials. Fraser (2011) briefly describes the application of this framework in a study for Chinese children in the People's Republic of China, calling for cultural reference adaptation (e.g. children in China would not relate to intervention activities involving baseball), and the adaptation of culturally based risk factors such as daily stressors in their context.

Social work has an international identity but is also diverse and context specific. There is increasing interest in the international movement of knowledge but little analysis of how and why this happens in the field of social work. Instead of seeing knowledge as "transferred" in a straightforward export—import relationship, attention needs to be paid to how knowledge is assembled, mobilised, circulated, reformulated and reassembled as it travels from one country to another (Harris et al., 2015). Hardy and Jobling (2015) propose a methodological framework in social work which they apply to translation of mental health policies, as described in Chapter 3. Such an analysis of policy formation may help to build understanding of the difficult and contested area of social work practice. More research is needed on the process of adaptation to be undertaken when social interventions are translated to different contexts.

To attempt to address the issue of context in designing and evaluating complex interventions, Webber (2014) argues a "rigorous process of intervention development, grounded in real-world practice, may improve the effect of the intervention when evaluated in an RCT, and facilitate its subsequent implementation into routine practice by practitioners" (p. 175). Using qualitative methodology to embed apparent good practice within the development of complex interventions enables feasibility and facilitates eventual implementation (and thus, sustainability) in the given context.

Harris et al. (2015) proposed a heuristic framework for undertaking international social work research which is a set of descriptive elements rather than a framework for intervention development. The framework highlights two key issues: (1) isomorphism in the context of globalisation, an idea addressing the colonisation of intervention models constructed and propagated through knowledge transfer; and (2) power which is deeply embedded in the translation of social work interventions because knowledge offers uneven distributions of power (and resources) across local, regional and national levels and through global networks. To address these two issues, Harris suggests incorporating the notion of "levels of change" to research and analyse the impact of social work interventions at the *macro-level*, involving large-scale change to goals, strategy and policy, at the *mezzo-level*, consisting of organisational changes in service delivery, and at the *micro-level* of changes in social work practice.

The issue of linking research, policy and practice is pervasive across health and social care interventions. Globally, billions of dollars are spent each year on clinical and health services research, but health systems still fail to ensure that effective and cost-effective programmes reach the people who need them most (Grimshaw et al., 2004). As a result, patients do not benefit from advances in health care resulting in poorer quality of life and loss of productivity both personally and at the societal level.

The gap between research, policy and practice has captured the attention of policy makers, researchers and practitioners alike, with repeated calls for the greater use of explicit theory in research that explores intervention development and implementation (Eccles et al., 2005; Woolf, 2008). The proposed benefits are that theory can offer generalisable frameworks that apply across differing settings and individuals and may enhance the ability to design interventions to shape and improve implementation processes (McEvoy et al., 2014).

### 5.3 Theory driven approaches

Theory-driven approaches to intervention development can be traced back to the 1930s (Coryn, Noakes, Westine, & Schrote, 2011) with hallmark programme evaluations developed in the 1950s by Kirkpatrick (1959) and 1980s by Chen (1990) who assert that understanding the theory underlying a programme approach is necessary to understand whether, and how, it works. The idea that underlying, context mechanisms give rise to outcomes has become a guiding principle across many social science disciplines. One form of this enquiry, realist evaluation, gained momentum in the evaluation of complex social interventions. It is driven by theory and has a distinctive focus on the nature of programmes and how they work, the research methods that are needed to understand the workings of programmes, and in what circumstances (or contexts) they might be most effective (Pawson & Tilley, 1997). Therefore, a realistic evaluation is not only inspecting outcomes to see if an intervention works, but is analysing the outcomes to discover if the mechanism or context theories are confirmed (Linsley, Howard, & Owen, 2014). Thus, providing evidence of effectiveness and also an explanation that helps to develop and improve the content and the targeting of future programmes.

There is consistency across intervention design frameworks that theory should underpin the first phase of research. For example, the MRC framework describes the first phase of complex intervention development as preclinical exploring relevant theory to select an appropriate intervention, hypothesis and to predict design issues. Fraser and colleagues (2011) describe this stage as a data-driven process related to the initial conceptualisation of a programme theory. And Webber argues for the importance of early integration of "local, practice and explanatory knowledge" (2014, p. 175). Local knowledge and practice wisdom first identifies the social problem, then aids in the interpretation of epidemiological findings and informs theoretical models.

More guidance on how to incorporate theory-driven approaches into the design and evaluation of social interventions is needed, providing a clear explanation of the mechanisms

of change through which the intervention leads to real-world impact. Two theories, Theory of Change (ToC) and Normalisation Process Theory (NPT), have been more recently proposed to describe how an intervention affects change and can be normalised in implementation.

## 5.3.1 Normalisation Process Theory

Murray and colleagues argue that the implementation and sustainability of interventions can be considered from the very beginning of their development and evaluation by using NPT. NPT is a sociological theory that provides an explanatory framework for investigating the routine embedding of material practices in their social contexts (May et al., 2009). The theory is concerned with understanding trust and interpersonal relationships within social networks as they impact on the introduction of innovative practice approaches (McEvoy et al., 2014). However, NPT extends beyond the initial introduction of innovation to investigate the processes by which innovation may become embedded and made routine in practice, to the extent that it becomes regarded as a normal and taken-for-granted way of working.

NPT has been widely promoted as a means to understand implementation, embedding and integration of innovation into services, and has been advocated as bridging the translational gap between research, policy and practice. It also explains how interventions work, the "active ingredients" so-to-speak, looking beyond early implementation to the point where an intervention becomes so embedded into routine practice that it disappears from view (i.e., it is normalised). This is critical because the implementation of some interventions is likely to only be possible with major structural or organisational changes to service delivery.

There are four main, non-linear mechanisms to NPT which interact with one another and with the wider context of the intervention, such as organisational context, political structures, and social norms (Finch, Mair, O'Donnell, Murray, & May, 2012). The four mechanisms include:

- 1. *coherence*: understanding the process that individuals and organisations have to go through in order to promote or inhibit the routine embedding of a practice.
- 2. *cognitive participation*: the process of engaging individuals with the new practice.
- collective action: the work done to enable the intervention to happen (in the original Normalisation Process Model, there existed four subcomponents of this mechanism: Contextual Integration, Relational Integration, Interactional Workability, and Skill Set Workability).
- 4. *reflexive monitoring*: formal and informal appraisal of the benefits and costs of the intervention once it is in practice, in order to assess its advantages and disadvantages, to understand its effects.

NPT is mainly being used in qualitative research to study the implementation of complex interventions that introduce a new way of working in health care settings. Empirical application of the model to experimental (Wilkes & Rubin, 2009), qualitative (Gask, Rogers, Campbell, & Sheaff, 2008), and review (Elwyn, Legare, Weijden, Edwards, & May, 2008) data showed that the model had utility in explaining factors underlying implementation. The data required to utilise NPT is extensive, and therefore the approach is suited to in-depth studies of health service implementation. In this study, such extensive data collection was deemed impossible due to the research team being based in the UK, unable to spend extended time in Sierra Leone to assess health service implementation.

There is limited evidence on the application of NPT in diverse health care settings, especially those with low resources such as Sierra Leone. McEvoy (2014) conducted a qualitative descriptive review of peer-reviewed NPT literature, finding that of the 29 articles appraised, 21 originated in the UK (the country of origin for NPT). Five studies investigated the application of NPT in mental health interventions though no studies evaluated its application to complex social interventions. Indeed, NPT is a useful way to understand implementation but was not practical for this study.

## 5.3.2 Theory of Change

The Theory of Change (ToC) is another theoretical approach that has been used to design and evaluate development programmes in many different contexts globally. Defined as "a theory of how and why an initiative works" it can be empirically tested by measuring indicators on the hypothesised causal pathway to impact (Vogel, 2012).

ToC models are developed in collaboration with stakeholders and modified throughout the intervention development and evaluation process. Sullivan and Stewart (2006) suggest that one of the advantages of the ToC approach is that key stakeholders will develop ownership of both the intervention and the evaluation because of their active involvement in surfacing the ToC around which the evaluation is designed. This was supported by De Silva and colleagues (2014) who integrated the ToC into the MRC framework in the design and implementation of a complex mental health intervention that was then tested in low-resource settings. The study found that ToC may provide enhanced stakeholder engagement and opportunities to embed the intervention in local primary care settings.

ToC resonates with policy-makers and commissioners such as the Gates Foundation and the UK Department for International Development (DFID) who recognise the inappropriateness of experimental models to the evaluation of complex social change initiatives, but who still desire clear evidence that change can be linked to the intervention being studied (Vogel, 2012). It has also provided researchers with a framework to organise complex and multifaceted change processes. ToC does not determine the methods to be used in an evaluation, nor does it define how theories of change are articulated or by whom.

Therefore, the ways in which it has been implemented show considerable variation.

In the US, where the approach was first described (Weiss, 1995), ToC has been directly linked to the development of community initiatives. For example, Connell et al. (1998) illustrated its capacity to provide a framework for monitoring, evaluation and learning

throughout a programme cycle in the implementation of community initiatives which aim to achieve positive outcomes for youth. Whereas in the UK, it has more often been the case that researchers have started ToC evaluations after large-scale national programmes were underway, but the precise design of these initiatives was not based on a ToC (De Silva et al., 2014). ToC are increasingly mandatory for implementing agencies to submit to donors in the development sector. This appears to have begun with DFID, but has since ballooned so that most donors now require ToC as a standard component of programme design.

However, by its very inception the approach is vulnerable to creating top-down accounts of change that speak more to donor (or academic or policy makers') interests than to the ground realities of people affected by these interventions (Stein & Valters 2012). Some argue that it has become a tool, or product, "sold" to donors rather than being fit for purpose. Whilst these arguments are valid, it's possible that ToC are linked to the tensions brought on by the power relations between donors, governments, and communities, more than it is the tool itself that is problematic. Another concern is that ToC can also encourage linear, mechanistic thinking (Vogel, 2012), based on the idea we can accurately predict the outcomes of interventions, an assumption that is even less likely in humanitarian emergencies.

ToC was not explicitly chosen in the design and development of the mental health social intervention in Sierra Leone. The process undertaken in co-producing a mental health social intervention with local stakeholders required flexibility and ongoing adjustment in order to respond to the changing needs of the community. Based on the critiques of ToC outlined above, it was not viewed as appropriate in this research.

# 5.4 Revised framework for social intervention development

To address the limitations of existing complex intervention frameworks such as the MRC framework, social work frameworks, and theory-driven approaches such as NPT and ToC, a three-phased framework is proposed for social intervention development. The need for

a bottom-up approach that would capture the social context without being too resource and time intensive was considered as the main arguments for creating a social intervention development framework.

The proposed framework asserts that developing complex social interventions for low-resource settings does not align with one existing approach alone. Although the intervention development framework builds on other approaches, there are unique attributes that make it particularly useful in designing and modelling a social work intervention.

The framework is informed by the evidence base, requiring inputs from the literature about what works in other settings and the underlying theory driving the intervention components. It provides a systematic approach that assists researchers to identify the most relevant intervention components for the target population and service capacity whilst documenting the adaptation process and evaluating the outcomes. An important attribute of the framework is drawing on the strengths of the community and stakeholders' experience in the field by integrating feedback loops throughout the adaptation process. The framework emphasises understanding the practice setting so that relevant adaptations to evidence-based interventions can be made. It is therefore responsive to the local social environment and accounts for local variations but may be used elsewhere as a generalisable framework.

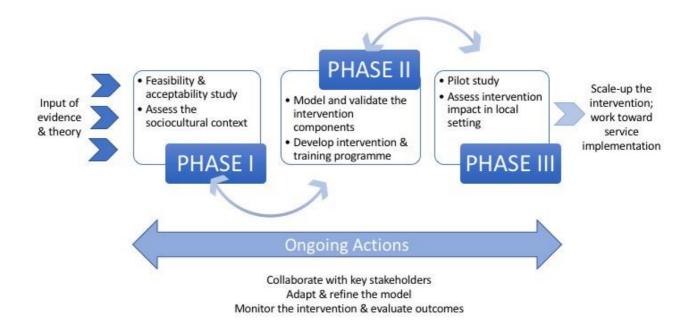


Figure 5.2 Intervention development framework

The first phase of the framework includes an exploration of stakeholder views on the feasibility and acceptability of co-producing a social intervention for mental health care delivery. Using qualitative methodology to embed apparent good practice within the development of complex interventions enables feasibility and facilitates eventual implementation (and thus, sustainability) in the given context. The second phase in the intervention framework is modelling, the process of identifying the components of the intervention and the underlying mechanisms by which they will influence outcomes (Campbell et al., 2007). In the third phase, a pilot study is conducted to explore the application of the newly developed intervention model based on outcomes that are determined co-productively with local stakeholders.

The ongoing actions of the model such as collaboration with key stakeholders, are drivers for continual checking of the model's adaptations. In this way, it is an iterative approach to co-producing an intervention model where input at each phase is used to validate or refute the model's components and its application in the social context. It is also through

these ongoing actions that feedback loops in the model are important, as a return to previous phases for validation and further adaptation may be necessary.

As complex interventions work best when tailored to local circumstances (Craig et al., 2008) the intervention development framework also emphasises the need to incorporate participatory methods early in the research, pre-empting the model and intervention training development, to ensure stakeholder views are embedded within the design of the study itself. This approach confronts the tradition of one-way translation of knowledge—from academia to the community—and asserts the value of hybrid knowledge. In her book, *Decolonizing Global Mental Health: The psychiatrization of the majority world*, China Mills (2014) uses examples of participatory research and commitment to partnership with local people as an alternative to applying Western conceptions of psychiatry in low-resource settings globally. Participatory methods thus provide communities with a genuine voice in research and may increase the likelihood of a mental health intervention's success (Wallerstein & Duran, 2010).

A key feature of this study was the strong local partnerships established between the UK research institutions (University of York and King's College London) and partner organisations, King's Centre for Global Health King's Sierra Leone Partnership (KSLP) and Enabling Access to Mental Health (EAMH). As described in Chapter 3, the mental health workforce in Sierra Leone is extremely small, therefore partnerships with the key stakeholders from the beginning of the study was essential. The partnerships built during the feasibility phase of research extended through the model development and pilot phases to incorporate local knowledge into the design and delivery of the intervention.

The term "co-production" was first used in the 1970s by Elinor Ostrom to explain a process of working in partnership in the delivery of public services; its use in research and especially mental health research is much newer (Kara, 2017). In mental health research, co-producing knowledge involves "the exploration and articulation of what different voices mean in relation to each other" (Gillard, Simons, Turner, Lucock, & Edwards, 2012, p. 1135). In

2013 MIND commissioned a report of the evidence on co-production in mental health services which was explicitly in favour of co-production and working with experts through experience to give a voice to service users, carers and families (Slay & Stephens, 2013). As co-production was initially linked with service assessment and improvement, it may be especially appropriate to co-produce evaluation research as a way of understanding the sociocultural context. It has been used in countries around the world, for example, Burkina Faso, Cameroon, New Zealand, the US and the UK (Kara, 2017). Co-production began early in the study and extended throughout all three phases. Because of the strong partnerships between the UK research team and the practitioners and policy makers in Sierra Leone, co-production began early in the study and extended throughout all three phases. In the intervention development framework, co-production is used as a means for validating, or checking findings from earlier phases, and is therefore a driver for the feedback loops presented in the model.

Each phase of the framework is presented below alongside the methodological underpinnings. The rationale is outlined for conducting a comprehensive feasibility study prior to modelling the interventions components and then testing the intervention in a small-scale pilot study. Details on study design of each phase (procedure, target groups, data collection, outcomes and measures, coding and analysis) are presented in methodology sections of Chapters 5 through 7.

## 5.4.1 Phase I: Feasibility and acceptability study

The first phase of the framework includes an exploration of stakeholder views on the feasibility and acceptability of co-producing a social intervention for mental health care at the pre-intervention stage. The full methods and results for this phase of the study are presented in Chapter 6. Feasibility is defined as the extent to which a new treatment or innovation can be successfully used or carried out within a given setting (Karsh, 2004). Feasibility studies are

used to estimate important parameters that are needed to design a pilot study and enable researchers to assess whether the ideas and findings can be shaped to be relevant and sustainable (Arain, Campbell, Cooper, & Lancaster, 2010). Its purpose is to elucidate what context-specific factors may be fundamental to intervening in Sierra Leone's mental health services from the views of key stakeholders. In this way, the feasibility and acceptability phase is considered a crucial first-step before piloting an adapted (or newly developed) intervention (Bird et al., 2014).

Acceptability is the perception among stakeholders that an intervention is agreeable, palatable, or satisfactory. Lack of acceptability has long been noted as a challenge in the evaluation and implementation of interventions (Sekhon, Cartwright, & Francis, 2017). Acceptability should be assessed based on the stakeholder's knowledge of or direct experience with various dimensions of the intervention to be implemented, such as its content or complexity for delivery (Proctor et al., 2011). Successful mental health interventions require the collaboration and support of those for whom they are intended. For an intervention to be acceptable, the target population must first agree that there is a mental health problem in the community and that addressing that problem is a priority (Bolton, 2009).

Ethnography was used to assess the feasibility and acceptability of developing a mental health social intervention to address the treatment gap in Sierra Leone. To better understand the context of mental health in Sierra Leone—both in terms of the explanatory models of mental illness and the services available—seeking views from the country's key mental health stakeholders using qualitative ethnographic methods. Ethnography has come to be equated with virtually any qualitative research project where the intent is to provide a detailed, in-depth description of everyday life and practice. Ethnographic methods such as participant observation, in-depth interviews, and collecting documents, give researchers an indepth understanding of culture (norms, values, beliefs, concepts, language) from the perspective of the members of the culture (Varjas, Nastasi, Bernstein Moore, & Jayasena,

2005). By using ethnographic methods as part of action research, studies can reflect both universal and culture-specific (local) aspects of a phenomenon. Ethnography has also been found to be successful in developing culture-specific interventions and examining the extent to which interventions embody the cultural experiences of participants (Varjas et al., 2005).

Though appealing on many levels, ethnography is a great investment for researchers. Evaluating ethnographies is challenging as the research topics, methods, and study designs are heterogeneous; the time commitment required is substantial; and partnership activities may generate a complex array of both short- and long-term outcomes (Jagosh et al., 2012).

Traditionally, ethnographic studies are conducted over periods of several months to provide in-depth understanding of a target population. However, because of the urgency associated with strengthening mental health services in Sierra Leone and the challenge of conducting the study with a variety of stakeholders within and outside the country, rapid ethnographic methods were employed. Rapid ethnography lends itself well to social science questions because of its capacity to collect complex descriptions and explore themes within the organization of everyday life and social experiences. Using data across four countries, (Baines & Cunningham, 2011) found that it was feasible to conduct a rapid ethnography by pairing an insider with an outsider researcher in order to draw on comparative perspectives. Rapid ethnography has also field tested in studies of refugee and displaced populations whereby training, data collection and analysis occurred in just seven to ten days (Bolton, 2009). The rapid ethnographic methods enabled collection of a vast amount of data over the course of two visits to Sierra Leone, and then to spend time back in the UK analysing the data and modelling the intervention components in the next phase of research.

## 5.4.2 Phase II: Modelling and developing the intervention

The second phase of the intervention development framework is the process of developing a culturally relevant intervention model to meet the needs of the local community.

The full methods and results for this phase of the study are described in detail in Chapter 7.

Informed by the evidence base around social capital theory and building on the results of the feasibility and acceptability study, the second phase articulates the modelling of core intervention components, validation of the intervention from additional sources, and development of an intervention training programme.

Intervention modelling allows researchers to identify key components and underlying mechanisms that will influence outcomes (Campbell et al., 2007). Modelling ensures that complex interventions fit with and reflect the complexities of the practice environments in which they will be implemented (Webber, 2014). Modelling can be used to connect intervention theory to practice, thus potentially facilitating the translation of new interventions into routine use (Rowlands, Sims, & Kerry, 2005). This method might be especially suitable for social interventions that rely on the lived experience of beneficiaries.

There is little consensus on the optimal methods to use in the modelling of complex interventions. However, using quantitative results from published outcome studies alongside qualitative evidence from patients or practitioners, aims to ensure interventions are "evidence based and patient-centred" (Lovell et al., 2008). Developing a process for modelling a self-help intervention to reduce symptoms of depression, Lovell and colleagues (2008) included in their modelling a systematic review, meta synthesis and a consensus process. Although the pilot data from their study did not suggest that the intervention developed was particularly effective, authors argue that a degree of flexibility in the application of quantitative and qualitative evidence is required. For example, previously published studies may not provide very detailed data on the specific intervention under test, therefore where innovative approaches are being modelled, primary qualitative work may be required.

Qualitative research can be used to show how the intervention works through potential facilitators and barriers to change. In a qualitative study adapting US-derived collaborative care models to UK services, Richards and colleagues (2003) suggest that no matter how

effective models of care are in their originating countries, any attempt at replicating these internationally should be preceded by careful modelling including qualitative research with clinical outcomes prior to implementation. Testing through focus groups, preliminary surveys, or case studies can also help define relevant components (Campbell et al., 2007). For example, if social workers see the main barrier to changing their practice as being lack of time or resources, an intervention that focuses only on improving their knowledge will not work.

After determining that a mental health social intervention would be feasible and acceptable in Sierra Leone, results from the qualitative ethnography were used to model the core intervention components. Drawing on social capital theory, the wider evidence base for mental health social interventions in low-resource settings, and specially the CPI, an adapted intervention was modelled that was culturally appropriate to the local context and mental health service needs in Sierra Leone. The intervention model was then tested through focus groups with members of the Sierra Leone Diaspora community in London, who were also working in UK mental health services. They could therefore provide a unique perspective of the potential validity of the intervention model for the cultural context and service availability in Sierra Leone. From their feedback the intervention was adapted before the pilot study was undertaken.

### 5.4.3 Phase III: Pilot study

The third phase of the intervention development framework is the testing of the intervention model. Detailed methodology for the pilot study is presented in Chapter 8. Pilot studies are exploratory ventures. The results from which can guide in the design and implementation of larger scale efficacy studies. In social science research the term pilot study is used in two different ways. It can refer to so-called feasibility studies which are "small scale versions, or trial runs, done in preparation for the major study" (Polit, Beck, & Hungler, 2001, p. 467). However, a pilot study can also be the pre-testing or trying out of a particular

research instrument or methodology (Teijlingen & Hundley, 2002). In this study, the pilot study was conducted following initial feasibility phase, to explore the application of the newly developed intervention model in Sierra Leone. It was used as an opportunity to assess whether or not the proposed model and research methods of evaluation were fit for purpose, in addressing the mental health treatment gap in Sierra Leone.

Pilot studies play an important role in health research, often by providing information for the planning and justification of RCTs (Lancaster, Dodd, & Williamson, 2004). Whereas RCTs are the "gold standard" method of intervention evaluation, as randomisation minimises selection bias, pilot studies precede the RCT when the efficacy of an intervention model is unproven and there is no critical equipoise to justify randomisation. Pilot studies, are an opportunity to refine research protocols, for instance source documentation, informed consent procedures, data collection tools, regulatory reporting procedures, and monitoring/ oversight procedures before larger, more resource-intensive RCTs are undertaken. Indeed, RCTs are costly and time-consuming, and major funding bodies such as the UK Medical Research Council require this evidence before large amounts of money will be allocated (Lancaster et al., 2004). Pilot studies can also uncover local politics or problems that may affect the research process (Teijlingen & Hundley, 2002).

In this study, the adapted intervention model was tested through a training programme with mental health nurses in Sierra Leone, the country's sole mental health workforce at the district level. The nurses were follow-up for nine months as both quantitative and qualitative data were collected to assess the impact training had on their practice.

## 5.5 Method of analysis

Framework analysis was used across the three phases of intervention development (Gale, Heath, Cameron, Rashid, & Redwood, 2013). The Framework Method first identifies commonalities and differences in qualitative data before focusing on relationships between

different parts of the data, thereby seeking to draw descriptive and/or explanatory conclusions clustered around themes. A framework is a set of codes organised into categories that creates a new structure for the data (rather than the full original accounts given by participants) that is helpful to summarise/reduce the data in a way that can support answering the research questions (Lacey & Luff, 2001). The method originated in large-scale social policy research but is becoming an increasingly popular approach in medical and health research (Gale et al., 2013). The analysis followed the seven-stage procedure outlined by Gale and colleagues (2013): transcription; familiarisation with the interview; coding; developing a working analytical framework; applying the analytical framework; charting data into the framework matrix; interpreting the data.

This method of analysis was selected because the CPI and its intervention components served as a "framework" from which interview guides, questionnaires, and early conceptions of the Sierra Leone model could be drawn. Other analytical approaches were considered, such interpretative phenomenological analysis (IPA) and thematic analysis, which are commonly used in psychological and sociological qualitative research. The former, aims to provide detailed examinations of personal lived experience. IPA involves a two-stage interpretation process whereby the researcher attempts to interpret how the participants make sense of their experience (Pringle, Drummond, McLafferty, & Hendry, 2011), but it can be especially time consuming and was not deemed feasible to capture a large number of stakeholder perceptions in this study. The latter is a method for identifying, analysing, organising, describing, and reporting themes found within a data set. Thematic analysis has been posited as a flexible approach, but can sometimes lead to inconsistency and a lack of coherence when developing themes derived from the research data (Nowell, Norris, White, & Moules, 2017).

Framework analysis was used first in the feasibility and acceptability study (Chapter 6). A more detailed description of how the framework analysis approach was applied can be found in section 6.3.5. The coding framework that was developed in this phase was built upon

when modelling the intervention in Chapter 7. Finally, in Chapter 8 the method was used to understand qualitative data emerging from the training programme and evaluation of nurse practice.

#### 5.6 Ethical considerations

This research was approved by the Social Policy and Social Work Departmental Ethics Committee at University of York and the Office of the Sierra Leone Ethics and Scientific Review Committee in June 2013. Amendments were made to the ethical approval prior to each phase of research. This reflected the adaptations that were made to the research design and the iterations to the intervention model that were required for the changing needs of the communities in Sierra Leone.

Health and social care research is increasingly being conducted in LMIC and specific issues in the ethical conduct of research with vulnerable populations have been raised (Bhutta, 2002; World Health Organization, 2015b). Challenges of applying ethical principles to global health research are outlined below with practical strategies undertaken in this study for dealing with those challenges.

Research needs to respond to community needs and national priorities, and the research agenda in developing countries must be firmly grounded in participatory process with the community (Bhutta, 2002). Shared ownership and ongoing, respectful dialogue (on the ethical challenges of mental health studies) among researchers, participants, and community stakeholders may enhance the ethical and scientific quality of research (Ruiz-Casares, 2015). In this study, there was close collaboration with partners in Sierra Leone to ensure the study design, measures and interview styles were culturally sensitive and appropriate.

One of the central aims of co-produced participatory research is to address power imbalances. However, when conducting research in Sierra Leone there were numerous levels

at which power dynamics could influence the participants, data and the interpretation of results. At an individual level, there were power dynamics introduced by an insider-outsider perspective, where the researchers were coming from the UK, a country that colonised Sierra Leone and left a history of oppression. There were also dynamics regarding gender, age, and race. At the group level, there is the collective identity brought by the participants and research team, as well as the stakeholders of Sierra Leone's mental health services and study funders. These are not separate from each other, or from the individual level power dynamics. They are entangled, inseparable, intra-acting and unavoidable even in co-produced research (Kara, 2017). The relationships built with local stakeholders in Sierra Leone was crucial to the study and helps to articulate the methodology.

Informed consent with vulnerable people and/or in low-resource settings has gained increased attention in medical research as such procedures should be adapted to the local context. DuBois (2011) warns researchers against requesting signatures wherever such a practice generates mistrust, and highlights the ways that disempowerment to make autonomous choices is emphasised across societies (e.g., due to low education, gender, or diagnostic discrimination). In Sierra Leone, individualised written consent was viewed as potentially threatening to participants. For this reason, consent procedures were revised for each study phase and informed consent was obtained prior to data collection. Verbal consent was obtained and recorded prior to focus group discussions in the feasibility and acceptability study; participants in the model development creative sessions in Sierra Leone agreed to sign one consent form for the group whereas focus groups in the UK with Sierra Leonean Diaspora participants each completed a consent form; and in the pilot study participants decided as a group they would sign one consent form, and requested confirmation from supervisors at the MOHS that they approved of the study. A systematic review of informed consent procedures in non-Western societies documented the effectiveness of involving local community and/or

cultural leaders in the presentation of study information (Mystakidou, Panagiotou, Katsaragakis, Tsilika, & Parpa, 2009).

The number of people working in mental health in Sierra Leone is very small. This compromises anonymity of the data, particularly qualitative findings. Data were anonymised upon return to the UK at the point of data entry and transcription. Quotations throughout the thesis are presented only from the stakeholder group in which they fall and all identifying information has been removed. Data was archived within the Department of Social Policy and Social Work research records.

A lack of trained health workers puts an enormous pressure on the workload of staff. For this reason, non-participant observational methods were chosen to gather data on practice in situations wherever possible to minimise the impact of the study on busy staff. Group interviews and informal discussions were also used to gather data and minimise burden placed on individuals.

When studies are carried out in low-resource settings, the members of those societies who take part are being put at risk, while – because of their economic or social disadvantages – they may not be able to benefit from the knowledge gained by the study (World Health Organization, 2015b). Prior agreements about the benefits of research were agreed in advance and made clear that there was no promise the study would help individuals, nor the mental health services provided in Sierra Leone, but that the information gathered from the study would be used to inform significant gaps in services and how to improve care in future research. The ethics procedures also aimed to reduce this issue by maintaining ongoing communication with local partners and providing ongoing dissemination of research results both in Sierra Leone and internationally.

Ethical questions also emerged in the selection of the research topic. The health concerns of affluent populations often drive the research agenda, leading to the development of interventions for which there is a good evidence base in HIC. The topic of this study (i.e.

mental health) is highly stigmatised in Sierra Leone. Participants in the study are among a rather small group of individuals working toward enhanced mental health services in the country. Their efforts are not always favoured by policy makers and arguably would not be possible without the contribution of international funders. The intervention development framework, starting with a feasibility and acceptability study, aimed to ensure the underlying theory and conceptualisation of a mental health social intervention. It also aimed to articulate the needs and capacity of the mental health workforce to provide services to people with mental health conditions in the community.

#### 5.6 Conclusion

This chapter presented the methodological framework for developing social interventions in low-resource settings. The approach taken in this study builds upon existing frameworks such as the MRC guide to developing complex interventions (Craig et al., 2008), combined with underlying theory-driven approaches to design and implementation. Having argued that existing frameworks do not fully support the development of social interventions in low-resource settings, this approach is next applied to describe three distinct but connected phases of research which form the methods and results for the intervention framework.

# **Chapter 6: Phase I Feasibility study**

#### 6.1 Introduction

This chapter reports on the first main objective of the thesis: to critically examine stakeholder perceptions of the feasibility and acceptability of developing a social intervention that addresses an under capacity of mental health workers in Sierra Leone. The feasibility and acceptability study is the first phase of the intervention development framework. Results of this study were also described in a video, funded by the University of York Centre for Chronic Diseases and Disorders (C2D2) and Wellcome Trust, produced by Digifish (https://youtu.be/XIXSQMNldF8).

This chapter begins with a brief description of why feasibility and acceptability studies are important in designing locally appropriate interventions. The methodology used in the research is then explained, arguing that a rapid ethnography was the most suitable approach to build research partnerships and gather rich data during two visits to Sierra Leone. This phase of the research provides a critical link between the application of social capital theory to addressing the mental health treatment gap which was elucidated in Chapters 2 and 3, and the development of a co-produced and locally appropriate model of mental health care in Sierra Leone. The feasibility and acceptability phase also laid the groundwork for developing the partnerships between UK researchers and stakeholders in Sierra Leone that made this research possible. The qualitative results are presented using quotes from transcripts and tables present the quantitative data. Finally, the discussion of this chapter focuses on an interpretation of these findings that will form the basis of the model and training programme development described in Chapter 7.

# 6.2 Background

Some researchers argue the assumptions underpinning the GMH movement may reflect a globalisation of Western cultural trends towards the medicalisation of distress (see Chapter 2). In a book describing the impact of the globalisation of North American constructions of mental illness around the world, Ethan Watters (2011) sees the loss of cultural diversity in understanding and responding to distress worldwide. Gavin Miller (2014) agrees that GMH risks cultural extinction of non-Western norms mental illness and healing, but asserts that the movement may offer the possibility of a mutually enriching dialogue between various Western and non-Western cultures, part of a commitment to a global mosaic of cultural diversity rather than merely a preservation of traditional beliefs. In order to bridge the treatment gap in a way that does not undermine local efforts and culturally-bound coping strategies, interventions should reinforce local capacities, but also integrate the evidence base from (primarily) HIC. As reflected by the conceptual and systematic reviews presented in Chapters 2 and 3, respectively, social interventions may have a unique role to play in producing locally-appropriate solutions to address the mental health treatment gap in LMIC.

## 6.2.1 Feasibility study research aims

This study critically examines stakeholder perceptions of the feasibility and acceptability of developing a social intervention to address an under capacity of mental health professionals in Sierra Leone. Its purpose is to elucidate the context-specific facilitators and barriers that may be fundamental to scaling up mental health services in this setting. The first objective of this research phase was to conduct a rapid ethnography of existing mental health services in Sierra Leone, describing explanatory models and impact of illness, exploring experiences of current care and unmet needs of users to refine the goals and content of the mental health social intervention. The second objective was to develop sustainable international partnerships with stakeholders at varying levels of policy, research, and practice in Sierra Leone. The third objective was to evaluate the feasibility and acceptability of

designing a co-produced social intervention, including individual components and delivery mechanisms.

#### 6.3 Methods

## 6.3.1 Study Design

This study is the first phase of the intervention development framework and was carried out at the pre-pilot stage. Using qualitative methodology to embed apparent good practice within the development of complex interventions enables feasibility and facilitates eventual implementation (and thus, sustainability) in the given context (Webber, 2014). The present study reports on the results of qualitative research using rapid ethnographic methods (Baines & Cunningham, 2011; Bolton, 2009) in Sierra Leone.

# 6.3.2 Participants

Purposive and snowball sampling methods were used to identify participants from among the limited number of people and organisations providing mental health services in Sierra Leone. The sample was initially selected based on extensive knowledge of the study partner organisations, KSLP and EAMH, and was refined throughout data collection. Participants were selected to ensure adequate representation from a broad range of stakeholders spanning policymakers; psychiatry, psychology and social work practitioners; mental health activists; national and international NGOs; community members such as religious leaders and traditional healers; and academics from a range of disciplines.

This was achieved with 31 individual interviews and four focus groups involving 36 participants (Figure 6.1). Two focus groups were conducted with newly trained mental health nurses from all regions of Sierra Leone. One focus group consisted of executive board members from a national organisation committed to advocating for the human rights and mental health service development. The final focus group was conducted with administrators

and academics at a Sierra Leone university. Eight individuals participated both in a focus group and interview; in total 59 people participated in the feasibility study.



Figure 6.1 Feasibility and acceptability study participant groups

Table 6.1 describes the characteristics of the participants. 86 percent of the participants were Sierra Leonean middle-aged adults, 83 percent lived in urban settings, all were literate, and included an almost equal number of men (54%) and women (46%). The sample is not representative of Sierra Leone, where 38 percent of the population reside in urban areas, the female population accounts for 52 percent of the total population of 5.8 million, the median age is 19 years, and the adult literacy rate is estimated at 27 percent for women and 45 percent for men (United Nations, 2017). However, the sample includes the key mental health stakeholders in the country and is therefore a strong representation of the state of services in the country to date.

**Table 6.1 Characteristics of participants** 

	<u> </u>	Participants n=59 (%)
Gender	Male	32 (54)
	Female	27 (46)
Age	<25	0
	25-34	16 (27)
	35-44	21 (36)

	45-59	17 (29)
	60 and above	5 (8)
Nationality	Sierra Leone	51 (86)
	Other	8 (14)
Residence	Urban	49 (83)
	Rural	10 (17)
Literacy	Literate	59 (100)
	Non-literate	0

#### 6.3.3 Data collection

Data were collected during two visits to Sierra Leone in July 2013 and May 2014. Ethnographic field methods of semi-structured interviews, focus groups, researcher observations and informal discussions were used. Information was also derived from documents, e.g. brochures, annual reports, organisation websites, and emails were exchanged to fill gaps in data already collected.

Interviews of key informants took place within the first several days of the visit in July 2013 and then again throughout the course of the data collection period. These individuals acted as gatekeepers to identify additional participants for the study. The purpose of key informant interviews are to confirm any contextual problems or facilitators to an eventual intervention, describe them in detail and identify other potential sources (Spradley, 1979). An important feature of this method is that there are usually multiple interviews or researcher notes from the same respondent which build upon their previous responses and elucidate additional information that may not have been captured in just one interview.

Focus groups were used to better understand group and interpersonal dynamics. These were especially important to be able to reach a number of participants from Sierra Leone's mental health services in a limited period of time. This was important both for the researcher who was in the country for only a few weeks at a time, as well as for the participantsm who were taking time away from their jobs in mental health services. Focus groups also enabled assessment of how people worked together. For example, two groups of mental health

workers were conducted and the researcher could observe peer support and supervision as well as check inconsistencies in what was being described from interviews.

All interviews and focus group discussions were audio-taped and transcribed, with quality checks by the researcher. They were conducted in English as the official language of Sierra Leone and on several occasions' words or phrased were translated from Krio to English. Generally, interviews lasted between 20 and 75 minutes, whereas focus group discussions lasted between 60 and 90 minutes.

The researcher took detailed narrative recordings (i.e., field notes) throughout the data collection phases to capture practice contexts and reflect on barriers and drivers to the intervention. These observations included contextual anecdotes, reflections and impressions. They also included information derived from documents obtained during the visits. The resulting field notes were used to guide decisions about adaptations/modifications, and evaluate programme acceptability, integrity, culture specificity, and impact.

To increase the internal validity of the findings, the study used methodological and data source triangulation. Triangulation refers to the process of exposing multiple dimensions of the same research issue by using a variety of methodological sources in data collection and evaluating if there is a convergence in results (Farmer, Robinson, Elliott, & Eyles, 2006). This was accomplished through multiple interviews or focus groups with some of the same participants and validating responses using data from the variety of sources obtained. For this reason, results are presented in this chapter across these data collection sources.

Prior to the first visit to Sierra Leone in July 2013, informed consent was discussed with stakeholders from the partner organisations. Researchers were informed that in Sierra Leone request to sign a consent form is often perceived as suspicious, inappropriate and perhaps even threatening. Written consent can potentially harm the research interaction and generate rather than ameliorate concern in respondents. At the start of each interview and focus group the researcher verbally read an information sheet detailing the research aims and

procedures for data collection, how the information would be used, storage of data and confidentiality, and whom to contact for further information about the study. The researcher then verbally asked if participants agreed to take part in the research and if they were happy for the interviews to be audio recorded and detailed field notes to be taken. A pro-forma was signed by the researcher to ensure consistency (Appendix C).

#### 6.3.4 Data sources

The interview guide was structured around social capital theory and key components of the CPI model were used to form a priori framework that was refined during the course of data collection. The guide included semi-structured, open-ended questions that allowed participants to describe their perceptions and experiences while also enabling the researcher to probe extensively, responding with related questions. The guide began with a background section about the participants education, training and current role. It was then divided into four sections. The first section aimed to better understand explanatory models of mental illness and recovery in the community. Questions about the beliefs and attitudes toward mental health in stakeholders and general public were asked to determine the prevalence of stigma and its impact on pathways and access to care.

The second section posed questions to shed light on practice and unmet training needs of the workforce. Themes around communication, rapport and building trusting relationships with service users and basic counselling skills were explored. Participants were also asked to use case examples to illustrate practice.

The third section used components of social capital theory including social networks, norms and sanctions that facilitate trust and cooperation among individuals and communities to elucidate their relevance within the Sierra Leone social fabric. Questions to explore micro level social interaction, for instance, covered ties between service users, their family and friends. Items asked, "if someone is finding it difficult to develop and maintain relationships,

how might you help this person?" At the meso level there was enquiry about the social networks of service users and how they participate in their communities. For example, probing about the resources available in the community and how service users might be linked with these resources to support their recovery. At the macro level advocacy campaigns, mobilising of existing resources and the structures that might facilitate or impede the development of mental health services were explored.

The fourth section was aimed at assessing the barriers and facilitators to feasibility and acceptability of a co-produced social intervention. This section was structured around four dimensions: workforce (human resource, training, supervision); intervention complexity (manualised, flexibility, potential effectiveness, affordability); evaluation (pilotable, outcomes, reversible); and application to beneficiaries (access, matches prioritised goals, adverse event). Participants were also asked their perspective on the broader structural and political challenges to providing mental health services.

## 6.3.5 Data analysis

Data were analysed as an iterative process throughout data collection in order to examine major themes that emerged around the feasibility and acceptability of a mental health social intervention in Sierra Leone. As the data collection phase lasted nearly 12 months, a constant comparative method of analysis (Boeije, 2002) also enabled the researchers to capture the views of stakeholders as relationships were being developed. This led to a richness of qualitative responses that might not have been possible with a short period of data collection or had the analysis been conducted only after all data had been collected.

Furthermore, this enabled confirmation of responses on the second visit to Sierra Leone, providing a feedback loop with the participants.

First, the data from all the interviews were transcribed by the researcher and an assistant researcher. The narrative accounts, interview transcripts, and, where possible,

documentary evidence were converted into text files and open-coded as a process of familiarisation, i.e. highlighting anything that might be relevant from as many different perspectives as possible. At this stage, analytical notes and impressions were made to identify key themes and issues. Becoming familiar with the whole interview using reflective notes was a vital stage in interpretation of the data, particularly as the researcher was making sense of cultural elements alongside specific details of mental health services in Sierra Leone.

NVivo v.10 was then used to assist tasks of coding, categorising and comparing data. A code or descriptive label was assigned to excerpts of raw data. Analysis involved a detailed reading and re-reading of the text (both transcripts and field notes) to identify themes, initially around the priori coding framework with further emerging codes identified throughout analysis (e.g., supervision and evaluation, issues with medication, etc.).

Next, the codes were grouped into clusters around similar and interrelated ideas or concepts, called categories. While categories are closely and explicitly linked to the raw data, developing categories is a way to start the process of abstraction of the data (Gale et al., 2013). Coding and categorising the transcripts enabled the researcher to assign values of frequency, presence and absence, and relationships with other codes. For example, many respondents mentioned stigma as impacting on the individual (access to care, family relationships, self-esteem, community participation) as well as on the care providers (role for advocacy, work performance). Therefore, codes related to stigma were found to be crosscutting in the framework and would influence the model conceptualisation so that stigma could be addressed for both the provider and the individual or family members.

Theme saturation was met by evaluating throughout the data analysis process whether new information was created using the coding framework generated.

#### 6.4 Results

The results of the study are presented, first on the feasibility and acceptability of the intervention, and then on key themes that emerged from the data.

## 6.4.1 Feasibility

In evaluating the extent to which a mental health social intervention might be developed and delivered in Sierra Leone, the following themes of feasibility are covered: availability and capacity of the mental health workforce; delivery and implementation; logistical challenges; and potential impact of the intervention.

## 6.4.1.1 Availability of a mental health workforce

One aspect of data collection involved mapping of the available mental health services in Sierra Leone. Much of this information was collected through partner organisations and helped to inform the sampling for this study. The lack of human resources and the difficulty of integrating staff into existing services, with referral pathways almost non-existent in rural areas, was an important obstacle identified by the majority.

Formal mental health capacity is limited to one psychiatric hospital in Freetown with 150 beds for severe cases. There are only two psychiatrists (one is retired, both practice in private clinics) and two trained psychiatric nurses in the country. Besides governmental treatment, psychiatric care is supported by a number of NGO's (such as City of Rest, the Centre for Victims of Torture, and the Community Association for Psychosocial Support (CAPS)). Mental health care at the primary level is very limited; with about 150 primary health unit staff (PHU) receiving two-weeks mental health training during the data collection phase for this study. They are trained to recognise mental health conditions but are usually not willing or capable of treating them.

Several universities in Sierra Leone offer social work undergraduate programmes

(Njala University, Fourah Bay College) but mental health social work specialisation does not

exist. Furthermore, the graduates from these courses may have opportunities for government positions from the Ministry of Social Welfare, but such jobs are severely underfunded. The term social worker also frequently applies to young people with jobs at local and international NGOs without formal education in the field.

CHW undertake a qualifying course, which, at the time of data collection did not include a mental health component. A majority of participants including policy makers, supervisors and mental health specialists voiced that this group would be particularly difficult to access for a pilot intervention study as they would first need training in basic mental health knowledge before exploring social models of treatment. Several participants felt that CHWs might be a suitable population for a future trial, using training of trainer (TOT) approaches from an initial study sample of more qualified mental health workers.

The first mental health training to take place in Sierra Leone was with a group of 21 nurses who undertook an 18-month qualifying course through a partnership between EAMH and COMAHS between September 2011 and March 2013. As the sole country's mental health providers outside the SLPH, the nurses were in the process of being posted to district level hospitals during the data collection phase of this feasibility study. It was felt by many participants that this group of nurses would be most suitable to pilot a mental health social intervention.

# 6.4.1.2 Capacity of the workforce

Supervisors interviewed about the nurses' training and practice capacity described gaps in their ability to work within the communities and provide psychosocial support to service users. The nurses were primarily taught in the biomedical model, which treats mental health conditions in the same way as a broken arm or communicable disease, i.e. there is thought to be a physical cause. This approach emphasises pharmacological treatment to target presumed biological abnormalities (Deacon, 2013). Consequently, the nurses viewed

symptom clusters as the primary focus of their initial assessments and often failed to address other psychological and social stressors present in the patients' lives. Supervisors felt the nurses needed specific techniques to identify common mental disorders (e.g. if patient used to enjoy activities, daily functioning, social isolation, relationship problems, sleep disruption).

As three supervisors observed, this tendency led the nurses to sometimes overdiagnose severe mental illness such as psychosis and under-diagnose common mental disorders like depression or substance misuse:

"They are not seeking mental health cases, not holding regular meetings with service users and are unable to notice changes [in service users] they are not always able to recognise psychological problems and symptoms." (Mental health supervisor)

One supervisor explained the nurses "perhaps didn't feel confident in moving beyond the diagnosis to think about treatment options." The emphasis on the biomedical model is furthermore complicated by the longevity of treating mental illness as compared to physical conditions in this context. Another supervisor described,

"it is not a quick fix. The duration of physical illness is shorter here, we have less diabetes than malaria. The idea that mental illness stays with a person is often incongruent with physical health understanding." (Mental health supervisor)

Also, a consequence of their training, the mental health workers almost unanimously highlight the need for medication in order to treat service users. Whilst the availability of psychotropic medication is an urgent issue needing to be addressed at the national level, mental health workers also lack the skills and resources needed to support service users in the absence of medication. As one nurse described,

"If the person arrives and their condition is worse we can't keep them there [in the district hospital] because we don't have facilities, and there is actually no way we can counsel that patient because of their illness. We refer them to Freetown (SLPH)."

(Mental health worker)

Some argue that medicalisation of psychiatry is the direct result of the GMH movement: addressing mental health in low-resource settings which desperately need services is essential but on the other hand the predominance of Western medical framings has created conditions which favour psychotropic medication to culturally appropriate treatment approaches (Clark, 2014; Mills, 2014). As one supervisor described,

"[Mental health workers] think more about the take away for the patients, as they come in and are looking for something tangible, they need to help the patient understand what they are receiving from the treatment. There needs to be a reframing of nurse and patient expectations around receipt of medication." (Mental health supervisor)

## 6.4.1.3 Delivery & implementation

Training and supervision were viewed to be essential in ensuring feasibility of a mental health social intervention. One participant explained that a number of international organisations would offer trainings with per diem funds for trainees which often took workers away from their day-to-day roles in clinics, hospitals and care settings. In order to avoid removing mental health professionals from their critical workload, six participants in a focus group, including supervisors and service providers, proposed initial intervention training might last one to two weeks and be most feasible during quarterly supervision when nurses come together in Freetown for professional development. This was confirmed in an individual interview and offered as an alternative to inviting the nurses to separate training outside their existing workload to prevent it being perceived as a burden. There was also a need expressed for ongoing and refresher trainings to ensure improvement in nurse practice.

Regular and planned supervision was seen to be essential for the success of an intervention. Comments about the need for supervision came from supervisors themselves, as well as other mental health service providers and policy makers. Whereas the partner

organisations might be able to provide regular supervision to nurses, this would need to be supplemented by the researchers to specifically address new skills gained within a social framework.

One barrier to supervision and ongoing support during a pilot was that of communication, both nationally and internationally. As nurses are spread across all 14 districts in Sierra Leone and only visiting Freetown for quarterly, supervisors expressed concern on how to contact them regularly. To better understand the methods of communication and access to internet amongst mental health nurses and CHWs a brief internet usage survey was conducted.

Results from the brief internet usage survey showed that in the years 2013 and 2014 access to the internet was extremely limited, especially outside Freetown. Only four participants owned a smart phone, five had an email address they accessed regularly. From the results of the survey it was also clear that workers turned to colleagues and supervisors when they had questions or needed help at work. Therefore, when not face-to-face, the primary source of communication was telephone which is costly outside the country and would even require nurses to "top-up" the credit on their mobiles.

Table 6.2 Results from Internet usage survey

		Participants n=29 (%)	
Own a computer	Yes	5 (17)	
	No	24 (83)	
Internet access at	Yes	3 (11)	
home (via Dongle)	No	26 (89)	
Access to a computer	Yes	0	
in PHU/District	No	29 (100)	
hospital			
Use of social media	Yes	7 (24)	
(Facebook)	No	22 (76)	
Mobile phone with	Yes	4 (14)	
internet	No	25 (86)	
Have an email address	Yes	5 (17)	
	No	24 (83)	
Frequency use internet	Daily	4 (14)	
for work purposes	Every 2-3 days	0	
	Weekly	1 (3)	
	Less than weekly	24 (83)	

Frequency personal	Daily	4 (14)
use of internet	Every 2-3 days	0
	Weekly	1 (3)
	Less than weekly	24 (83)
Confidence in using	Not at all	23 (79)
internet	Somewhat confident	2 (7)
	Quite confident	3 (11)
	Very confident	1 (3)
Resources you use for	Teacher	0
help at work <sup>1</sup>	Colleague	25 (86)
	Supervisor	10 (34)
	Books	10 (34)
	Online support	2 (7)
	Email someone for advice	0
	Other	0
		0
Distance to internet	Urban	Internet cafes in motorbike distance
	Rural	No internet facilities

<sup>&</sup>lt;sup>1</sup>Results are not mutually exclusive, participants were asked to select all items that apply

# 6.4.1.4 Logistical challenges

A number of logistical barriers to implementing a mental health social intervention were highlighted by participants. Some workers felt that in order to conduct work in the community and provide home visits they required transport in the form of a motorbike or a boat (for island provinces). Funding for transport vehicles and fuel were not part of their government salary. Several of the workers did not have office facilities in their district hospitals, or had not yet been posted to a province by the MOHS. Whilst supervisors tended to disagree, these workers felt unable to practice without the physical space.

Workers also experienced challenges to integration within the hospital system, sometimes due to stigma or being considered "outsiders" from that particular community. As one participant said,

"there is a lot of respect for health care workers in the community but when they are not from that community, when midwives have been posted to a new district they are considered outsiders in the communities they serve." (NGO representative)

#### 6.4.1.5 Expected impact of an intervention

In terms of evaluating the outcomes of an intervention, many participants said that research was necessary to ensure the approach would be evidence-based and also to improve opportunities for future funding of services. Involving local researchers was seen as a way to enhance cultural sensitivity to the evaluation. One university and members of a local research committee expressed an interest in data collection phases of research. For example, designing locally appropriate questionnaires and employing student researchers to interview participants. Some participants mentioned there are challenges around getting negative information from people in Sierra Leone:

"There is a culture of not complaining, which also related to their experience in the war and finding resilience in difficult situations, but it can make evaluations difficult."

(Mental health supervisor)

Satisfaction with the intervention model and training, improvement of social networking skills, enhanced connections in the community and increased referrals were all described as important outcomes from the intervention evaluation.

## 6.4.2 Acceptability

There were many shared views among stakeholders, including mental health workers, supervisors and specialists, community members, academics and policy makers, on what might make a mental health social intervention acceptable. Participants agreed that a social framework would be an innovative way to enhance access to mental health services in the communities and would help to address gaps in the knowledge and capacity of the workforce. Gaps in diagnosing and counselling skills, treating patients without access to medication, reaching out to community members, building relationships with service users and combating stigma were all highlighted. When translated into local language and adapted for the culture,

topics related to social capital were found to be relevant and accessible. These are explored in detail in the themes below.

- 1. Explanatory models & mental health context
- 2. Stigma faced by service users, family members and workers
- 3. Workforce organisational structure
- 4. Relevance of social capital themes (building trusting relationships, working with families, community engagement)

## 6.4.2.1 Explanatory models & mental health context

Participants described mental health conditions and the stigma associated with them as complex in nature, needing to be understood in relation to the cultural, social and economic context of Sierra Leone society. Although beliefs are changing in urban areas and with people who have received higher education, all participants felt that traditional cultural explanations for mental health conditions are commonly held. The belief that mental health conditions are caused by evil spirits, witchcraft or possession and may be punishment or a curse for wrongdoing is still pervasive:

"...they did the witch. Some of the people around this man confessed they did witchcraft and that's why he lost everything [i.e. his home, job, his wife left him]."

(Community member)

Several participants discouraged the use of Western terms associated with mental health, as it has the potential to detract from culturally and socially appropriate notions of recovery. The valuable role of sociocultural beliefs in giving meaning to the experience of mental health and facilitating healing was also mentioned:

"We put it in a way that 'I don't want to sick this man.' I say there's something happening with people, they get confused I say, 'he goes off', we say 'they go off.' We tell them many things, that we will take care and we know what to do because it is

in our education. Everyday one or two of us has to talk about our topics. Mental illness is one of our topics." (Mental health worker)

Common mental health conditions such as depression and anxiety were rarely seen as mental illness within Sierra Leone society but as part of life, a response to difficult circumstances. This is evidenced by one of the ways people describe depression in Sierra Leone is with the use of the word 'frustration.' One participant explained,

"It's still new; if you talk about mentally ill in Sierra Leone you will talk about psychotic or Schizophrenic, the worst of the states. If it is a stress-related issue they don't consider it mental health, so they too are having some of these problems without knowing they are having it." (Mental health supervisor)

When people did present with common mental disorders it was often with somatic symptoms. Nurses spoke about the effect of depression symptoms on functioning as, "the head is drawing out" or that patients come to the hospital only with complaints of not sleeping. The social factors impacting the depression might be kept "secret" from others around them:

"You need to allow the patient to explore. They might come in and be talking about a headache, if you give the patient more time to explore and bring all social complaints — I am having problems with my family, my wife. All of this will come up. Maybe the headache is not the problem but the problem with the family is the major problem."

(Mental health worker)

## 6.4.2.2 Stigma faced by service users, family members and workers

Every respondent reported stigma towards people with mental health conditions as widespread and damaging. People with mental health conditions are seen as aggressive and dangerous. Coupled with traditional beliefs that mental illness might be "contagious" and fear of the person being under the influence of spirits, stigma often leads to social exclusion with

people being deprived of interpersonal relationships, alienated from family life and shunned from community activities. One participant said,

"Some families they even go to community meetings, they themselves contributing, but for the person with mental health conditions they say, 'don't say anything here you are suffering from mental problems, so you have nothing to say that is serious.' So, they are stigmatising even though that person has become a sober person. Even the family stigmatise the patient by just excluding them from certain activities." (Mental health worker)

Many families go to extreme lengths to keep mental health conditions hidden, and this was particularly apparent in rural areas. The lack of knowledge about mental illness and the stigma associated with it also prevents people from seeking care outside the community:

"Most of them they are on streets, when they become very aggressive, police men on the street take them to the psychiatric hospital. 25% are brought through the policemen, they believe these types of sicknesses that cannot be cured. Only when people have learned that these cases should be treated will this be changed. We need to give this message to our people but it is not easy for them to believe it."

(Policymaker)

The stigma surrounding mental illness also extends to the health workers who treat them. These workers are breaking down massive barriers in the communities as simply, "visiting the clinic can also make for people to be stigmatised." As one nurse described,

"In my hospital they refer to me as crazy man doctor. Immediately when you decide to change from general medicine to psychiatric medicine, you are given a term that defeats mental health practice. So it is serious. To our disappointment even our senior colleagues comment this is a crazy man, a crazy nurse." (Mental health worker)

There may, however, be some adaptive responses to the traditional beliefs that also lead to stigma. During a visit to one of the care facilities, it was observed that nurses were

writing "spiritual problem" as a cause for mental illness on the assessment form. In Western cultures this would not be viewed favourably, but in this case the "diagnosis" did not negatively impact the way that the nurse worked with this individual, especially in terms of any social rehabilitation. The nurse still administered appropriate medication and treated the person with the same respect as other patients. In fact, it may have reduced the stigma as the spiritual problem was viewed as curable.

## 6.4.2.3 Workforce organisational structure of mental health services

There is the view that family members initially treat most people with mental health conditions in the home. When the family becomes unable to manage their condition they consult traditional healers (or sometimes religious leaders). And only when no improvement can be observed do families take their relatives to formal health services. There are many reasons for this pathway to care, several of which are described below.

It is socially important for family members and the community to care for individuals who are unwell. Institutionalisation is viewed mainly as a last resort, when all other possibilities had been exhausted. Furthermore, there is a belief that when relatives go to the SLPH they will not be returning to their communities, because they stay in the hospital for the remainder of their (often shortened) lives or are released without money or resources to return and thus end up on the streets in the surrounding neighbourhood, Kissy.

"Normally when people get mental illness they are first taken care of by their parents. Whenever someone causes a problem in the family, the family ignore. Then later some decide to take them to pastors or Imams. Some take them to the herbalist or traditional healers where they will be restrained or chained. Sometimes their condition becomes worse and they have to run away or they have to go to this place [SLPH]. But sometimes some will bring their patients over to Freetown because formally there are no mental health diagnoses in the provinces." (Mental health worker)

Despite advances in mental health programmes in recent years, there are still very few formal services available and especially in hard-to-reach rural communities. Furthermore, there is little awareness in the community about alternative services for people to access.

"These people, normally, when they are ill the first point of call is to go to the traditionalist. When the traditional healer gets fed up with certain conditions he can't manage this is a time, we hope that he will listen to the radio and maybe people tell him about facilities." (Community advocate)

However, the participants were hopeful that this might be changing in the future, with training of mental health workers and improved access to care. It was clear that nurses were aware of their health promotion role, but there was no indication as to whether they felt adequately prepared:

"They usually go to the traditional healers but I think with our support and support of others when the word gets out they will start coming to the hospitals, when they have started implementation they will start coming directly to the hospital." (Mental health worker)

Several participants said there is a need for training mental health workers at the community level. Working with non-health agencies, such as educational services and the social welfare system, was not mentioned as an integral part of community-based mental health care.

"We think of mental health care as being treated in the community because traditional healers see the majority of service users and the psychiatric hospital is the only government facility. Currently, in terms of Government and Ministry of Health and Sanitation, it's completely tertiary level but there's a recognition it needs to be community and primary health care. There needs to be follow-up as there's none at the moment, the relapse rate is 33%, there's a high readmission rate of service users. So, it's not there yet, we're not ready." (Mental health supervisor)

There are still a number of key stakeholders involved in advocating for changes to current mental health policy but to date the drafted changes had not been implemented at the time of this study. The current policy still falls under the Lunacy Act (Criminal Procedure Act 1965, Laws of Sierra Leone 1960, High Court Rules 2007). As one participant explained,

"One major goal is to increase our relationship with the government using lobbying or having them committed to these aspects of health until they realise the primary responsibility is there's and until it comes to support it will be bureaucratic and penetrating." (Service provider)

## 6.4.2.4 Relevance of social capital themes

To evaluate the acceptability of a mental health intervention rooted in social capital theory several key themes were identified and included in the priori framework used to inform the development of the interview schedule. These themes were identified from several places. Firstly, from the CPI model which has been found to be an effective means for engaging UK mental health service users in developing their social networks (Webber et al., 2018; Webber, Reidy, Ansari, Stevens, & Morris, 2015b). When conducting the feasibility study, care was taken not to share the CPI model in discussions, but rather used these themes to check the acceptability of various components such as relationship building and community participation, both hallmarks of social work interventions.

Secondly, the systematic review and narrative synthesis presented in Chapter 3 identified a series of effective social intervention components applied in LMIC (Newlin & Webber, 2015). Although the priori framework included questions around several of these themes, the approach remained flexible to incorporate respondents' views of the needs for mental health capacity building. In this way, a bottom-up approach was still maintained.

One of the key components of a mental health social intervention explored during interviews was the building of trusting relationship between the worker and service user. This was seen as a critical need for future training. As one participant described,

"You realise that the relationship between the service provider and service user is very important, the relationship between the families and service user is important; these are major areas that we struggle with." (Service provider)

There may be wider cultural factors involved that prevent health care workers from taking time to build a relationship and support individuals in their recovery. For example, the social hierarchy that exists between doctors and their patients renders relationship building "almost non-existent." This is exemplified in the following quote:

"The approach to drug and substance rehabilitation is one page: a detox for a patient. You tell them they should not take drugs, tell them not to do it and then they're discharged, that is the rehab plan and it's a cultural way of approaching something. Its telling someone not to do something and then moving on rather than building a relationship, supporting the individual, problem-solving and I think it all goes back to really that relationship." (Supervisor)

Across the participants there was a lesser focus on individualised human rights and the associated tendency towards overriding patient autonomy. Examples were shared of how individual concerns came before human rights or patient safety.

"How to build relationships between service provider and service user, we've not done this one. It forms the foundation as it determines every other thing. If they [mental health workers] are taught how to maintain relationship, then the welfare of the service user will be a priority. What is happening now is they can lock up patients because Government has to pay them [service providers] money and patient's go home without water. It shows that their interest has exceeded that of the client." (Supervisor)

All groups of respondents stated that family members played a pivotal role in supporting people with mental health conditions. Contrary to most HIC, Sierra Leone and many African societies are more tightly knit, there is almost always an extended family to rely upon, and even severely ill people are usually living with their family. Family members could either improve the functioning of people they were caring for through social support or could further impair functioning by denying the autonomy or through coercion.

"Family members can be a barrier or push the use of services. They often share in the decision making, relationship to community leaders, and they are the link between the service provider and users." (Academic)

Similar attitudes were said to prevail in the community at large. Some participants said, "the village is the family" and the nurse's role is working with everyone; emphasising the importance of home visits. Other participants seemed to believe the stigma was so strong that service users might not have social relationship outside the family for support.

"When you want to build a relationship between the family and the client first of all you have to educate the relative that the client has mental problems. If they know that mental illness isn't brought by demons or witchcraft or transferable I'm sure they will try to build a relationship with the person. They fear the transfer. They need to know the causes, the signs and symptoms. For example, when the client hallucinates the relatives don't know what that is, 'they see something I don't see' and think they see the devil so they fear to come close to their relative." (Service provider)

Regarding development of a mental health social intervention it was stressed by several participants that inclusion of the family within such a model was imperative for implementation. Relating to psychoeducation of families, workers explained that families need to know the signs and symptoms of mental illness: "The family is almost equal to the client because they have feelings and interests over their ability, we need to treat them equal, it should not be targeted just to the client." (Academic)

The connections with other community members, the sense of belonging and collective responses to suffering were seen as advantageous to mental health. An inability to participate or having little participation in different community activities was another important limitation observed for people with mental health conditions. This served to further isolate the individual and their family members from the community.

Regarding the goals of service users, one nurse said, "They want to be well again so they can continue on with the activities they love". Participants reported employment was rare for people with mental health conditions in Sierra Leone and if someone was not able to work, relate well with other people and participate in different community activities, poverty was considered to be inevitable. Supporting oneself through agriculture, growing fruit and vegetables to sell at the market for example, was more realistic for some people. By increasing involvement of the patient, family and community in mental health care, it was thought that messages about effective practices could be disseminated. Community advocacy was viewed as an essential part of the health workers' roles but also neglected in the workplace:

"they're really passionate about reaching out to the community and following up in people's homes but there's got to be clear boundaries. Because they're not managing, they might do a very, very minimal amount of management in the community but they need to be doing more networking, being aware of what's going on in the community, being a liaison officer. That will be a big training need." (Supervisor)

However, one of the barriers to a mental health social intervention model is the poverty faced by the communities because, as one NGO worker described, "I believe there's feasibility for more social network development and it could work but basic needs are not being met due to poverty."

#### 6.5 Discussion

This is the first study to explore the experiences and perceptions of a diverse range of local stakeholders in Sierra Leone's mental health services. Although the number of people working in Sierra Leone's mental health services remains small, there exists a strong (and growing) group of advocates for change in the country. The findings from this study represent the views of these key individuals who are making progress toward more effective and accessible services nationally. After collecting data for more than one year from a variety of sources, synthesis of the available data allowed number of broad conclusions to be drawn about the acceptable and feasible components of an intervention. The findings highlight the importance of pre-intervention research in understanding the beliefs, sociocultural context, and capacity of the workforce to ensure a collaborative approach to intervention development can take place.

The chief lesson learned from this study is that building strong relationships with key stakeholders at several levels of mental health services in Sierra Leone during early stages of intervention development research enables a method of co-production. In doing so, the intervention components could be better fine-tuned to the cultural setting, thus enhancing acceptability and engagement with the interventions. Knowledge about how to bridge crosscultural differences and adapt services to local needs are limited (de Jong et al., 2003; Newlin & Webber, 2015). This study contributes to the limited evidence base on adapting and designing social interventions for low-resource settings.

Another important finding relates to the complexities of culturally based conceptions of mental illness. The traditional beliefs that are still pervasive in Sierra Leone often coexist with social, biomedical and religious explanations. It is not uncommon for people to present at the hospitals or clinics stating the cause of their illness is "spiritual" and attributed to sin or the "will of God." This is exemplified in the language used to describe people with mental health conditions. In the local language Temne, penk means 'mad' and it refers to the 'crossed state' that diviners attain between real and spiritual worlds. It is also present in Krio proverbs,

"Ful n de men, but kres de men" which means "while foolishness is not curable, insanity is [curable]" (Berghs & Dos Santos-Zingale, 2011, p. 40). This in-between state of mental illness attests to the idea that mental illness is not permanent and social remedies can be sought. In a comparative analysis of disability experiences in Sierra Leone, fieldworkers described how a young girl with mental health conditions was taken up in the Bondo female secret-society hierarchy due to her supposed understanding of the supernatural (Berghs & Dos Santos-Zingale, 2011). Mental illness can thus be viewed negatively or positively and it does not necessarily imply victimhood.

Research on stigma now indicates the need to move from a focus on individual characteristics to understanding stigma in its social context (Thornicroft et al., 2016). Stigma exists when an individual is labelled, stereotyped, classified as separate, and experiences discrimination by someone who is in a position of relative power (Link & Phelan, 2006). People with mental health conditions in Sierra Leone often experience stigma not only may serve to exacerbate internal distress, it may also impede a person's access to coping resources such as community and family support. Revealed through focus groups and interviews with mental health workers, they too are affected by this stigma in the communities. The need to include community advocacy and breaking down stigma in a mental health social intervention was underscored by many participants.

Adding to the stigma toward people with mental health conditions are scars left by the decade-long civil war still impact the psychosocial adjustment and social reintegration of community members. A study of stigma experienced by former child soldiers in Sierra Leone by Betancourt and colleagues (Betancourt et al., 2011) found that perceived discrimination (as an indicator of stigma) was associated with poorer access to protective resources such as family and community acceptance, and showed significant relationships with increases in depression, anxiety and hostility over time. A survey of adults and former child soldiers

conducted by Humphreys and Weinstein (2007) found that higher rates of exposure to violence were associated with lower levels of community acceptance.

Although most participants held similar opinions about the characteristics that a mental health social intervention should possess, there were several inconsistencies between practitioners and supervisors. The foremost example was practitioners believing they could not practice to their fullest ability without access to medication and the authority to prescribe. Whereas supervisors agreed that medication is critical in treating patients with severe mental illness but skills for engagement with service users and psychosocial treatment could enhance the nurses' capacity to perform their jobs in the absence of medication.

A similar discrepancy was also observed in a qualitative study exploring the roles of nurses in sub-Saharan Africa which found that of all the roles discussed, the issue regarding who can make a diagnosis and prescribe treatment was the most controversial (Seboni et al., 2013). Community members believed these skills to be essential to nursing, especially when they practised in remote areas with no or few other health professionals available. But other stakeholders, mainly health care managers, saw this as over-stepping boundaries and doing tasks that were acting as doctors. The issue appears to be not only concern for the nurses' ability to carry out the function, but may be viewed by some as being a threat to the viability of other health care jobs. In Sierra Leone, CHW are able to prescribe medication precisely for the reason that they are reaching communities which might never have access to a doctor. Despite the advancing evidence base for newer drugs and psychological interventions, many medications, especially new technology, are not available in low-income countries and clinical human resource are much more constrained (Saxena et al., 2007).

A systematic review of health care workers in developing countries (Pakenham-Walsh & Bukachi, 2009) suggests a gross lack of knowledge about the basics on how to diagnose and manage common diseases (including, but not limited to mental health conditions), going

right across the health workforce and often associated with suboptimal, ineffective and dangerous health care practices.

In resource poor settings, task shifting away from specialist care toward a model in which frontline care is provided by community or lay health workers has become an important and cost-effective strategy to manage mental health conditions (Hoeft et al., 2018; Padmanathan & De Silva, 2013). Indeed, frontline CHW or social workers seemed to be logical starting points for a social intervention aimed at enhancing social capital and community connections. However, criticism of the task shifting model in Uganda has also pointed to policy makers and management not accepting the approach because "lower cadres of health workers" might be perceived as less competent, overworked and support supervision is especially challenging (Baine & Kasangaki, 2014).

Findings from this study suggest that many people in Sierra Leone access traditional healers and religious leaders as first-line responders. The few interviews conducted with such community members and other stakeholders suggest that traditional healers have some knowledge of mental health conditions but also use harmful practices such as chaining. A systematic review of the effectiveness of traditional healers in treating mental health conditions or alleviating psychological distress found that 32 published studies met inclusion criteria, seven of which took place in sub-Saharan Africa (Nortje, Oladeji, Gureje, & Seedat, 2016). Evidence suggests they may be able to provide psychosocial interventions to improve mild symptoms in common mental health conditions such as depression and anxiety. However, little evidence exists to suggest that they change the course of chronic and severe conditions such as bipolar and psychotic disorders.

When exploring the feasibility of developing an intervention for the workforce in Sierra Leone it was clear that capacity of the specialist mental health nurses needed to be addressed in the first instance. Findings from this study indicated substantial training needs for mental health nurses (e.g. communicating with service users, difficulties working with

families, counselling skills in the absence of medication). As CHWs would be referring most mental health cases to the nurses, it was decided with local partners that addressing these training needs should be prioritised. Although Sierra Leone does have a small workforce of social workers, they are not currently supported by government salaries and are not able to reach patients with mental health conditions, thus rendering an intervention unsustainable in the long term. Both CHWs and social workers might be considered for future research and capacity building interventions. More research would be needed before considering the inclusion of traditional healers or religious leaders in a future intervention.

The shift in emphasis to universal health coverage many LMIC has been accompanied by a process of decentralisation of mental health services to district level through mental health plans and policies (Lund, Tomlinson, & Patel, 2016). Indeed, districts are the "first detectors and last mile responders" to health needs (Bellagio District Public Health Workshop Participants, 2016, p. 5). However, in practice, mental health is under-prioritised with few districts in LMIC having a mental health plan in place, insufficient supervision, training and support of the primary care workforce and limited or inconsistent access to psychological interventions and psychotropic medication.

For these reasons, attention in the global health workforce is turning to nurses, who form the greatest proportion of health personnel worldwide, to play a greater role in delivering health services amidst a severe human resource shortage and overwhelming disease burden in low-income countries (Ng'ang'a & Byrne, 2015). Strengthening the capacity of nurses in low-income countries, as well as promoting the reach of health systems and health professionals into homes and communities will become even more important (Crisp, 2012). Hoffart et al. (2013) posited that professional practice models are needed as a means of mobilising nurses in low-resource settings by granting them control over delivery of patient care and the overall work environment. professional practice models entail essential building blocks: professional values, patient care delivery systems, professional relationships,

management approach and remuneration. Incorporating social work skills such as relationship development and community mobilisation into nurse professional practice models may be one opportunity to link specialist mental health services with the communities that current lack access to care. In Sierra Leone, an emphasis could be placed on developing a competent cadre of nurses whose role as mental health leaders may, in the future, be poised to contribute to organisational decision making in the development of more comprehensive mental health teams.

In HIC, the preferred model of care is community-based mental health services with teams composed of psychiatrists, nurses, social workers, psychologists, occupational therapists and other mental health professionals, providing outpatient and outreach services aiming to support patients in their homes wherever possible. This model is not, however, directly applicable to low-income countries in Africa, where there is a great scarcity of trained mental health professionals and virtually no social service (Alem, Jacobsson, & Hanlon, 2008). Findings from the feasibility study reflect the need to enhance skills of the existing workforce, promoting links between formal health services and local communities without discrediting the role of families, traditional healers and religious leaders often play the dominant role in dealing with mental health conditions.

Drawing on theories of social capital enabled an extended understanding of the processes that facilitate or challenge engagement in a mental health social intervention in Sierra Leone. At the micro level of interpersonal connections, building relationships between health care workers and service users was seen as being an essential skill which requires more training in the sector. In a UK based study, relationships between service providers and users were found to be important to service users' satisfaction with mental health treatment (Gilburt, Rose, & Slade, 2008). Similarly, the results from the feasibility and acceptability study in Sierra Leone found that supervisors and experienced mental health workers were in agreement of the importance in treating service users as equal and respecting the rights of

individuals. They explained, however, that limited capacity in relationship building skills may stem from culturally-based social hierarchies that exist in Sierra Leone, as with much of West Africa, placing health care professionals in a position of authority and preventing them from taking time to build a relationship and support individuals in their recovery. As one participant explained of medical education, "they're not taught communication, the medical system in Sierra Leone is very hierarchical and that is evident in the way that doctors treat nurses and nurses treat patients." There may also be gender imbalances adding to this phenomenon, as was seen in a study of health care utilisation from Liberia (Sipsma et al., 2013), though gender was not explicitly explored in this study.

Beyond the social hierarchy is the rhetoric expressed by participants in the study around service users and their families coming to the clinic for "answers" to their mental health conditions (i.e. medication). Indeed, for the most common health problems in in the region, such as malaria or TB, people travel to the clinic expecting a tablet or an immediate resolution. But the treatment of mental health conditions is fundamentally different from physical illnesses. The issue is compounded by the lack of psychiatric medication and that when it is available, individuals who have mental health conditions are required to meet the cost of their treatment. Health care in Sierra Leone is only free for pregnant women and children under the age of six. In many other low-income countries where psychiatric medication may be available, service users often must pay out-of-pocket whereas treatment for physical health problems which is freely provided (Ngui, Khasakhala, Ndetei, & Roberts, 2010), thus disproportionately affecting poorer people who are at greater risk of having mental health conditions.

There is good evidence that supportive social relationships are associated with wellbeing and practitioners should aim to enhance individuals' social relationships (Aked, Marks, Cordon, & Thompson, 2008; Webber et al., 2011). In Sierra Leone, family members often carry the major burden of care for people with mental health conditions. Enhancing

three-way relationships between the mental health professionals, families and service users is therefore of prime concern when engaging individuals in treatment. This study found that families can be the source of burden or encouragement in the care for mentally unwell relatives. Similar in many LMIC countries, family members are often stigmatised themselves (Ng et al., 2013). Support is needed to empower and strengthen the participation of persons with mental health conditions, carers and family members in a holistic approach to care.

At the meso level, items asked about the social networks of service users and how they participate in their communities. Enabling service users to try new activities and participate in the local community was not frequently practised by mental health workers in Sierra Leone. Only one of the workers described an example of how he engaged a service user in cleaning the clinic so as to help provide that individual with a sense of purpose and meaning. Whilst the connections with other community members and a sense of belonging were seen as advantageous, participants explained that people with mental health conditions were very socially isolated and often not given the chance to participate. Graded exposure techniques (Waller et al., 2015) might be a useful training tool to encourage mental health workers to incrementally engage service users in community activities.

This brings us to the macro level connections, which explored advocacy campaigns and mobilising of existing resources. Given the negative stigma associated with mental illness, it's impact on families, communities and on the workers' themselves, the need for community advocacy was clear. As one worker said, "we need to be visiting the health centres. We need to visit schools and ask what they are teaching children. We need to visit the community, while we are taking the patients back to the community, to the stigma." Despite agreement of its importance, most mental health professionals were not currently engaged in advocacy work. For some of these professionals they too were recently posted to communities new to them, where they may be viewed as "outsiders". Practical skills in how to build

relationships with community members and support service users to access the resources available to them are needed.

Professionals' responses to working with a social intervention were largely positive but in some cases varied according to their experience in the field. For example, three people who had been practicing for a number of years as general nurses were more experienced in counselling skills and expressed more ease with building relationships with service users and families than those who were new to practice. But this was not entirely based on age or experience of the workers. Other workers viewed this model as a challenge to their current way of working and were less willing to provide community outreach or to support social network development with service users. Therefore, one barrier to the implementation of mental health intervention in Sierra Leone may be the selection and training of workers who are prepared to operate in a social work framework. Similar issues have been identified in collaborative care interventions for UK primary care (Richards et al., 2006) and integrated US managed care organisations (Gask et al., 2010). Findings from these studies suggest the clash of identities and cultures between the workers' traditional role and a new treatment approach is significant. When a professional group sees itself as providing a specific service and social skill development is absent from this conception, individuals are enormously challenged by new ways of working.

Another barrier to implementing the intervention may be the poverty experienced by service users. Around 60% of the population lives below the national poverty line in Sierra Leone (Kaldor & Vincent, 2016). When visiting the psychiatric hospital, mental health workers explained that because services are so limited in the districts, even people with severe mental disorders may not be able to access formal health services. Mental health needs and social support are not always viewed as priority. Coupled with the stigma and limited knowledge of mental health that engenders social isolation, if families have too little money to pay for health services, or to travel in order to access services, people with mental health

conditions are potentially at a greater risk of not receiving treatment. Though poverty is arguably very different in the UK and Sierra Leone, similar attitudes to social network development were also observed by the research team during piloting of the CPI in the UK, results indicated that some workers and service users expressed that basic needs must come before social connections (Webber et al., 2018). Indeed, basic needs such as food and shelter are critical human rights and must be addresses as quickly as possible. There is also an argument in social capital theory that the development of social relationships might in fact support meeting of some basic needs as people gain access to resources (Costanza et al., 2007). Matthew D. Lieberman, in his book, *Social: Why Our Brains Are Wired to Connect* (2013), argues that research in social neuroscience reveals social connections as even more fundamental or basic than the need for food or shelter. One example of how social relationships may be beneficial to people with mental health conditions is in the stories of communities collectively pooling their money to send a person to the psychiatric hospital in Freetown. In contrast to the examples of socially isolating people with mental health conditions, this reflects the social support that does exist in communities.

### 6.5.1 Limitations of the feasibility and acceptability study

Potential limitations of the analysis are the mixed data collection methods and the fact that the sample was primarily focussed on mental health workers and supervisors; there was not inclusion of an equal representation from community members, service users and policy makers. As this was a study of key informants from Sierra Leone's mental health sector, it is possible that some perspectives are not adequately captured. This is particularly the case for service users who were difficult to access due to the limited availability of services. The exception to this being the few individuals interviewed from a small service users group and the observations made in the SLPH and other mental health services. Aware of this problem,

the discussion from the service users group drew a collective narrative and was corroborated by interviews across stakeholder levels to ensure that the data were not superficial.

It is also possible that the interview questions and observations, shaped by the priori framework, might include preconceptions of what a mental health social intervention might look like from a UK setting. Although the approach to data collection and triangulation during the analysis enabled reflection of this and built upon the information shared to test emerging theories with new and repeated interviews. While trying to address the problems of unfamiliarity with social capital concepts without imposing viewpoints or sharing the original CPI model, it was sometimes difficult for respondents to envisage the procedures they were being consulted on. Previous research indicates that respondents learn to fit into what is required of them to their existing socialisation, norms, values and experience of receiving or giving care (Richards et al., 2003).

In order to utilise the results from the feasibility study to design a model and training programme, the focus of this study was on professional practice. Though there was enquiry about community level support and cultural practices to coping with distress, as well as interviews of four community members including community leaders, the study did not separately analyse social networks, bridging or bonding of relationships in the community. This could have been achieved through survey data and a social network analysis or mapping exercise, which has been found to be acceptable in other African populations such as Benin (Igras, Diakite, & Lundgren, 2016).

### 6.6 Conclusion

This chapter described the first phase of the social intervention development framework and presented the results from the feasibility and acceptability phase. The data from this study have enabled a balance between the original theoretical foundation, drawn from existing empirical literature and the CPI model, with the views of a diverse sample of

mental health stakeholders in Sierra Leone. The feasibility and acceptability study highlighted the training needs for mental health professionals, key components of a feasible and acceptable model, and difficulties likely to be experienced in the implementation of an intervention. By ensuring the intervention is grounded in local knowledge, the sociocultural context and driven by beneficiaries, one can expect that it is more amenable to implementation in routine practice, and produce better outcomes for service users (Webber, 2014).

The emphasis in GMH literature is moving toward task-shifting of resources to lay and CHWs. Although, stakeholders agreed that in the case of Sierra Leone, improving skills of the only mental health workforce, a group of 21 nurses, was a critical first-step. If these mental health nurses could be trained to enhance the social networks of service users and build community participation, CHWs and social workers would be able to refer cases to these better equipped specialists in the future. The next chapter describes how the results from the feasibility phase of the research were used to model the mental health social intervention and develop the training programme.

# **Chapter 7: Phase II Model development**

#### 7.1 Introduction

This chapter presents the process of developing a culturally relevant intervention model to meet the needs of the extremely limited mental health services in Sierra Leone. The intervention model uses the CPI as a base from which to build upon, therefore rooted in social capital theory (Chapter 2) with synergies with other models and theories in social work (Webber et al., 2015a). The findings from the systematic review presented in Chapter 3 showed that there is limited but supporting evidence for the need to design social intervention in LMIC that model culturally appropriate and socially relevant approaches to addressing mental health needs. Chapter 4 highlighted the immense treatment gap in Sierra Leone and some of the challenges faced by communities. The feasibility study, presented in Chapter 6, indicated that a co-produced mental health social intervention was not only acceptable and feasible, but also a crucial need in the capacity building of the mental health workforce in Sierra Leone.

Core intervention components were drawn from a combination of these sources and their relevance to Sierra Leonean cultural was explored in the feasibility phase (Chapter 6). Additional focus groups with mental health professionals in Sierra Leone and the UK Diaspora were used to confirm cultural relevance of the intervention. The intervention endured several iterations as the context in the country changed due to the Ebola outbreak. The intervention was then manualised to provide trainers with key learning outcomes, background information and activities to facilitate learning within each core component of the model. The product of this phase of research—a mental health social intervention that is both evidence-based and culturally appropriate—is discussed as a flexible approach which may be adapted for use in other contexts globally. Results of this phase of study are also described in

a video funded by University of York Rapid Response Fund and produced by Digifish (https://youtu.be/i8mj2qnNSvg).

# 7.2 Background

Addressing the mental health treatment gap in LMIC relies, in part, on the degree to which empirically-supported interventions have the capacity to produce desirable outcomes and equivalently large effects in cultures and contexts different from those in which they were originally developed. Although the knowledge base for empirically supported mental health interventions is rapidly growing, moving such innovations from one practice setting to another, with fidelity, involves far more than simply making efficacious practice models available.

de Savigny and Adams have mentioned that evidence-based interventions often fail to achieve their goal, "not necessarily due to any inherent flaw in the intervention itself but rather to the often unpredictable behaviour of the system around it" (2009, p. 19). Multiple barriers related to human resources, infrastructure, information and service provision, people's participation, knowledge, perception of services, help-seeking behaviour and governance related issues impact on the effectiveness of interventions when tested in different contexts.

Community based interventions for people with mental health conditions, in both HIC and in LMIC, have succeeded in reducing symptoms, improving adherence to treatment, promoting social integration and employment (Malone, Marriott, Newton-Howes, Simmonds, & Tyrer, 2007). However, some of these models, for example, community mental health teams, require considerable investments of financial and human resources and may have limited feasibility in countries such as Sierra Leone (Alem et al., 2008; Hanlon, Wondimagegn, & Alem, 2010). As the results from the feasibility and acceptability study showed (Chapter 6), low-resource intensive approaches such as task-shifting may also be

deemed inappropriate in Sierra Leone where mental health referral systems are virtually non-existent and lay mental health workers may not be supported by government policy (Baine & Kasangaki, 2014).

In designing interventions for low-resource settings, it is imperative to remember that culture matters in mental health – from development of illness, to its social meanings, diagnosis or misdiagnosis, to help-seeking behaviours and even to how it is expressed or manifested, or classified by medical professionals (Ng et al., 2013). Thus, there is a need for developing effective and affordable models that are culturally appropriate and sustainable (Eaton & Agomoh, 2008).

# 7.2.1 Intervention adaptation

When an evidence-based intervention is imported to a new practice setting, some type of adaptation or modification is needed. Many of the papers included in the systematic review (Chapter 3) indicated some level of adaptation when transferring interventions across economic boundaries. Adaptation has been defined as "the degree to which an innovation is changed or modified by a user in the process of its adoption and implementation" (Rogers, 2003, p. 180). In the broadest sense, adaptation can include deletions or additions, changes in the manner or intensity of components, or cultural modifications required by local circumstances (McKleroy, Galbraith, Cummings, Jones, & Harshbarger, 2006). Meta-analyses in mental health literature have indicated that adapting interventions to clients' cultural backgrounds by explicitly integrating cultural factors such as language, cultural beliefs, and explanatory models into the intervention improves the relevance, acceptability, effectiveness, and sustainability of the intervention (Griner, 2006). Care should be taken, however, as these meta-analyses reflect great variability in effect sizes, study designs, populations, and interventions sampled.

Over time, adaptation has been viewed both negatively and positively. Often considered a distortion of the evidence-based intervention, many developers have tried to ensure that adaptation does not take place (Rogers, 2003). One reason for this is that it is difficult for researchers to measure adoption of evidence-based interventions when adaptation occurs. Adopters, however, generally perceive adaptation as necessary to make the innovation more relevant for the target population, service context and can aid in gaining community ownership of the programme (McKleroy et al., 2006). Perhaps, the most enigmatic issue in the cultural adaptation process involves this tension between adaptation (i.e., flexibility) and attaining fidelity, taking into consideration when an adaptation may compromise the key elements of an intervention (Sundell, Ferrer-Wreder, & Fraser, 2014).

Defined as "the extent to which an intervention was delivered as planned" (Allen, Linnan, & Emmons, 2012, p. 281), fidelity allows researchers to understand whether outcomes are related to the intervention itself or to some other factors. Fidelity is one of the most frequently evaluated implementation outcomes, and "faithfully replicating evidence-based interventions has become a mantra in social work and other practice oriented professions" (Fraser & Galinsky, 2010, p. 15). If an imported evidence-based intervention is implemented with poor fidelity, an otherwise well-conducted study might produce findings of no effect.

Unfortunately, there is no consensus about the criteria for determining when cultural adaptation is needed, nor a single, correct way to culturally adapt interventions (Ferrer-Wreder, Adamson, Kumpfer, & Eichas, 2012). Guidelines have been proposed that emphasise striking a balance between adaptation and fidelity to the original intervention. One such example is explained by Allen et al. (2012), effective implementation of "core" intervention elements—those components that were tested through rigorous research designs and linked to the outcomes—are considered to be responsible for intervention effects. In contrast, "adaptive" elements do not change the internal logic or core aspects of the intervention. These

typically reflect the cultural or contextual translations that are critical to the success of delivering interventions in new settings.

Similarly, Sundell (2014) suggests restricting adaptation to "surface" structure and stress fidelity to the so-called "deep" structure. An intervention's deep structure is the causal model that specifies the empirical and theoretical foundation of an intervention, the mediators of change (e.g., changes in skills, knowledge, or attitudes), and ultimate outcomes (e.g., changes in behaviour or health status). Examples of deep structure components in empirically supported social interventions include activities that strengthen social ties, which in turn are posited to benefit an individual's mental wellbeing (Kawachi et al., 2007). The surface structure of an intervention consists of aspects of the intervention that improve the face validity of the intervention with participants (e.g., language, images, and activities not key to intervention success) which is central to making the intervention and its components more acceptable to the target population (Barrera, Castro, Strycker, & Toobert, 2013). In order to benefit from an intervention, participants need to understand what is being communicated to them and how it resonates with their lives. Across different intervention cultural adaptation models, there seems to be less disagreement about the need for surface structure changes when implementing an evidence-based intervention with new cultural groups (Castro, Barrera, & Holleran Steiker, 2010).

Exporting evidence-based intervention across cultures, where access to resources, the prevalence of problems, and the constellation of risk and protective factors vary, presents numerous challenges. Variations in social and health services may determine whether a newly imported intervention can be considered more effective than treatment as usual or not (de Savigny & Adam, 2009). For example, in the US, intensive case management is a service for persons with severe mental illness. Case managers are typically a nurse, social worker, or other clinician who takes primary responsibility for assessing an individual's needs and ensuring that needs are met within the health and social care system. A systematic review of

outcomes from 29 RCTs of case management demonstrated culture-based patterns across studies (Burns et al., 2007). Meta-regression showed that case management was more effective in societies where there was high use of hospitals by individuals with severe mental illness. The interpretation was that where community services are good, hospital care was used sparingly and only when absolutely necessary. When community services are poor, a case manager may find it easier to reduce hospitalisation (Burns et al., 2007). This finding has profound implications for the adoption of case management in resource-poor contexts such as Sierra Leone or other sub-Saharan countries, as described in the systematic review in Chapter 3. In short, the service environment has relevance for the way the effectiveness of evidence-based intervention are interpreted across cultural contexts.

# 7.2.2 Intervention modelling

From attempts to replicate evidence-based interventions across and within countries, model development in the cultural adaptation of interventions has been gaining ground (Ferrer-Wreder et al., 2012). Yet, progress in this field depends, at least in part, on developing, testing, and then refining ideas for how to most effectively go about evaluating the outcomes of culturally oriented intervention adaptations. One approach to this is intervention modelling, the process of "identifying the components of the intervention and the underlying mechanisms by which they will influence outcomes" (Campbell et al., 2000, p. 695). Modelling can improve understanding of how core intervention elements interact and how local conditions may impact upon outcomes.

Modelling can be used to connect intervention theory to practice, thus potentially facilitating the translation of new interventions into routine use (Rowlands et al., 2005). For example, Webber (2015a) argues that modelling ensures complex interventions fit with and reflect the complexities of the practice environments in which they will be implemented. It can help to clarify what practitioners are expected to do and articulate good practice,

identifying the specific mechanisms that lead to improved outcomes in a particular setting.

This method might be especially suitable for social interventions that rely on the lived experience of beneficiaries.

There is little consensus on the optimal methods to use in the modelling of complex interventions. However, using quantitative results from published outcome studies alongside qualitative evidence from patients or practitioners, aims to ensure interventions are "evidence based and patient-centred." Developing a process for modelling a self-help intervention to reduce symptoms of depression, Lovell and colleagues (2008) included a systematic review, meta synthesis and a consensus process. Although the pilot data from this study did not suggest that the intervention developed was particularly effective, authors argue that a degree of flexibility in the application of quantitative and qualitative evidence is required. For example, previously published studies may not provide very detailed data on the specific intervention under evaluation, therefore where innovative approaches are being modelled, primary qualitative work may be required.

Qualitative research can be used to show how the intervention works through potential facilitators and barriers to change. As Campbell explains (Campbell et al., 2000), qualitative testing through focus groups, preliminary surveys, or case studies helps to define relevant components, and descriptive studies may find potential barriers that seek to alter patient or professional behaviour. For example, if social workers see the main barrier to changing their practice as being lack of time or resources, an intervention that focuses only on improving their knowledge will not work. In a qualitative study adapting US-derived collaborative care models to UK services, Richards and colleagues (Richards et al., 2006) suggest that no matter how effective models of care are in their originating countries, any attempt at replicating these internationally should be preceded by careful modelling including qualitative research with clinical outcomes prior to implementation.

### 7.2.3 Evidence-based intervention treatment manuals

A key aspect of research aiming to evaluate the effectiveness of social interventions is the need to develop manuals which, to some extent, standardise practice. Treatment manuals describe an intervention in sufficient detail so that the practitioner can appropriately implement core components in delivery and produce targeted outcomes. They help to transfer intervention knowledge, provide consistency and clarity in the delivery of interventions, including replication in different contexts, and facilitate the measurement of fidelity (Fraser & Galinsky, 2010).

Despite criticisms about the reputed rigidity of treatment manuals (Proctor & Rosen, 2008), well-constructed treatment manuals have also been described as affording flexibility and discretionary decision making for practitioners (Castro et al., 2010). Such treatment manuals may encourage attention to the therapeutic relationship versus attention to therapeutic techniques (Addis & Cardemil, 2006). The greater the practitioner's experience, the greater the range of flexibility that he or she can exercise in applying clinical judgment to a serve user's unique needs. Indeed, an experienced social worker may be seen as conducting a cultural adaptation when tailoring an evidence-based intervention to an individual's ethnic, racial or language needs. This flexibility is pervasive in daily clinical practice, although it raises questions about the limits of flexibility that a practitioner may exercise while also adhering to the tested effects of an evidence-based intervention (Addis & Cardemil, 2006).

# 7.2.4 Connecting People Intervention

The intervention being developed for Sierra Leone mental health services is based on the research team's experience of developing and piloting the CPI in the UK (Webber et al., 2015a). CPI is articulating the process of a mental health worker assisting an individual to enhance their social network and engage in their community. Although informed by social capital theory (Lin, 2001), the CPI model can be linked with other models and theories, which

social workers draw upon in their practice (Webber et al., 2015a). For example, the asset-based approach of the CPI model is similar to Rapp's (1998) strengths model; systems theory (Forder, 1976) reminds practitioners of the importance of engaging with networks to support people; and problem solving can be accomplished through identifying and mobilising community (Kretzmann & McKnight, 1993). The CPI was also developed by social workers, in UK practice contexts, as social model within the profession. Therefore, adaptation is needed for its application in another practice context, but by drawing on its core components in this study it highlights the value of a social work interventions.

As participants in the feasibility and acceptability study described (Chapter 6), breaking down the social hierarchy between a mental health worker and service user to enhance relationships and provide more person-centred care was an important next-step in the training and education of Sierra Leone's nurses. The CPI articulates this relationship as a partnership in the UK context, and is supported by the agency or service to provide skills sharing, supervision and peer support. With the support of partner organisations in Sierra Leone, KSLP and EAMH, this phase of research was needed to further contextualise and adapt an intervention model that would meet the needs of the limited mental health workforce in Sierra Leone.

#### 7.2.5 Research aims

In this phase of research, the aim was to partner with stakeholders in Sierra Leone to co-produce a mental health social intervention and training programme that was culturally relevant and sustainable given the limited capacity of the local services. The key objectives were to firstly draw upon the existing literature from other LMIC and intervention models such as the CPI that have been found to effectively engage service users in enhancing their social networks, and develop the results from the feasibility study in modelling an intervention for the Sierra Leone service context. The second objective was to work with

partners in Sierra Leone and the UK Diaspora to ensure cultural relevance and check the validity of the intervention that is being designed. Lastly, to create a feasible and acceptable training programme around the key intervention components to be piloted with mental health nurses in Sierra Leone.

#### 7.3 Methods

# 7.3.1 Study procedures

Qualitative and participatory approaches were employed to facilitate development of the model and training programme curriculum. The process of cultural adaptation is a painstaking one that involved maintain the integrity of the intervention's causal/conceptual model while modifying for the unique features of the culture (Devieux, 2005). As such, the intervention model development was an iterative process, including multiple adaptations following frequent discussions with stakeholders in Sierra Leone, rooting the intervention in local sociocultural norms, mental health needs and changing context.

To ensure the intervention was both evidence-based and patient-centred, the first step of the modelling phase was to draw upon a variety of sources. This included a review of the literature, grounding the intervention in social capital theory and drawing upon evidence from the CPI and other models of mental health social work practice that have been found to be effectively piloted in LMIC. The methods were then influenced by the experiences of participants in the feasibility study which outlined the critical considerations for a context-specific mental health social intervention. Defining the core components of an intervention helps to communicate the effective aspects and increase the likelihood that it is replicable (Millar & Donnelly, 2014). A central premise of a mental health social intervention is that strengthening trusting relationships will enhance not only a practitioner's ability to support an individual, but also encourage family and community ties. In order to evaluate these

assumptions in Sierra Leone, "core and deep" components of social capital theory and the CPI model were explored when engaging stakeholders.

The second step was to use these core components as a priori framework and conceptualise the model with Sierra Leoneans who could comment on the cultural relevance. This was done in a series of focus groups, firstly in Sierra Leone (n=9) and one with members of the Diaspora community in the UK (n=5). Gerrish and Lacey (2010) highlight that individuals may participate more actively in a focus group than a one-to-one interview, with views potentially being modified as the discussion evolves. The focus group methodology also enables individuals to respond to discussion from fellow participants, in contrast to being the centre of focus in an interview. Wong (2008) supports this argument, recognising that the material and data evolving from a focus group would be less attainable through direct questioning in interviews. The focus groups provided the chance to further elaborate on the themes which emerged in the feasibility and acceptability phase of research. The methods are described in more detail below.

### 7.3.1.1 Focus Groups in Sierra Leone

Five of the stakeholders who participated in the Sierra Leone focus groups had been involved in the feasibility phase. The sociodemographic profile of the participants was, again, not representative of the Sierra Leonean population but included key individuals with extensive knowledge of the mental health system and culture. The decision of who to recruit for the first focus group in Sierra Leone was left up to the partner organisation but included key decision makers in mental health strategy and policy. The second focus group was with two local practitioners who also had extensive experience giving trainings in Sierra Leone and thus specifically address culturally appropriate training methodologies and activities.

The methods used in the Sierra Leone focus groups brought together researchers and community stakeholders through "creative sessions" in May 2014. These sessions aimed to

build upon results from the feasibility and acceptability phase to explore the core components of the model in more depth and with the Sierra Leonean cultural lens. Such sessions provide valuable input about the cultural values, social norms, and community practices and strengths that informs the tailoring of interventions to community realities (Devieux, 2005). The specific goals of the creative sessions were to:

- maximise the fit of the intervention to the Sierra Leone context by incorporating community knowledge; and
- 2. formalise ongoing partnerships by involving implementers of the intervention (e.g., mental health workers, supervisors) in the adaptation process to enhance their skills, confidence, and capacity to deliver the intervention.

The intention of the focus group methodology was also to capture the range of contributions and importantly the collective feeling generated from the whole group. This was especially important as the study worked with key mental health stakeholders in Sierra Leone whose influence reached across policy and eventually the structures needed for implementation. Care was taken to facilitate whole group discussion and individual experiences were also seen to inform the discussion. Participants were invited to be involved in the creative sessions based on their extensive knowledge of the mental health system in Sierra Leone and because they represented the drivers of innovation in implementing change to this system. One creative session was held with two stakeholders with experience giving mental health training in Sierra Leone and it was proposed they might be involved in the delivery of this intervention during the pilot phase.

It was decided that the most appropriate method of questioning would be to use a semi-structured format, with open-ended questions allowing the facilitator to probe and explore specific issues as necessary. The discussion flowed freely, and the facilitator used techniques such as "reflective listening" to promote participation, and ensure that no particular individual dominated the conversation and that views from everyone were heard

from at some point. Brainstorming around culturally relevant activities for each training module also took place in the creative sessions.

# 7.3.1.2 Focus Group with UK Diaspora

Focus group were used a second time during the modelling phase in March 2015, when engaging with members of the Sierra Leone Diaspora community in London who were also working in UK mental health services. Five individuals were identified due to their indepth knowledge of mental health practice and their personal experience of living in both countries, as well as their understanding of culture and its role in shaping potential responses to an intervention. One individual served as a gatekeeper, to identify and recruit participants to the focus group. Therefore, the gatekeeper knew all participants but they did not all know one another, this may have increased their willingness to share details about their personal experiences (Bender & Ewbank, 1994). Members of the Diaspora focus group included a range of professionals (e.g. psychiatrist, social worker, mental health nurse) and ranged in age from mid 30's to 50's. There were three men and two women. One woman also prepared Sierra Leonean food for the group to make everyone feel relaxed and comfortable in the discussion.

The main aim of the Diaspora focus group was to check the validity and reliability of the co-produced intervention model and training programme. Whereas the creative sessions in Sierra Leone were developing the model and training programme curriculum, this second stage was to confirm findings and further adapt the intervention. This helped to ensure data coding from the modelling was accurate, discuss emerging findings, iteratively develop the intervention model, and check when data saturation was achieved.

Furthermore, the Diaspora focus group took place after the EVD outbreak had reached Sierra Leone. During the outbreak, the research team was initially unable to gain access to Sierra Leone and partners were either forced to leave the country or extremely restricted in

their movement. The training programme needed further adaptation to meet the needs of the local communities and in-line with public health messages. In the revisions that took place following this focus group the aim was to ensure that it was feasible in practice, particularly given the country's crisis, and to do so from the perspective of practitioners who understand both Western therapeutic models and the cultural context in Sierra Leone.

### 7.3.2 Data analysis

Focus groups were recorded and transcribed verbatim. The completed transcripts were compared with hand-written notes from the researcher to fill gaps in the tapes and summarise the discussion. The transcribed focus groups as well as researcher notes and observations were analysed thematically with the assistance of Nvivo version 10.0 using the framework approach (Lacey & Luff, 2001), as was done with data from the feasibility study (Chapter 6). Briefly, it incorporates five stages of familiarisation, development of a thematic framework, coding or indexing, identification of themes or charting and interpretation. In addition, open coding was used in the identification of emergent themes. Reliability of data was established by comparing responses from the two creative sessions and Diaspora focus group. As new information was collected in the form of the creative sessions, researcher communication with stakeholders, and validated by the Diaspora, the model and training programme were further refined.

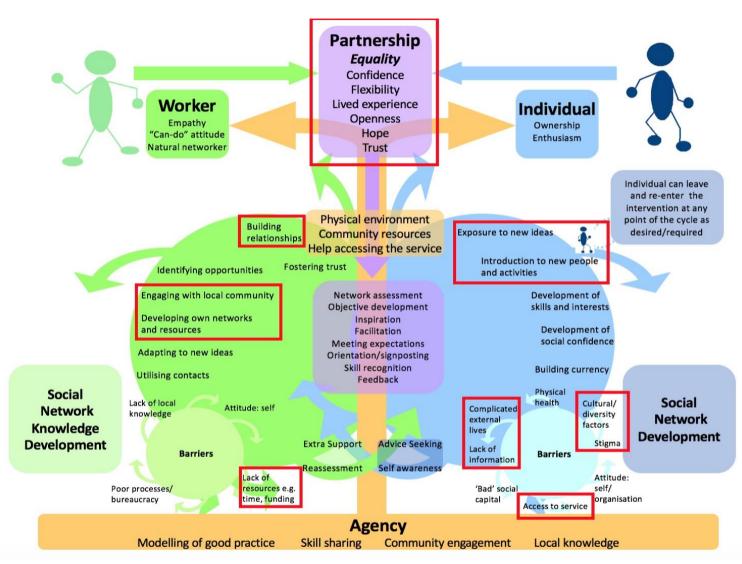
### 7.4 Results

### 7.4.1 Modelling key components of the intervention

The core components developed by the first step in modelling were drawn from a variety of sources, such as the CPI and evidence base of mental health interventions in other LMIC (Chapters 2 and 3); other mental health research conducted in Sierra Leone to date (Chapter 4) as well as the feasibility study that placed the components in the sociocultural

context (Chapter 6). Below the components are summarised with the evidence and the theoretical constructs attached to each (grounding the model within the literature, CPI and the cultural context). This can be useful to show how each individual aspect is not necessarily novel but the combination of such components and the application of the model is new in Sierra Leone.

One of the first key components of the model was the relationship that would be built between the mental health service provider, Sierra Leone's nurses, and the service users. In the CPI, some prerequisites which need to be in place before the intervention cycle can start moving forward, for example the "equal partnership." Findings from the feasibility study indicated substantial clinical and counselling training needs for the mental health nurses (e.g. communicating with service users, difficulties working with families, counselling skills in the absence of medication). There existed a strong hierarchy between the nurses and service users as they had been trained using a psycho-dynamic approach which assumes a clinician is implicitly positioned as the expert, in possession of the power and control over the outcome of the relationship. Contrastingly, the relationship of the worker and the service user in the CPI is more closely linked with a person-centred approach, based on principles and values such as unconditional positive regard, mutuality and dialogue whereby the service user is in fact considered the expert in control of the outcomes from the therapeutic relationship. Mental health leaders interviewed during the feasibility study emphasised the importance of promoting empathy and trust in this relationship, to ensure that the nurses could maintain good relationships with service users and support them to continue moving forward into roles, relationships, and networks beyond the service.



**Figure 7.1 Connecting People Intervention** 

Notes: Sourced from (Webber et al., 2015a). Red squares refer to the core components that were drawn from the CPI when designing the Sierra Leone intervention model

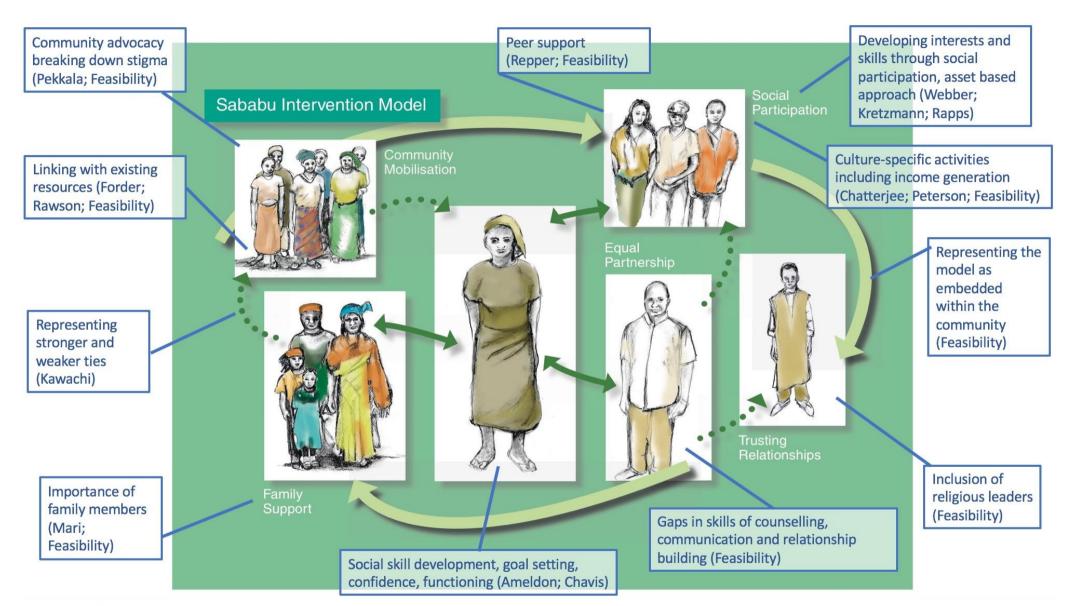


Figure 7.2 Sources for the core components of the Sababu intervention model

The second core component built upon this relationship to train nurses in developing the social skills of service users. A common theme identified across the studies in the systematic review was an emphasis on culturally appropriate social and behavioural skill development, including communication and interpersonal relationship skills. Most commonly measured by social functioning scales, such outcomes reflect how patients live, function, and perform various roles in society. Chavis and Newbrough defined social functioning as "the ability of a person to do what is appropriate in a social setting" (1986, p. 19). Impairment in social functioning is widespread, particularly more serious disorders such as schizophrenia (Yildiz, Veznedaroglu, Eryavuz, & Kayahan, 2004). By assisting the nurses in Sierra Leone to develop social skills of service users, the model aimed to help them integrate into their communities and engage with others.

The third core component of the model was helping service users to develop individual social relationships by enhancing the trusting bonds between service users and their peers, family members and others. At the basis of social capital theory is the notion that people invest in social relationships with expected returns (Lin, 1999). The connections that people have with others may bring returns such as access to community resources, emotional support in difficult times, or helping to meet practical needs. In the CPI the individual is supported to build trusting relationships with others in order to develop networks as the a primary outcome (Webber et al., 2015a). Kawachi and Berkman (2001) reviewed the link between social ties (or connections/relationships) and psychological wellbeing, finding that strong ties can buffer against mental health conditions and are inextricably linked with the wider social network of an individual. In the feasibility and acceptability study this notion of individual social support and building trusting relationships was seen to be especially important for Sierra Leoneans at the family level. Family members often carry the major burden of care for people with mental health conditions. Similar in many other LMIC

countries (Mari 1994; Ng 2013), family members in Sierra Leone are often stigmatised themselves. Thus, enhancing three-way relationships between the mental health professionals, families and service users was of prime concern for stakeholders in the feasibility study when engaging individuals in treatment.

The next core component, again, built upon on the development of social relationships to promote participation of service users in community activities. This includes supporting an individual to consider interests and assets, and engaging in culture-specific community activities—particularly those that generate income—a mutually beneficial strategy for individuals with mental health conditions and wider community development (Chatterjee et al., 2009). The goal of the social participation component was to develop networks with new people and organisations, enhancing that person's access to social capital. Rapp's (1998) strengths model, like the asset-based approach of the CPI, considers the skills, capacities and resources people have that enable them to cope with challenges in life. Helping service users to identify their assets was included in the model as a way of moving beyond the needs and risks that were typically emphasised in assessments by the nurses.

Another core component to the intervention model was mobilising community resources by improving knowledge of and access to individuals and organisations. The extremely limited resources of Sierra Leone's mental health services meant that the nurses couldn't feasibly conduct in-depth counselling with all the service users in need of care. By encouraging the nurses to link service users with other supportive resources in the community, there was potential to take some burden off the formal health system as well as promote inclusion. Community linking systems theory Forder (1976), reminds practitioners of the importance of engaging with systems and networks to support an individual or family. Turning individual assets into an opportunity for mobilising wider community support, assetbased community development (Kretzman & McKnight, 1993), involves identifying and mobilising community assets to solve problems without the intervention of external agencies.

This can be accomplished through community mapping techniques (Rowson, Broome, & Jones, 2010) which train the nurses to identify key people, places and service in the communities and link service users. Given that Sierra Leone is one of the world's poorest countries, it was important for the intervention to recognise that communities do not have the same rich resources that were available in the UK pilot of the CPI study (Webber et al., 2018). However, there are a number of active resources to support people with mental health conditions such as religious leaders who play a strong role in the communities, women's groups, and NGOs for specific social needs such as children's education or youth employment.

In addition to these components, the intervention also targeted advocacy of mental health in the community by employing specific strategies, for example, providing psychoeducation to service users, family members and the wider community to educate them about mental illness; involving them in managing difficult symptoms and promoting the treatment options available in Sierra Leone. Psychoeducation was a central theme identified by the systematic review and seen as critical to breaking down stigma from the perspective of multiple stakeholders in Sierra Leone. This component also directly impacts social network development by promoting wider community acceptance and social relationships outside mental health services (Lund et al., 2013). Learning how to engage traditional and religious leaders, and other influential community members such as Chiefs, Mammy Queens and local government was seen as an integral aspect of a mental health social intervention to break down stigma.

### 7.4.2 Creative sessions and co-production of the model

The creative sessions served as an opportunity to explore these core components in more depth with stakeholders in Sierra Leone and to co-produce the intervention model.

These sessions focussed on conceptualising the model and then developing a culturally

relevant training programme. The intention of co-producing a model with Sierra Leonean stakeholders was to ensure a Western model was not merely transferred, nor assumptions made about what may or may not be suitable for the setting. During the creative sessions, discussions focussed on social capital literature and components of evidence-based models of practice such as the CPI, but emphasised the objective of creating a Sierra Leone model. As one participant articulated and others agreed, "don't discard the model [CPI]. It gives a comprehensive picture. We can look at the strengths and challenges of the model, the effects of each and what is the way forward." In the creative sessions, this background knowledge was utilised to ground the intervention model in the evidence but together design a model that fit within Sierra Leone. This included the consideration of cultural and social norms influencing the presentation of symptoms, access to care and treatment options.

One such example was the necessity of targeting the community for psychoeducation about mental health conditions and anti-stigma campaigns. Due to the limited scope of trained mental health workers and the expanding, but still inadequate referral systems, finding ways to collaborate with traditional healers and spiritual leaders was seen by most respondents as vital to capacity building. There was a strong sense from the participants that a key part of mental health worker's role involved advocacy and breaking down stigma in the community. Describing core components of the model such as building relationships with individuals and their families, making links in the community, these actions were viewed as going "hand-in-hand" with awareness raising. Indeed, fundamental to mental health social work is engagement with the community and direct contact has been found to be an effective means of addressing stigma (Office of the Deputy Prime Minister, 2004).

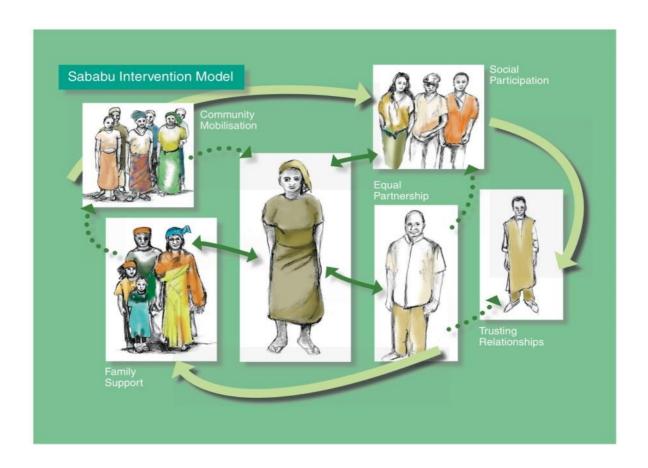
During discussions, it became clear that the conception of a community-based model deviated from how it might be defined in HIC. The theory behind care in the community is that it enables individuals to live as independently as possible within their own homes while support is provided by community mental health teams (CMHT), ideally comprised of several

disciplines, including nurses, occupational therapists, psychiatrists, psychologists and social workers, but defined as more than a single person providing care in the community (Malone et al., 2007). Within this definition there is the assumption that specialised services—such as assertive community treatment (Marshall & Lockwood, 2000)—are extra components to the central management role performed by a CMHT. However, in a limited resource setting like Sierra Leone, where psychologists and mental health social workers are non-existent, this distinction between specialist and community teams is not currently feasible. Therefore, the concept of training mental health nurses as a kind of "link worker", who would work close to the community, was developed in several of the responses. The importance of such a worker liaising with traditional healers and spiritual leaders was repeatedly emphasised. The way that participants described this community based approach was around "sensitisation" and having a presence in the community. This approach served to promote the mental health services that were newly offered in the districts (nurses completed training in March 2013, offering the first services outside of the tertiary hospital in Freetown) and increase awareness of mental health issues in the community. With this understanding, definitions from HIC were integrated (Malone et al., 2007) with the local conception of community-based mental health.

Further to this, participants said the model itself needed to visibly show the community. Unlike other intervention models such as the CPI, participants felt the community members should somehow be clearly illustrated. This was how the model came to be visualised as a narrative, highlighting the cultural importance of storytelling and depicting the intervention process as a dynamic journey. The idea of community was also believed to be unique to each individual. Factors affecting one's definition of community might include age, gender, proximity to a town or city, socioeconmic status. For example, an individual living in a rural area might have a close network of family and neighbours for support but also less access to mental health services and thus may need to rely more on the traditional healers for care.

Likewise, as was highlighted in the feasibility phase, it was critical to depict the importance of family in the Sierra Leone context. The key tasks for the nurses was providing support to families and helping to maintain patients in their homes. The model illustrates this process in the support that a mental health worker provides in building relationships with family members and encouraging the maintenance of relationships between the service user and his or her family members. In many ways, this three-way bond is more relevant to the social context than a two-way relationship as described in the CPI (Webber et al., 2015b).

The name for the model also bore out of the creative session discussions. When asked for cultural references related to the model, one participant suggested the term "sababu" which in Krio, the local language, means connections with other people, in particular, benefiting from such connections. Sababu has roots in the Arabic word "sabab" meaning good fortune, and relates to the notion of social capital, describing the connections among people and the shared value that arises from such relationships.



# Figure 7.3 Presentation of the Sababu intervention model

The final model which emerged from the creative sessions and was refined in the Diaspora focus group was dynamic and a narrative example of a service user's experience in Sierra Leone's communities (Figure 7.3). At the heart of the model is a female service user who develops an "equal partnership" with a mental health worker. Support from family is fostered through the connection the worker makes. That worker also supports the individual to build stronger or weaker ties with other community members, as illustrated by the solid and dotted lines. For example, this may be to connect an individual with an Imam or other religious leaders, or to encourage peers to include this individual. Through these relationships, participation in social activities is encouraged by the worker using a strengths-based approach, emphasising personal interests and access to resources. The model emphasises fluidity and flexibility, noting the process is individual to each service user. It also depicts social work's micro, meso, macro levels of practice through the connections between individuals, their social networks, and the community structures.

### 7.4.3 Training programme modules

Based on reflections from the feasibility phase, the trained mental health nurses were identified as the most appropriate group to work with in future training as they were considered the country's future leaders in mental health but had been largely trained in the biomedical model and thus were still limited in their capacity to work with service users in the community. Gaps in their practice were recognised around the social aspects of mental health, particularly the capacity for nurses to engage with service users social support networks such as family members and the wider community. The overall aim of the Sababu training programme was to successfully build capacities of mental health nurses in Sierra Leone to strengthen their knowledge and skills of mobilising social networks for people with mental illness.

By aiming to co-produce a training programme for the nurses, the study acknowledged that new skills must fit into the qualifications they had received, and this not meant to be replacement training but rather supplemental. Supervisors mentioned in the feasibility study and again in the creative sessions about the importance of the training serving as refresher to what they have already learnt. For example, the aim was to refer back to the skills they gained from mhGAP training received in 2013 (World Health Organization, 2010), building upon their understanding of the bio-psycho-social model, emphasising the Sababu training would enhance psychosocial skills they could bring into their existing practice.

Delivery of the model was explored during the feasibility phase and expanded during the creative sessions. The intervention training would be collaborative, including the lead researcher, MFN and supervisor, MW, alongside two Sierra Leonean trainers. The nurses with 18 months mental health training would be trained in using the Sababu model and responsible for delivering the intervention. Nurses were based in all 14 districts and therefore the intervention would have national impact on the availability and scope of care. Managers from partner NGO, EAMH, and KSLP were responsible for on-the-ground supervision which fit within their pre-existing supervision structures. The delivery of the specific components would be flexible, guided by the unique needs of each individual and his/her family, identified through a structured needs assessment and responding to changes overtime.

Designed around the model's core components (Table 1), the Sababu training programme could be delivered in five days by pairs of trained facilitators working from a detailed procedure manual (Appendix B). Participants in the creative sessions recommended developing a standardised training package, one that could be delivered to the nurses in the pilot phase but also be sustained for future training of CHW and SWs should it prove effective. The necessity for ongoing monitoring with supervisors was also stressed. Regular refresher courses were thought to be important, preferably short and frequent courses rather than long ones with extended intervals in between them.

Training of health care workers in sub-Saharan Africa remains largely based on the traditional didactic approach with lectures forming the bulk of education material sources (Mufunda et al., 2007). Introduction of innovative curricula such as participatory methods that mobilise knowledge and engage in critical reasoning can better equip future health care workers with skills and an ability to cope under diverse socio-economic environments (Frenk et al., 2010). As was learned from participants, interactive and participatory approaches were not used in Sierra Leone's education system and thus would be new to the nurses. As one supervisor explained,

"the nervousness of the nurses to engage with patients is unsurprising given the learning style of their education. They were memorising medications and diagnoses but never actually taught how to think critically and assess the patient holistically, much less practicing therapeutic techniques."

By utilising role play and allowing the nurses to practice new skills in a comfortable and supportive environment, the training aims for a deeper understanding of the model components and an opportunity to assimilate knowledge into practice. This approach also aims to move away from directing workers in what to do, but rather to consider the perspective of the service user as an individual to engage in meaningful conversation. For example, asking the nurses to think about, how would you talk to your neighbour about the stress he's feeling with farming difficulties? The active ingredient, the interpersonal relationship between the worker and service user, comes first in this model.

Another caveat to the narrative depiction of the model was the notion of including "success stories" within the training. In the feasibility phase, one practitioner described how an individual with anxiety was seeing a traditional healer for five years without improvement, but after just a few weeks in this practitioner's care the individual had reduced symptoms and a care plan. He explained, this individual gives the community an illustration of how his approach works which can break the misperceptions of sending mentally unwell people to

clinics. Although the participants offered understanding that engagement in activities, mobilising resources and social relationships would be beneficial to service users, they still needed to see how this could actually work in practice, particularly in the low-resource setting. Sharing success stories during the training also serves to enhance peer support among the group.

A training manual was co-produced with stakeholders in Sierra Leone and refined through feedback from the Diaspora focus group. A participant workbook summarises each module and encourages participants to record their thoughts and to set goals from each session. The intervention is designed to have a degree of flexibility regarding the activities that are scheduled to take place during each module. Whilst each step is covered, the content or activities of the module may vary slightly according to the resources available, the skills of the facilitator, the length of the sessions and the level of experience of the particular group. Each module outlines the aim of the session, the provision of background information for the session, discussion of the topic addressed by the session, and culturally based activities for participatory learning.

Table 7.1 Training programme modules linked to the Sababu intervention model

	Module	Learning objectives	Culturally appropriate activities
Part 1 INTRODUCTION TO CONCEPTS AND THEORY	Welcome & Introduction	Introductions and ground rules, discussing learning objectives as a group	+Using icebreakers relevant to Sierra Leone +Develop a list of learning objectives as a group +Baseline evaluations
	Background to social determinants of mental illness	To understand and articulate the social determinants of mental illness and how/why psychosocial problems might exist for their service users.	+Explore the social context to understand causes of mental illness +Small group case discussions sharing "success stories" peer learning and support, feedback from each other, as a group discussion explore options for treatment.
	Crisis situations,	This module focuses on	+Discuss cultural

	coping with grief and loss	how people react to and deal with the loss and grief connected to crisis events and was added in response to the EVD outbreak.	grieving processes and importance of social support during crisis. +Some people may be re-experiencing war trauma
Part 2 PSYCHOSOCIAL AND COMMUNITY INTERVENTIONS	Link to Psychological First Aid (PFA) and psychosocial responses	Emergency psychosocial response interventions during times of crisis, specific to the current referral pathways and connections nurses have with other health & social care services in Sierra Leone.	+Overview of PFA and the current response of services in Sierra Leone. Joined by colleagues from the WHO and local NGO partners for this session. +Discussion of what recovery means in Salone context
	Introducing social and community models of practice: Sababu Intervention Model	To think about social strategies for care and the importance of creating linkages in the community. To introduce the Sababu model	+Discussion of community mental health: Using evidence in other African contexts firstly, then introducing the model we've adapted for Sierra Leone +Mapping one's own practice onto the Sababu model
Part 3 DIMENSIONS OF SABABU MODEL AND INTERVENTION	Communication and building trusting relationships	To explore basic communication and counselling skills in this section by discussing the values that underlies the counselling process as well as the principles of building an equal partnership and relationship with service users.	+Exploring communication techniques to use in counselling: active listening, storytelling, guiding and motivating an individual to about difficult topics (links to training nurses had in domestic violence and female genital mutilation) +Small group role play on reflexive practice related to difficult case or a personal experience
	Individual social support using an asset-based approach	To explore the asset based approach to working with service users and empowering them to build self- confidence in their abilities, knowledge, skills and resources	+Practice creating asset maps for themselves, then translating this into work with service users through individual goal setting in role play +Discussions of empowerment and building confidence in

			samvina vsams
	Care for carers and family support	To build confidence in discussing mental illness with carers/families and plan activities for involving family members in counselling.	+Role play working with families and building relationships with family members that do not discount the individuals
	Engaging and mobilising social networks	To look at how building relationships with supportive people and in the wider community can be developed for both workers and individuals.	+Creating of social network maps, then translating this into work with service users by discussing social support using the "hand technique" +The importance of coming together and working with respected leaders is further threatened by EVD. Hold discussion on reconnecting that is both culturally appropriate and in-line with public health messages
	Community engagement and mobilisation	To understand the importance of using psychoeducation, awareness-raising and advocacy techniques to enhance community participation.	+Design a community intervention to address one of the psychosocial problems facing communities in Sierra Leone amid the EVD outbreak +Community mapping using post-it notes to depict community organisations and members, discussion of how to mobilise the community in practice +Roleplay community interventions
Part 4 TRAINING OF TRAINERS / EVALUATIONS	Training of Trainers (TOT)	Overview of TOT concepts and to make plans as to how they can train others in the district	+Reflections on the model, explaining the model to another person, sharing Sababu "success stories" of working in this way +Training planning checklist

The focus group with members of the UK Sierra Leone Diaspora was an opportunity to evaluate the validity of the Sababu intervention model and training programme, and to make further adaptations to the existing design. Participants were in agreement regarding the core components of the intervention. Therefore, the discussion focussed mainly around assessing the training manual to explore culturally appropriate language, case examples, activities, barriers to working in the community, and to incorporate more practice knowledge from individuals who uniquely understand the mental health service context.

By the time of the Diaspora focus group in March 2015, the EVD outbreak was at its peak and there was a need to adapt the training programme to suit the needs of the communities in Sierra Leone. The disease was particularly influenced by cultural and behavioural practices that occur at household and community levels. Therefore, the training had to be adapted for cultural sensitivity whilst also maintaining salient public health messages around the disease.

Two modules were added within the training programme to focus on the EVD outbreak and the role of the nurses within the response. The first, focussing on coping with grief and loss in crisis situations, opened a discussion in the focus group about grieving practices and traditional beliefs in Sierra Leone, and appropriate methods of discussing these difficult topics in a group setting. The second module that was added in response to the outbreak was focussed on PFA and psychosocial responses to crisis. The discussion with the Diaspora focus group explored the meaning of recovery in the cultural context. These discussions were especially salient given the timing of the focus group and the fact that were unable to access colleagues in Sierra Leone during the peak of the outbreak.

The participants were also able to highlight links to Sierra Leone's past, describing how in the war, the sense of community, social cohesion and trust was relatively maintained as the people were seen as separate from the rebels and government soldiers. People could also rely on their relationships for support. However, with the spread of the EVD through

human contact, the maintenance of trusting relationships and the ability for people to support and care for another had been damaged.

Participants supported the development of an activity to facilitate learning about mobilisation of community resources. As one participant described the difficulties nurses may face in advocating for mental health in their communities and engaging key leaders, he suggested the use of an "action plan" to meet with the Paramount Chief, one of the most influential figures in the community. To challenge the approach and unpick the specific skills a nurse might need in order to access the chief, another participant role played the barriers that nurse would face and as a group discussed how the cultural norms impacted the adoption of the model and its core components.

#### 7.5 Discussion

The Sababu model articulates an intervention approach that is grounded in social capital literature and the evidence base for mental health social work but is uniquely designed to address the capacity of mental health services in Sierra Leone. Drawing on evidence from a range of existing sources and modelling core components for the Sierra Leone context, the Sababu model offers a theoretical base which practitioners can translate into effective mental health practice, thus potentially producing a more feasible and sustainable model than individual approaches that may have been implemented in isolation.

Social work's ecological approach that has emerged from the early works of Germain (1973) provides strategies that allow the social worker to move from a micro level of intervention to a macro level of social treatment (Ahmed, Amer, & Killawi, 2017). The Sababu model can be understood in similar terms, as it builds upon practice strategies such as asset based approaches (Rapp, 1998) at the individual level, moves through family interventions (Kumpfer, Smith, & Bellamy, 2002) into mapping and mobilising resources on

the community level (Rowson et al., 2010), thus combining a congruent practice orientation to work with service users.

In the modelling of Sababu, a combination of deep and surface-level cultural adaptions were identified. Surface level adaptations consist of aspects of the intervention that improve the face validity of the intervention with participants and determine acceptability. As Sundell explains (2014), the deep-level, causal model specifies the empirical and theoretical foundation of an intervention, the mediators of change and ultimate outcomes. The deep structure of the Sababu intervention model was drawn from existing evidence and amalgamated into the core intervention components. These were then adapted to incorporate specific cultural values and norms into specific intervention components and training modules.

Firstly, drawing on evidence from the feasibility phase, explanatory models of illness were explored to articulate the social determinants of mental health. As Rebecca Esliker explains in her report, *Mental Health in Sierra Leone: Beliefs, Myths and Truth* (2015, p. 11), most Sierra Leoneans believe that mental health illnesses are "caused by witchcrafts, curses, evil spirits or punishment for bad people in the family." Such beliefs become barriers to the people acquiring knowledge about psychiatric evidence on the causes of mental health conditions. Thus, already resource-poor health care systems have been further challenged by myths and misinformation, often driven by erroneous news reports and inadequate public health messaging (Shultz et al., 2015). In co-producing a model that would enhance mental health services in Sierra Leone, there was a need to incorporate the understanding from traditional beliefs as a way to enable to mental health workers to connect with people in their communities and promote their practice.

Secondly, findings from the feasibility phase suggested that conceptions of community-based mental health differed from how it is often defined in HIC, potentially influencing the acceptability of a social intervention model in Sierra Leone. In a review of

studies developing community mental health care in Africa by Hanlon, Wondimagegn and Alem (2010), authors found diverse interpretations of the meaning of community care across countries. In the low-income countries of the Africa region, community mental health care is largely restricted to care delivered by primary care staff, with specialist mental health workers (usually psychiatrists and psychiatric nurses) tending to provide care through hospital-based outpatient clinics, thus limiting in their abilities to provide responsive outreach services close to home. However, they argue, without community sensitisation and engagement, the detection of untreated patients and take-up of mental health care is unlikely to proceed successfully. As the group of 21 nurses in Sierra Leone serve as one of the only resources for mental health care in the community, outreach is a crucial component to their role. Therefore, combining the diverse interpretations of community care was done in order to enhance understanding of the Sababu model's approach to working in the community.

A third deep-level adaptation was the addition of "care-for-the-carer" techniques to engage and empower family members in supporting the service user. The importance of involving families and community members in interventions to address mental health conditions in LMIC has been emphasised by WHO in its mhGAP programme (World Health Organization, 2008). It has also been explored in a study of former child soldiers in Sierra Leone. Betancourt and Khan (2008) use an ecological model to illustrate a gap in research whereby many intervention studies in sub-Saharan Africa focus on individual children and fail to integrate the strength of extended families and communities of family-based interventions which, authors state, are critical to address mental health needs. In most parts of sub-Saharan Africa, the family remains an important resource for the support of patients with mental health conditions.

Although most families are willing to care for their sick relatives, severe mental health conditions may deplete the resources of even the most willing and able families. Braathen describes (2013), in a South African case study of a family dealing with mental health issues,

that mental health literacy is a key challenge for families to recognise illness and know that care may be available. The case study explains that when the person became ill, neither she, her family nor the community around her recognized that she was suffering from a mental health condition, and that there was health care available to help her. It took six months from her first symptoms before her family and community sought care, only after she was presenting with dangerous behaviour. This is another example of the need for sensitisation with family and community members within the intervention model.

These three examples of deep-level cultural adaptations in the development of the Sababu model illustrate the interconnections between the sociocultural belief systems, knowledge of mental illness, access to care, and ultimately the outcomes for service users. This research and subsequently the model and training programme, was also influenced by the current crisis situation. Both deep and surface level adaptations were needed to address the changing needs of the communities amid the EVD outbreak. Two modules were added to the intervention training, conceptualising the model within an emergency response framework and revisiting training nurses had in PFA. Surface level adaptation involved customising intervention messages, and approaches to the observable cultural characteristics of the local population in order to enhance the intervention's appeal, receptivity, and feasibility (Cabassa et al., 2014). For example, discussions and activities incorporated cultural grief practices and understanding of recovery. This enhanced its feasibility and acceptability to be piloted during a particularly challenging time in the country.

## 7.5.1 Limitations of the modelling and training development

While focus groups are an effective research method in many situations, their applicability is not universal (Bender & Ewbank, 1994). On the one hand, the researcher has less control over the direction of the discussion in a focus group than a one-to-one setting, whether it be an in-depth interview or the application of a survey. Additionally, the necessity

of preserving the context of the data gained through focus groups may make the data more difficult to analyse. Another fundamental disadvantage of focus groups is its susceptibility to bias, because group and individual opinions can be swayed by dominant participants or by the moderator (Wong, 2008). This may have been an issue in data collection during the creative sessions. Working together as a group, as a reflection of sociocultural norms (e.g. signing a single consent form), may have been beneficial in findings consensus but potentially limited dissenting voices.

However, focus group discussions also have several advantages. It is an excellent method for collecting qualitative data where participants are able to build upon one another's comments, stimulate thinking and discussion, thus generate ideas and breadth of discussion (Wong, 2008). In this way, the chosen method of data collection was particularly salient in building upon existing evidence to develop a new model of practice for the Sierra Leone setting. Focus groups can also produce high quality data because the moderator can respond to questions, probe for clarification and solicit more detailed responses.

The Sababu model is complex, with many interacting components, which can be challenging to understand how it works in practice. It is also aimed to a be a flexible approach that, through the training programme, enhances skills for practitioners to address individual needs of service users. It is not prescriptive and requires a degree of professional judgement to implement, which may be particularly challenging in low-resources settings where mental health training is lacking. For this reason, the training manual builds a step-by-step outline for delivery, one that is more standardised than the CPI practice guidance, for example, but is still flexible enough to be adapted to a different target audience or context. This is necessary in piloting the model with the 21 mental health nurses as well as considering it as a tool for future cross-disciplinary training, such as with CHWs and SWs. Based in the 14 districts across the country, the 21 nurses practice in diverse settings, from the country's only mental health inpatient facility in Freetown to outpatient hospitals in Bo, the third largest city, or a

community-based clinic in Kono District, in the Eastern province characterised for its poor infrastructure. But the model and training programme is developed with enough flexibility that it trains the nurses to apply bespoke methods within their practice settings. The Sababu training enables practitioners to understand their existing practice within the context of the model, therefore enhancing the professional judgement deemed necessary in clinical work.

#### 7.6 Conclusion

In this chapter, the second phase of the research, the modelling and development of the mental health social intervention was described. Consistent with other intervention models adapted for LMIC (Balaji et al., 2012; Cabassa et al., 2014) the collaborative nature of the methodology involved multiple stakeholders in the adaptation of several iterations, used focus groups to understand the needs of mental health services in Sierra Leone and the context of practice. Two critical strengths of the approach were the use of co-production principles and integration of the evidence base into a culturally appropriate model and training programme. In the next chapter, the piloting of the intervention will be discussed.

## **Chapter 8: Phase III Pilot study**

### 8.1 Introduction

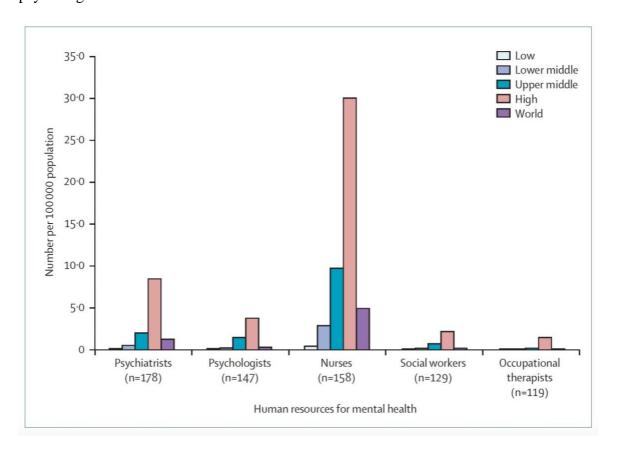
This chapter will examine the pilot study of the Sababu intervention model and training programme developed in Chapter 7. The chapter first introduces the critical need for capacity building in mental health services and the unique role of nurses in delivering effective interventions at a community level, as this was the target group identified for the intervention by the feasibility and acceptability study (Chapter 6). The mixed methods of the pilot study which trained 20 mental health nurses is then discussed. This includes a critique of how the study addressed challenges to data collection and the changing needs of the community amid the Ebola outbreak. Quantitative and qualitative results are presented, highlighting the themes for successful implementation of the Sababu model within the 14 districts of Sierra Leone as well as systemic barriers. Results of the pilot study were also published in a video funded by the University of York Rapid Response Fund and produced by Digifish Impact of Ebola on mental health (<a href="https://youtu.be/IaTg5r3LnAw">https://youtu.be/IaTg5r3LnAw</a>). The chapter concludes with a discussion of how the findings relate to existing literature in building the capacity of mental health service providers in low-resource settings.

### 8.2 Background

The WHO's *Global Strategy on Human Resources for Health: Workforce 2030* (2016b), argues that global efforts to achieve the health targets of the MDGs set by the United Nations in 2000 were thwarted in many countries by shortages of health staff. The report indicates the ambitious targets recently put forth by the SDGs (which include promoting mental wellbeing), will only be achieved if dramatic improvements are made to strengthen the health workforce. The report reinforces previous resolutions to strengthen nursing and midwifery, as well as cites current emergencies such as the Ebola outbreak to demonstrate how weak health systems with insufficient health workers are unable to respond to emerging

needs. The mental health workforce shortages in LMIC that were discussed in Chapter 2 reduce treatment and care opportunities for people with mental health conditions.

Despite nurses constituting the largest workforce in the mental health system globally, the gaps in resources remain significant, with the median rate of nurses ranging from .61 per 100,000 in Africa to 21.93 in Europe (World Health Organization, 2015a). And yet, globally, nurses are the largest workforce category in the mental health system (Figure 8.1). Nurses in LMIC are considered fundamental frontline personnel who provide mental health services for vulnerable populations residing in rural and remote areas, where psychiatrists and psychologists do not often reach.



**Figure 8.1 Human resources for mental health**Notes: per 100,000 population, by country and income group. Sourced from (Kakuma, 2011)

Mental health nursing has been identified as a core practice for the provision of mental health care alongside psychiatrists, psychologists/therapists, social workers, and other allied health professionals (Sujatha et al., 2014). Pedagogically and epistemologically, mental health

nursing has a long track record of being able to integrate, collaborate, and expand care across these professions for the benefit of individuals, families and communities (Ellis & Alexander, 2016). Psychiatric nurses specifically have a broad base of preparation in physical and mental health, cultural sensitivity, social justice, consumer-driven care, and consumer education for self-care. The diverse practice areas and populations served by psychiatric nurses make this nursing speciality ideally suited to help solve the treatment gap. Research suggests that the optimal role for mental health nurses is to integrate their knowledge and skills with other allied health professionals to achieve a wide range of quality, patient-centred health outcomes (Kakuma, 2011). However, in many low-resource settings, as is true for Sierra Leone, nurses may be the only qualified mental health professionals available in the communities.

## 8.2.1 Training and education of the mental health workforce

Training of nurses and other primary care staff in mental health is essential to building capacity of a strengthened mental health workforce globally. Since 2011, the number of nurses working in mental health has increased by 35 percent, but shortages still exist and psychiatric training programmes remain inadequate to meet the need (Fricchione et al., 2012). Training should be relevant to the mental health needs of the population and include inservice training (e.g., continuing professional development) and strengthening of institutional capacity to implement training programmes effectively.

The scarcity of mental health resources and inequalities in access to them have significant consequences in the training of the mental health workforce. The working conditions in public mental health services are poor, with a lack of incentives to work outside of cities and outside long-standing psychiatric institutions. Professional biases operate against expanding the roles for non-specialists within the mental health workforce. Gask and colleagues (2010) assert that barriers to mental health care may include professional attitudes of power-relationship identities and ideologies between professionals and disciplines.

Findings from the feasibility and acceptability study also indicate most mental health nurses in Sierra Leone experience stigma in the community, often being termed "craze nurse" (Chapter 6).

Furthermore, the infrastructure for building community-based supervision in mental health care is lacking. For example, mental health specialists are forced to spend time on the front lines providing care rather than becoming teachers and supervisors. In a call for human capacity building in GMH, Fricchione et al. (2012) recognise that training CHWs and social workers may be an important step in building capacity of the mental health workforce, though authors also suggest that "there is a need to develop mental health leadership and to train high-level health professionals" (p 49). Developing leadership within mental health services serves to provide referral capacity and ongoing supervision.

This was evidenced in the feasibility study when evaluating the training potential of CHWs and social workers in Sierra Leone, but local stakeholders prioritised enhancement of skills and capacity of the 21 mental health nurses to provide care in the districts. Mental health leaders felt it was first necessary to enable the nurses to provide appropriate care, supervised at a national level, before capacitating CHWs and social workers without suitable referral networks.

Kakuma (2011) found that there were only .01 mental health social workers per 100,000 in low income countries compared to 2.16 in high income countries. In India, psychiatric social workers have facilitated support groups for patients and caregivers as part of a multidisciplinary mental health team (Murthy & Lakshminarayana, 2006) and in Chile they have provided psychoeducation and monitoring (Araya, 2003). Humanitarian organisations such as Médecins Sans Frontières (MSF) often employ psychosocial workers during emergencies, for example during infectious disease outbreaks to contain the epidemic and care for those infected (de Jong & Kleber, 2007). Although these workers are often

employed for short-term crisis and recovery efforts and not sustained within the health systems long-term.

Regarding the training for mental health workers, most practitioners recommend development of standardised training packages, complemented by on-the-job training, and the necessity for ongoing monitoring and supervision from specialists (Alem et al., 2008).

Criticism of other "innovative care models" aimed at ameliorating the alarming and rapidly growing treatment gap have largely pointed to interventions as being unparalleled to the lived realities of people with severe mental illness, their families, and their communities (Ellis & Alexander, 2016). Evidence suggests that mental health care can be disseminated effectively through relationship and community-based models and task-shifting approaches where there is fluidity among related models instead of models that are single, stand-alone, and static Community interventions that are based on levels of relationships, roles, and service development may be a measurable indicator for achieving equitable service expansion for mental health.

In Sierra Leone, where there is a great scarcity of trained mental health professionals and virtually no social services; where families, traditional healers and religious leaders often play the dominant role in caring for people with mental health conditions, the importance of collaboration within local communities is stressed (Chapter 4). This includes provision of appropriate supervision and continuing education for the mental health workforce, and engagement with the families, traditional healers and community members who will sustain an intervention.

#### 8.3 Methods

This pilot study is part of a multiphase intervention development framework used to test the Sababu intervention in its practice context with mental health nurses in Sierra Leone.

The pilot study extends the findings from the feasibility (Chapter 6) and model development

(Chapter 7) phases of the research, focussing on examining the impact of the Sababu intervention on nurse practice in Sierra Leone amid the Ebola outbreak. With a theoretical foundation in social capital, the intervention aims to enhance the social networks of service users by supporting them to build trusting relationships, engage family and peers in treatment, and mobilise the existing, albeit limited, resources available to them in the community.

During the feasibility phase of the research, stakeholders from a variety of sectors in Sierra Leone were consulted on the research process, such as NGO representatives, health care providers, mental health leaders in policy and practice, as well as educators and administrators from two local universities. Input from these stakeholders provided a research strategy with regards to recruitment, informed consent, questionnaire development, data collection, and dissemination of study findings. In conducting intervention research, an advisory team is recommended to build stakeholder engagement, not only in the research process, but eventual uptake of the study findings (Moll, 2014). Since the researcher was not local to Sierra Leone nor living in the country during the duration of the research, these stakeholders provided insights into the unique structure and culture of the mental health services that might affect recruitment and data collection, and facilitated communication about the study to stakeholders across the system. These individuals were strategically recruited to ensure leadership and representation from all key stakeholder groups and sectors working in mental health. Thus, they were best placed to inform the study design.

# 8.3.1 Study design

A single group cohort intervention design was adopted. Between 2012 and 2013, 21 mental health nurses had been trained by EAMH and COMAHS. All but one nurse (who had passed away in 2014) were enrolled in the study during a quarterly supervision meeting in April 2015. These 20 nurses were posted by the MOHS across Sierra Leone in each of the 14 districts, with three nurses in the urban Freetown area, and three in the fourth largest city,

Makeni. The country has very limited mental health service coverage, the mental health nurses being the only service providers in most districts (Chapter 4). It was for this reason that the group of mental health nurses were identified during the feasibility and acceptability phase as the most appropriate target for the intervention and training. Since the end of the pilot study another nurse had passed away in child birth, now leaving 19 mental health nurses practising in Sierra Leone.

The Sababu model is a context-specific mental health social intervention, aimed at helping nurses to enhance the social networks and participation of service users. The training programme was designed to build the capacity of nurses by teaching specific techniques and tools they can use in their practice to achieve those aims. Going forward, the "Sababu intervention" refers to the application of the model itself, through the training of the nurses and evaluation of their capacity to implement this way of working in practice. Details of the intervention model and training development can be found in Chapter 7.

### 8.3.2 Method of evaluation

Kirkpatrick's model of evaluating learning and training (1959) provides the overall framework for assessing the impact of the Sababu intervention. The Kirkpatrick model has been widely utilised in the evaluation of training programmes in a variety of contexts, including sub-Saharan Africa. It has been used to evaluate a master's-degree programme in population and health in Burkino Faso (Ridde, Fournier, Banza, Tourigny, & Ouedraogo, 2009). In Mali, the approach was used to evaluate training of community doctors in rural areas, using indicators of retention, self-confidence and clinical skill acquisition (van Dormael et al., 2008). In a review of training programmes to support people with disabilities, Smidt (2009) found the Kirkpatrick model can be useful in determining whether a favourable outcome is limited to self-reported staff attitudes and practices, or whether there are improvements to relevant knowledge acquisition and application. The model assumes there

are three primary influences on learning: trainee reactions, motivation to learn (intervention readiness, job attitudes, personality characteristics), and ability. Individuals will be more motivated to engage during training if they believe their effort will lead to enhanced performance.

## **Box 8.1 Kirkpatrick's Model of evaluation**

Level 1 assesses trainees' reactions, satisfaction, perceived relevance to their work

Level 2 assesses trainees' learning and changes in knowledge, skills and attitudes

Level 3 assesses whether the training changed actual behaviour on the job

**Level 4** assesses overall results in terms of production and performance.

This evaluation focused on the first three levels. *Reactions* (level 1) typically involve trainees completing a post-course evaluation of their impressions of the programme. Such evaluation does not measure what participants have learned, but gauges the interest, motivation, and attention levels of participants. Learning (level 2) allows participants to demonstrate their understanding of specific skills and/or knowledge within the training. Behaviour (level 3) attempts to determine whether participants (who may already have demonstrated acquisition of specific skills and/or knowledge) use their new skills when they return to the work environment. Effects on actual practice were measured by self-report follow-up questionnaires and reports from supervisors. The fourth level, described as results, is a measure of the impact that the training has had overall, including financial or moral impacts. The assessment of this level of training usually entails key performance indicators such as volumes, values, return on investments and other quantifiable aspects of organisational performance. In the case of health research, it is often measured by the impact on service users or wider public health targets. Due to limitations in access and time spent in Sierra Leone, assessing the impact of the Sababu intervention training on these measures fell outside the scope of this project and thus were unable to evaluate this level of training.

### 8.3.3 Research procedure

Two local intervention trainers were recruited based on their leadership in mental health, experience of conducting a variety of mental health training programmes in the past, and their knowledge of the Sababu intervention model from having been involved in the feasibility and model development phases. The trainers received a one day training using the intervention manual and adapted the learning activities to match their style of delivery and further cultural sensitivities. The five day Sababu training programme was co-facilitated with the two local trainers and two lead researchers.

With the input of the stakeholders, the research strategy had aimed to use a pretest/post-test pilot study design that compared participants' responses at baseline, after training, and at three, six and nine-month follow-up. It was hypothesised that participants' knowledge, skills, and attitudes would improve after the delivery of the training programme, and that they would be able to implement this learning into their practice over the period of nine months.

However, when the researchers arrived to deliver the training in April 2015, there was difficulty in obtaining consent from the nurses to evaluate the programme. Although the process of the evaluation had been designed through discussion with local stakeholders, the nurses themselves had not been involved. There were concerns about how the information would be used and how the questionnaire was developed. It was explained by the nurses that since the Ebola outbreak, many organisations had been keen to request information and reports from the health care professionals but without providing feedback or sharing its purpose. They were happy to receive the training but did not initially complete baseline questionnaires.

Over the course of the training week, relationships between the nurses and research team were strengthened, giving the group time to discuss and make a decision about how to

evaluate the training. Together with the nurses, researchers developed a revised questionnaire that was completed post-training and subsequently adapted for each follow-up data collection.

#### 8.3.4 Data collection and measures

Data were collected at four time points during the study between April and December 2015: post-training, three, six, and nine-month follow-up. Instead of a pre-training measure, findings from the feasibility study and ongoing communication with stakeholders prior to the training provided some understanding of baseline training needs, gaps in knowledge and skill level. As a result, the training evaluation was mixed methods, weighted more heavily in qualitative data to reflect the nurses' experiences using the model and implementation in practice. This was assessed from the viewpoint of the nurses themselves, supervisors and researchers. The evaluation included the co-produced questionnaire; in-depth narrative interviews; and researcher observations. Additionally, researchers collected information on monitoring process indicators such as case notes and patient records over the nine-month evaluation period.

## 8.3.4.1 Questionnaire

The post-training questionnaire constructed co-productively between the researchers and participants on the fourth day of training (Appendix C) asked participants to (anonymously, at the request of the participants) self-evaluate their knowledge, skills, behaviour and attitudes. The questionnaire encorporated terminology used by the participants and specific items they felt were important. For example, as a tight-knit group of peers who were making the decision to conduct the evaluation as a group, they felt it was important to ask, "to what extent do you feel the group was responding, interacting and engaging in the training?" measured by a five-point Likert scale with responses ranging from "not much" to "a great deal."

Participants' reactions to the training within Kirkpatrick's level one were also measured by a series of items in the post-training questionnaire. For instance, participants marked responses to the statement, "this training was worth my time." on a Likert scale: "not at all true," "slightly true," "true half the time," "mostly true," "completely true." Level two was measured by asking participants to describe the specific skills they felt they learned, as well as Likert scale items about how useful the training was in developing skills related to the model itself. For example, "to what extent was the training programme helpful in developing your skills in linking a service user to his/her social networks?" with responses ranging from "no help at all" to "very helpful."

On the final day of training the nurses were given about 30 minutes to complete the questionnaires individually. The questionnaire was adapted for three, six and nine-month follow-up evaluations which took place during the quarterly supervision meetings. The researcher (MFN) was present to answer any questions the nurses had in completing the questionnaire. Post training, all 20 nurses completed the questionnaire. 19 nurses completed it at three months, 16 at six months, and 11 at nine-month follow-up. Completion rate reduction was because not all nurses attended the quarterly supervision meetings. The reasons for missing the meetings varied but included difficulty securing transport from the districts; personal illness or that of a family member; and obligations in the districts, for example, one nurse at nine-month follow-up was delivering a mental health forum with religious and traditional leaders.

### 8.3.4.2 Interviews

In-depth interviews were conducted with nurses and supervisors at three and nine-month follow-ups, each lasting 10 to 20 minutes. All participants were consented, including for video recording in the case of ten interviews with nurses and two supervisor interviews at three-month follow-up. MFN was not present for the six-month follow-up and therefore no

interviews were conducted in person. However, two supervisors were interviewed via skype.

At nine-month follow-up, six nurses and three supervisors were interviewed.

The interviews were loosely structured, including open-ended questions which prompted participants in the sequential telling of their experience. The objective was to allow for the research participant to contribute his or her own ideas and to narrate one's own story, resonating with the story-telling culture in Sierra Leone and the underlying social capital theory of the intervention itself. The interview assessed participants' feedback on the model and training programme and experiences post-completion, leading to an understanding of its impact on the first three levels of Kirkpatrick's evaluation model. For example, participants were asked to describe their reaction to training; skill development in communication styles for working with service users and families were explored; behaviour change was assessed through discussions of nurse experiences working with traditional healers and community leaders since the training, as well as barriers to implementation in their respective localities. Riessman described narrative interviews as "conversations in which both participants – teller and listener/questioner – develop meaning together" (1994, p. 135). In the telling of their story, the research participant takes the researcher on a journey and the researcher can be likened to a companion on that journey. In this sense, the interpersonal approach facilitated the trusting relationship built between the researcher and participants. This was particularly important in understanding the impact the Sababu intervention may have had on practice, assessing changes in attitudes, knowledge, skills and behaviour from the point of view of the participant.

#### 8.3.4.3 Researcher observations

Observation was used to complement the questionnaire and interview methods.

During the training, observation aimed to validate and refine the training modules and activities throughout the week. For example, the role plays were often conducted in Krio but

with the help of the local trainers, researchers were provided with on-site translation and could break down the areas where more instruction was needed. Observations of role play during refresher trainings and supervision meetings at three, six and nine months post-training contributed to identify to what extent training contents were implemented in practice. Alkin and Christie (2002) suggest that the learning by doing feature of role-play makes theorists and theories more accessible to students than would otherwise be the case with traditional didactic approaches. The authors maintain that in their use of role-play, the instructor is a facilitator of student behaviour and learning, and that students are participants in the process. In the evaluation of changed behaviour, role play may also be a productive and cost-effective alternative to actual practice experiences.

At each follow-up, nurses presented updates from their districts, including delineation of mental illness diagnoses and EVD survivor cases, as well as areas they would like to improve. These presentations provided an overview of both the successes and challenges faced by each of the nurses.

## 8.3.4.4 Case examples

To amalgamate the responses from the anonymous self-report questionnaire data, interviews, and researcher observations, case examples were written. Case study methodology varies and therefore this approach was used only to augment the extensive data collected in this study. Case examples were written to describe and explain the ways in which the intervention had impacted the nurses' ability to work with the psychosocial model.

Case examples are particularly suited to research questions that require a detailed understanding of social or organisational processes (Kelly & Howie, 2007), which is the case with the implementation of a new model of practice. The collection of individual cases allows for the analysis to move from story to story, noticing the differences and diversity of their storied experience. As a collection, the individual stories give deeper insight and

understanding than any one story. In this study, the collection of stories makes visible and communicates the influence of Sababu training on the professional practice of psychiatric nurses trained in this approach. In so doing, the storied collection begins a community narrative that gives meaning, understanding, and expression to the influence of Sababu training on the professional practice of this group of psychiatric nurses.

Context is particularly important when trying to understand and explain behaviour, and case examples provide an opportunity for in-depth examination of emergent and changing practice, including the social dynamics that unfold in relationship building with service users, families, and community members (Moll, 2014). Since the nurses' practice is not isolated from the context within which they work, case examples can be a rich source of data that allows the researcher to retain the meaningful characteristics of real-life events (Kelly & Howie, 2007).

### 8.3.5 Analysis

The present study adopted both a quantitative and a qualitative approach to evaluating the Sababu intervention. Given the small sample size and the pilot nature of this study, descriptive data analyses were conducted in SPSS version 22.0 and contributed to only the most conservative interpretations of these data.

The qualitative aspect of the study explored the participants' experiences while undergoing training of the Sababu intervention model, assessing changes in attitudes, knowledge, skills and behaviour. Interviews and researcher observations were transcribed and entered in Nvivo version 10.0. Data were then coded for themes using a framework analysis approach (Lacey & Luff, 2001). This analysis was selected as the CPI and wider social capital literature was drawn upon to inform the data collection. The topic guide forming the a priori "master codes" framework. The analysis proceeded through a process of reading, re-reading and annotating the transcripts to identify subthemes emerging from the data. Throughout the

analysis process, categories and themes were continually reviewed to ensure that they appropriately reflected the data. Credibility of the findings was supported by feedback from the advisory team.

Anonymity of participants was maintained throughout the study. A pseudonym was applied to each participant at the point of data analysis. Identifying data such as specific workplaces, professional backgrounds, dates, gender and names of participants were omitted or changed to ensure anonymity of the participants and others referred to by them in the qualitative data. This was particularly important given the small sample size and the narrow mental health network in Sierra Leone.

#### 8.4 Results

### 8.4.1 Participants

A total of 20 mental health nurses were trained in the Sababu intervention. Table 1 describes the participant characteristics including gender (65 percent female) and age distribution (mean age of 37), and service-related information. The median number of years practicing as a general nurse was 10, ranging from two to 31 years. All nurses had completed their specialist mental health training two years earlier in March 2013 and were employed by the MOHS at the time of the study. On average, each nurse treated 27 mental health service users per month in their clinics. However, the number of patients seen per month varied widely by district, with two clinics not up and running at the time of training thus reporting no data at baseline, and one service seeing over 300 patients through EVD survivor groups.

**Table 8.1 Baseline characteristics of participants** 

Participant characteristics	N=20 (%)
Gender	
Male	7 (35)
Female	13 (65)
Age	
20-29	5 (25)
30-39	8 (40)
40-49	4 (20)

50-59	3 (15)
Type of care facility	
District Government Hospital	17 (85)
Peripheral Health Unit	1 (5)
Military Hospital	1 (5)
Psychiatric Hospital	1 (5)
Urban/rural	
Urban <sup>1</sup>	7 (35)
Rural	13 (65)
Service duration (as nurses) <sup>2</sup>	
Less than 5 years	2 (10)
5-10 years	10 (50)
More than 10 years	8 (40)
Number of mental health service users seen per month	
(by district)	
No data <sup>3</sup>	2 (10)
Less than 10	5 (25)
10-30	4 (20)
30-50	4 (20)
More than 50 <sup>4</sup>	2 (10)

<sup>&</sup>lt;sup>1</sup>Urban areas include Freetown and Makeni

At the time of the training in April 2015, the Ebola response initiatives were underway, co-ordinated by the World Health Organization, the Ministries of Health and Sanitation and Social Welfare, and several local and international organizations including study partners EAMH and KSLP. This initiative included provision for mental health units in each of the 14 districts, called District Mental Health Units (DMHUs), details of which are included in Chapter 4. In two districts the nurses were having significant difficulties in working with hospital staff and the District Medical Officers (DMOs) to obtain office space or to be granted permission to work primarily with mental health service users (not being tied up with general nursing practice). The intervention was tailored so that each nurse could take the skills back to his/her clinic and use the way they needed, using the tools they learnt in training such as relationship building and drawing upon their social networks to address organisational barriers.

<sup>&</sup>lt;sup>2</sup>Most served as general or specialist nurses in other fields prior to completing their mental health qualifying training in 2013.

<sup>&</sup>lt;sup>3</sup>Two clinics were not set-up and running at the time of training

<sup>&</sup>lt;sup>4</sup>One outlier at 346, running mental health groups for EVD survivors

## 8.4.2 Level 1 Training reactions

On the fifth and final day of training, a series of questions were asked of the nurses about their reactions to the training. These questions were developed collaboratively between the researchers and the nurses themselves, with input from the local supervisors. Table 8.2 provides a summary of their responses.

Participants spoke positively about the intervention, stating that they were pleased to be involved in the training and delivery of the intervention model. When asked, "how important to your role as a mental health nurse is making connections in the wider community (e.g., with religious leaders, community members, families and neighbours of service users)?" the mean response was 4.85 (SD 0.366), indicating most participants felt that social networking was a key aspect of their role.

**Table 8.2 Training reactions from participants** 

Item <sup>1</sup>	Frequency (%)	Mean (SD)
The training was worth my time		4.60 (0.75)
Not at all true	0 (0)	
Slightly true	1 (5)	
True half the time	5 (25)	
Mostly true	14 (70)	
Completely true	0 (0)	
The trainers were effective communicators, they		4.75 (0.44)
gave clear messages and responded to questions		
Not at all true	0 (0)	
Slightly true	0 (0)	
True half the time	0 (0)	
Mostly true	5 (25)	
Completely true	15 (75)	
This training met my learning objectives and		4.85 (0.36)
expectations		
Not at all true	0 (0)	
Slightly true	0 (0)	
True half the time	0(0)	
Mostly true	3 (15)	
Completely true	17 (85)	
I gained new skills during the training		4.95 (0.22)
Not at all true	0 (0)	
Slightly true	0 (0)	
True half the time	0 (0)	
Mostly true	1 (5)	
Completely true	19 (95)	
The methodologies and use of learning activities		4.85 (0.36)
were appropriate (e.g., role plays, discussions)		
Not at all true	0 (0)	
Slightly true	0 (0)	
True half the time	0 (0)	
Mostly true	3 (15)	
Completely true	17 (85)	
The training materials (workbooks, powerpoints,	, ,	4.65 (0.58)
model posters) were of high quality and useful		, ,
Not at all true	0 (0)	
Slightly true	0(0)	
True half the time	1 (5)	
Mostly true	5 (25)	
Completely true	14 (70)	
To what extent do you feel the group was	, ,	4.70 (0.47)
responding, interacting and engaging in the training?		` '
Not much	0 (0)	
A little	0 (0)	
Somewhat	0 (0)	
	6 (30)	
Much	0 (30)	

<sup>&</sup>lt;sup>1</sup>All items were on a scale of one to five

Participants provided positive feedback about the participatory methods used in training such as group discussions, one-on-one teaching and role play. Like many African cultures, Sierra Leone teaching is often characterised as using a didactic style. The teacher or trainer is seen as an authority figure with expertise to pass down to participants who listen and observe (typically in lecture format, powerpoint preferred). Although it wasn't immediately welcomed, the style of interactive training, with a great deal of practice through role plays and encouraging the quiet nurses to be actively involved, was eventually appreciated by most members of the group. Understanding their preconceptions of what training should look like, trainers didn't need to drastically change the training approach, but they did need to be flexible, finding activities that would meet their needs whilst offering dynamic interaction. This approach ensured the nurses would walk away with specific strategies and tools to use in their practice so they felt they had learned something.

Findings from the feasibility and acceptability study (Chapter 6) and conversations with supervisors prior to training illustrated the baseline level of the nurses in addressing the psychosocial needs of service users. Supervisors talked about low confidence that some nurses exhibited in working with service users, citing limited knowledge of basic therapeutic and counselling techniques. There were also existing problems of translating new knowledge into their practice contexts. For example, during an earlier training the nurses were presented with cases that they needed to analyse and diagnose. They tended to oversimplify the condition of service users, explaining a girl who is fearful of EVD and having panic attacks as being "afraid of the stigma," struggling to identify anxiety and then in how to treat the individual, as the supervisor said, "encouraging them is not enough." As another supervisor explained:

"there is a lack of preparedness in working with patients. They did not have enough practical experience during their qualifying course and now two years on from their course many were still without facilities." (Mental health specialist)

During the training week, the need to scale back expectations of the nurses' capacity to engage service users was clear. The training therefore focussed on addressing these issues by using cases from the nurses own experience, particularly those that were challenging for them, and building their confidence through repeated role plays. To move away from short-term learning the training emphasised critical analysis of cases and creating an environment where they felt comfortable making and learning from mistakes.

Three participants felt the spirit of the reflective practice module, co-facilitated between UK researchers and Sierra Leone trainers was especially beneficial to their practice. Reflective practice is defined as the process of making sense of event, situations and actions that occur in the workplace (Oelofsen, 2012). During introductions on the first day most participants described themselves as caregivers, thinking often of how to support others but very little about how to address their own problems. Two supervisors confirmed this by explaining reflective practice was an especially difficult activity for this population as resilience and the ability to persevere through adversity is highly regarded in Sierra Leone society. This was marked by crisis experiences in the ongoing EVD outbreak, where health workers were particularly at risk.

In this particular module, the nurses were asked to reflect on the impact of their role on their own mental health, and to brainstorm with a peer how to solve problems they face in their posts. Reflective practice was a new concept to them and, as trainers, it was necessary to provide a step-by-step process in how to analyse their own problems, reflect on what they could have done better in their past experiences, and begin to apply such learning to new situations. Adapting the Gibbs model of reflective practice in nursing (2007), which includes the identification and analysis of the situation as well as one's emotional response and development of an action plan, the nurses were given a specific tool to evaluate their own practice and reflect on the impact it has on their emotional state.

Both the questionnaire responses and the qualitative evaluation data indicated a high level of satisfaction regarding the training. Participants described the course as crucial for increasing their self-confidence. Some participants said they felt overwhelmed by the content and intensity of the course, while others said they thought some of the content was too basic. Participants identified areas for improvement which included logistical issues such as the timing and difficulties they had in reaching the venue. They expressed discontent in the way that they were not consulted directly on the development of the questionnaire, as this had been done with their supervisors and other mental health stakeholders in the development phase of the project (Chapter 7). After holding group meetings several times throughout the week, the participants and researchers co-produced the questionnaire. Four individuals still felt there was a great deal of time wasted in this process but the majority of participants valued the time they took to work together as a group and make a decision that reflected the opinions of most. Participants also felt they wanted more opportunities for professional development through the training of others. The TOT module centred around the nurses teaching peers how to use the Sababu model and the nurses were keen to take this learning back to their districts. They were each given one additional training manual and were asked to pass this onto a colleague, however many nurses expressed concern about not being given additional funding to run their own training in the future.

The feedback received at the end of the five-day training was analysed and used to develop short refresher training sessions at three and nine months follow-up. For example, in July 2015, three months after the initial Sababu training, a half day was allocated to TOT exercises where participants put together a training plan and developed materials for training others back in their districts. Thanks to donations from EAMH, the nurses were able to facilitate one day trainings of CHWs, nurses, and NGO staff in their own districts.

The participants reported the training was a positive experience which had resulted in the acquisition of new knowledge and skills. Many nurses discussed how participation in the Sababu intervention training had provided them with more specialised skills in addressing mental health issues. By working with family and community members one nurse said, "it's a chain, you see, you really work together." Another nurse described her experience at three-month follow-up and how this approach was impacting on the recovery of her patients:

"The Sababu training really helped a lot. Helping people to know what to do and where to go in terms of caring for the patients. This Sababu training helps us to know you cannot deal with a single care for the patient, it needs a holistic care. You the service providers cannot do everything for the client, it needs teamwork. When you link the family, link friends around, and other people in society, you have everyone coming on board, you see a speedy recovery." (Mental health nurse)

Five individuals mentioned acquiring skills in relationship building and communicating with service users. New skills in networking were highlighted by 13 participants as useful. For example, one person described this: "My strategy of working with service users has improved. I learned skills like mapping with the communities and networking service users to social connections." (Mental health nurse)

The utility of identifying and assessing a service user's assets was mentioned by six participants. During the training, the nurses practiced this skill using "the hand technique" which is an adapted social network assessment suitable in low-resource contexts where stationery may be unavailable and service users are potentially unable to read and write. Asking the nurses to list five supportive figures, one on each finger, on the palm to imagine enjoyable activities and the wrist as a place to imagine a comforting proverb. Although this technique was covered during a module on asset-based approaches, it was clear during initial role plays that the nurses were unsure how to use this technique in their assessments. More time than initially expected was needed with this activity, breaking down specific questions

they could ask a service user to elicit information about their assets and resources to access in the community. By repeating these questions in role play the nurses worked on turning this new approach into tacit knowledge to make changes to their usual practice. One person described the impact of the extensive role play conducted during the training:

"I have added to my knowledge in assessing and identifying assets of service users. I learned from this training that those patients with mental problems need psychological and social support. That's why we take more time now to talk to patients. We [the other nurses and I] have more tools to address and solve problems. This training allows us to give a quality service to the people. We would like [the training] to continue." (Mental health nurse)

Although trainees reported improvements in skills and the use of more structured approaches to working with service users, they were also keen to point out that they need to be engaging with stakeholders in the community to implement this learning in practice:

"Sababu training it really gives me so many experiences. For example, I was finding it very difficult to map out organisations in my catchment area. I was assigned to the district that I am unfamiliar with and was struggling to know where my clients could go in their communities for support. The Sababu model has a unique way of connecting the community, and in the training it gave me knowledge to map organisations in my catchment." (Mental health nurse)

Seven participants mentioned they would like to meet with local authorities, stakeholders and leaders within the community to "engage in strong lobbying and advocacy" (as stated by one participant). Another person said:

"My future plans are to meet more stakeholders and other organisations to deliver dimensions of Sababu intervention model, psychosocial interventions in a crisis situation and to conduct a very good assessment to see what are the community needs, making community involvement a priority." (Mental health nurse)

During the three-month follow-up, the term "linking" was used by most participants when they described the Sababu intervention model. Though it had been used during the initial training, it was also interchanged with related terms such as "connecting," "networking" and "mobilising." In the three-month follow-up questionnaires, 16 of 19 participants mentioned they gained skills in "linking" service users to family and community members and other resources to support their recovery. As one nurse described:

"During the Sababu training I specifically developed the skill of linking service users to resources by using communication skills, one-on-one discussions with community members and groups. I learned the importance of community support and team work, that everyone has a role to play in recovery." (Mental health nurse)

#### 8.4.4 Level 3 Behaviour

The impact of the intervention training on practice was measured by self-report follow-up questionnaires and reports from supervisors, as well as observations of role play at three, six and nine-month follow-up. When assessing the impact of the Sababu intervention on the participants, several themes emerged. These themes included having an increased awareness of the role that social support and the wider community play in recovery; more confidence in themselves as mental health nurses, both in terms of supporting service users and of feeling empowered to perform their roles as health care specialists; and specific skills gained in networking with local communities that they could adapt and apply within their own districts. Barriers from working in the Sababu model were also identified.

Table 8.3 outlines self-reported confidence and abilities to deliver the Sababu intervention components within their practice. Items were based on Likert scale of five, for example, a rating of five was equivalent to "complete confidence," so this sample of trainees is providing high self-report estimates of their abilities. Taking into consideration the limitations of no pre-training data, the results presented here reflect naturally higher ratings at

post-training and little change across the follow-up time points. It was not possible to conduct formal significance testing due to the limited sample size and lack of baseline data, but results showed there was no mean difference in responses across the time points.

Anecdotally, many participants spoke of how an increase in confidence had helped them better assist individuals in crisis situations. They felt able to identify service users' assets and trusting people in their communities, and to then link them with resources that support their recovery. All four of these competencies reduced at six months post-training, which was when it was not possible for the researchers to hold a refresher training.

Table 8.3 Assessment of behaviour change across time points

	Mean (SD)			
Item	Post	3MFU	6MFU	9MFU
	(N=20)	(N=19)	(N=16)	(N=11)
To what extent do you feel your practice has changed	$NA^1$	4.42	4.25	4.45
in building relationships and communicating with		(0.50)	(1.18)	(0.52)
service users?				
How confident are you in identifying a service user's	4.80	4.58	4.38	4.36
assets, social network, and support people?	(0.41)	(0.50)	(0.71)	(0.67)
To what extent has the Sababu training helped you to	5.00	4.47	4.31	4.36
make links in the community?	(0.00)	(0.51)	(0.87)	(0.674)
To what extent has the Sababu training helped you to	4.95	4.68	4.56	4.45
perform your role as a mental health nurse?	(0.22)	(0.47)	(0.51)	(0.522)

<sup>&</sup>lt;sup>1</sup> Not asked at all four time points

The nurses acknowledged that they are often the only skilled mental health service providers in the districts but they cannot feasibly provide all mental health treatment in the country. The Sababu training enabled them to consider other resources available in the communities that would help to support their work and support the service users. As one nurse said:

"The training greatly helped me to know to connect myself and my clients to other people or organisations for support. In my country, we have 19 mental health nurses, these nurses cannot handle everything within the country. Even if we are deployed in one district we cannot cover the services for that entire district. So, we are advocating

for others to help us build up those services. We have been linking with other organisations and this experience has empowered us so much." (Mental health nurse) At three-month follow up a supervisor explained how the nurses are going about this in their districts:

"I think they are really growing in their knowledge of mental health, it's really mixed up with spiritual ideas and belief systems. What I have seen is that they really use the [Sababu] manual and that is really making a difference in the way they are working. The challenges in this country are huge. The people, they go on and they do it.

Linking to the police stations, and to the health communities around, going there, giving fliers, this is our office and the services we offer. This is how you advocate, that's how you get known as mental health professionals and advocate for people with mental health conditions. They have made major improvements in this area, in having the confidence to go around and promote themselves and their work. That really works very well." (Mental health supervisor)

## 8.4.5 Barriers to implementation

When asked about the barriers they experienced to implementing the Sababu intervention model in their practice, there was consensus from the nurses around two issues. At three months post-training, 58% participants mentioned limited mobility in their districts and a lack of access to medication was mentioned by 47%.

A key aspect of connecting to the local communities and providing outreach services is the ability to travel within the districts. With extremely limited transport systems, especially outside the major cities, service users are often unable to reach the district hospitals. Most of the nurses did not have access to vehicles and were unable to afford to use their funds for transport. During the course of the pilot study, the WHO began providing motorbikes to each of the DMHUs. However, the bikes were not available in all 14 districts and some nurses

experienced difficulties in paying for petrol or service for the bikes. One nurse, based in a southern coastal district stated she would need a boat in order to reach many island communities currently unable to access health services. This gave some nurses an advantage over others in the extent to which they could carry out aspects of the Sababu intervention within the communities. One nurse described how the motorbike enabled him to engage in the communities through home visits:

"What I discovered overtime is that community mobilisation and home visits are very important. With this I find pleasure in my work. With home visits, the family, they know that we really care about the patient, we care about the family and we start to relate them. Even with the community, it builds trust and confidence of them in us.

And we discover more cases." (Mental health nurse)

The nurse went on to share an example of how he visited one individual with psychosis in the community and through that visit was introduced to two siblings with epilepsy who were unable to travel into the town for treatment. The nurse began making weekly visits to the community to serve all three patients and over the course of three weeks on medication the siblings had no episodes of seizures. The limitations to mobility persisted throughout the course of the study, still mentioned by six nurses at nine-month follow-up.

A long-standing issue for the nurses has been a severe lack of psychotropic medication available in Sierra Leone. The nurses were often seeing patients in crisis situations and they needed to first be stabilised before the nurses could use aspects of the Sababu intervention model. Knowing this problem could prevent him for working with people in need, one of the nurses decided to build a relationship with the local chapter of an international NGO whom he knew could procure medication. Other nurses use their personal funds to purchase medication or travel to Freetown to obtain it on behalf of their patients. As one of the supervisors explained:

"I remember a time when Foday called me for advice. He met a very aggressive and psychotic patient on the street. While everybody was afraid of him and were moving out of the way, Foday calmly approached him and was able to gain his trust. After discussing treatment options with the patient and family members, he rushed to Freetown to buy him medication. Patient is still doing well with thanks to him."

(Mental health supervisor)

The MOHS encouraged the nurses to work with CHWs in the district, who, unlike the nurses, are authorised to prescribe medication. At three-month post-training, a group discussion revealed tensions between the nurses and CHWs as the nurses felt they were the mental health experts in the districts and fundamentally more qualified to prescribe medication to their patients. There was an unwillingness to work with the CHWs.

To address these barriers, a problem-solving activity was added in the three-month follow-up and supervision meeting which involved action planning that nurses could take back to their districts. However, the lack of medication and mobility were mentioned by the nurses, month to month. Recognising the importance of group decision making in this context, a different strategy was taken in the nine-month supervision, giving the nurses a platform to discuss these issues as a group and with policy makers from the MOHS. Nurses gave individual presentations about their achievements and challenges in practice, then as a group they were able to discuss barriers such as mobility and medication. Some of these systemic barriers such as the hierarchy engrained in the health care system and unwillingness to work in partnership with CHWs represents ongoing challenges to implementation and then need for continued work across multiple levels of service delivery.

These findings may point to issues of appropriateness of the Sababu model in addressing the needs of the nurses and service users in such a limited resource setting. Whilst some nurses were able to take lessons learnt from training and build specific skills around advocacy or linking with existing resources to break down barriers of mobility and

medication, it should be acknowledged that this model may not be sufficient to address the structural issues facing mental health services in Sierra Leone. It is important to note that the intervention is not appropriate to replace the need for medication in severe cases.

Additionally, there are shortcomings in how the intervention has been delivered whereby further supervision is recommended to support capacity building of the nurses. This is reflected below in the case examples, which highlight some of the troubles the nurses had in connecting with service users or their family members, or linking people to other support in their communities.

## 8.4.6 Case examples

The following case examples give meaning, understanding, and expression to the influence of Sababu training on the professional practice. The cases provide a narrative for the ways in which participants took aspects of the model, knowledge and new skills back to their districts and applied their learning within their unique contexts and workforce constraints. Whilst the results do not indicate complete effectiveness of the intervention, and effects cannot be attributed directly to the model, there is some evidence that this way of working can be beneficial to the nurses trained. Again, names have been changed to maintain anonymity of the participants.

#### 8.4.6.1 Case I

Aminata had been practising as a nurse for six years and completed her mental health qualifying course in 2013. She worked in an urban area, first at a private inpatient clinic and then at a main government referral hospital. It was there that Aminata saw a number of patients with EVD and their family members under the supervision of a consultant psychiatrist.

In the month preceding the Sababu training (March-April 2015) Aminata's caseload was 14 service users, including six new referrals. According to UNHCR diagnostic criteria, she treated three people with psychosis, one with epilepsy, one child with an intellectual disability, one with medically unexplained symptoms and one with "other psychological complaints" which includes mild to moderate depression an anxiety. She also treated two EVD survivors and five individuals affected by EVD (e.g., loss of family member). Around the time of the training, Aminata was making ward rounds with a team of nurses and working on identifying patients that might need mental health services. Addressing the psychosocial needs of service users was especially challenging. The stigma of both mental health and EVD were apparent in the communities she served and inhibited the support she was able to provide. She described her role:

"The psychosocial aspect of our work is very demanding and challenging because we have no social workers, so more or less we are doing both mental health and psychosocial work. There are destitute [persons] in the wards, some of which have been abandoned because of Ebola. Maybe they came to the hospital and their relatives have abandoned them. And we have to take the responsibility to care for them. Even when we take them back [to the community] they refuse to accept them."

At three-months post-training Aminata had doubled the number of new referrals she was seeing (mean 40.33, SD 13.01). One of the ways that she was able to reach more service users was through the innovative approach she took to mobilising other nurses in the hospital. Two nursing staff from each ward were identified as mental health "link nurses". Using the training-of-trainers approach from the Sababu intervention, Aminata and her supervisor provided basic mental health awareness training, which included psychological first aid training (World Health Organization and War Trauma Foundation and World Vision International, 2011), communication and relationship building skills. They identified and

referred people with mental health and psychosocial needs to Jenny's unit and provided basic psychological support on the wards. One of the link nurses described her experience:

"When we came back from the training I could see there are a lot of patients that really have these problems and now we can be able to identify, that makes my work so interesting. It's good we have this kind of opportunity here. Before this time, we were unable to identify these people because we did not have this training. When you have no knowledge, you cannot detect. In the future, what I want to see is that all mental health issues be treated well and concerns being put in place. If, after all, they have been treated encouraged and reintegrated it is great."

As with the majority of participants in the study, Aminata did report that she gained skills in networking during the Sababu training. For example, Aminata networked with the Ministry of Social Welfare, NGOs dealing with HIV, orphanages for EVD-affected children, and religious organisations.

"With Sababu we learned to link with organisations, family members, religious leaders and community members to see how much we are able to work together. Because of the impact that has been made during the time of the Sababu training, we have come in contact with a lot of organisations for effective service delivery – especially in making referrals of patients who needed interim care while we continue to provide care for them. The hospital is very supportive of what we are doing."

By six months post-training, Aminata had delivered a two-day training to CHWs in child and adolescent mental health, funded by EAMH and supported by a TOT refresher training led by MFN in July 2015 at three-month follow-up. Her caseload was up to 99 service users in September 2015, 15 new referrals that month. Together with her supervisor at the hospital she was also involved in getting a social worker placed at the hospital, the first social worker to be working directly with the mental health nurses. This was a major achievement as she described the majority of cases she was seeing "require not only mental"

health care but livelihood and social support as well." The involvement of the Ministry of Social Welfare was an effort that local partners had been working on for quite some time, as was highlighted in the feasibility study (Chapter 6).

At nine-months post-training, Aminata described two individuals on her caseload. The first was a married woman in her 30's with two children. She came into the clinic feeling distressed, she had a lot of stressors at home. Aminata went through a stress-management form with her and used the hand technique learned in the Sababu training. Together they identified four people this woman could talk to. Aminata suggested she take some time off work to rest and talk to these supportive people. The second case Aminata was finding more challenging, a 40-year old woman whose husband stopped communicating and changed his number. The woman felt isolated, had poor self-care, was difficult to assess and refused medication. Social isolation is a normal response to the experience this woman was having with her husband. Aminata had challenges working with this woman which may indicate the Sababu intervention training alone is not enough to address complex cases and that further supportive supervision for difficult cases is needed. It is reflective of her capacity as a mental health nurse but might not be entirely due to shortcomings of the intervention.

One of Aminata's biggest challenges to working within the Sababu model was her lack of mobility and transport to visit service users in the community. Emphasised by a majority of the nurses at three, six, and nine-month follow-up, "home visits" were a key component of Aminata's role, designed for people who cannot easily access the unit due to certain conditions. For the 70% of people in Sierra Leone living on less than US\$1 per day, according to the 2004 Sierra Leone Integrated Household Survey, transportation to reach health services is too costly. Nurses on a moderate government wage are often expected to use their personal funds to reach patients who cannot come into their clinics.

"Moving to these homes with the difficulties of accessing and meeting with the need and cost for transport has been a great challenge - which we are yet to surmount. The hospital and KSLP had been helping most of the times, but this is not a sustainable method as there are sometimes greater demands for the limited available vehicles."

#### 8.4.6.2 Case II

Fatu was the youngest of Sierra Leone's mental health nurses. After completing her training in 2013 she was posted to a north-eastern district characterised by its lack of infrastructure. Fatu was one of 39 nurses in the district and the only one to be providing mental health services. A single mother who was still not receiving her salary from the Minister of Health and Sanitation due to logistical issues, Fatu faced immense challenges in delivering care within the district.

Illustrating just how isolated this district is from the rest of the country, a UNICEF health facility survey (2014) reported EVD reached this district last, not until mid-October 2014, when other districts were already considered "red zones" and "hotspots" with more than 350 new cases monthly. A significant decline in uses of health services in the district was noticed between May and October 2014 as EVD spread throughout the country. Although the district was not immediately affected by the outbreak, news coming from neighbouring districts about the spread of EVD together with fear and misconceptions accompanying the news may explain the reluctance to visit facilities for routine services.

In the month preceding the Sababu training, Fatu saw four patients, all new referrals. When discussing the difficulties in promoting her work as a mental health nurse Fatu used the Sierra Leone proverb, "a dry bone is so sweet but what will we eat before the bone is dry?" She explained during the training that mental health stigma was particularly apparent in her district and nearly everyone would have visited a traditional healer before health services. As a result, she was struggling to get recognition in the community. This barrier was mentioned by a number of nurses. For example, at the time of training, two clinics were not up and

running, other nurses struggled to be allocated space within the district hospitals or be recognised for their qualifications.

By the time of the three-month follow-up in July 2015, Fatu, typically shy and reserved, shared stories with her peers about her recent experiences in the district. Fatu had 25 new referrals, 10 patients with psychosis and 15 experiencing other psychological complaints. Despite the immense barriers in her locality, she said she had gone away from the Sababu training with new skills in communicating and building relationships with community leaders at she was able to apply in the district. Uniquely, Fatu developed a referral system with the traditional healers and religious leaders. She built trust with them, gaining their respect and appreciation by showing them how her methods of treatment were successful:

"Sababu has really been a good experience for me because it has helped me to get linked with other organisations in my district, and also with the traditional healers. At first, the skills were not there, to go and connect with these people. But after the training, I made it... When I went there [to the community] they saw me as straight, but with the techniques from the Sababu training I called upon the leaders and set up a meeting with them. I explained my role as a mental health nurse, explaining a bit about mental health not being devilish but as a medical condition. Whenever they have a case they should first come with that case to me, together we can assess. We agreed that if I have a spiritual case I will refer back to them. At first they thought I was coming there to take their job from them, but I went there and told them, we are going to work together. So I built up a referral system between me and them. All they need is their respect and including them in my programmes. So that's how I built my relationships."

Between July and December 2015 Fatu's caseload fluctuated and data were not available. She explained she was unable to send monthly reports due to a lack of internet access. She did however discuss individual cases at nine-month follow-up. One of her most

challenging cases had been a young man she diagnosed as having drug induced psychosis.

Using techniques she learned in Sababu training she had assessed his needs and assets,
learning that he was interested in going back to school. Together with the boy she wrote a
care plan. She went to his school to talk with the principle about letting the boy return. In
order to assist the boy with his school attendance record she needed to obtain an official
record of his diagnosis, one that she was unable to provide herself and needed to go through
the channels at the Ministry of Health and Sanitation. During the nine-month follow-up there
was consensus among the nurses about their frustration in not being recognised for their
speciality. Fatu's case is one example of this barrier.

#### 8.4.6.3 Case III

In January 2015, several months prior to the Sababu training, Marie was posted to a south western rural district, where she did not speak the local language and knew only a handful of people. She moved to the district with her newborn child and mother, who was to help her in raising the baby as her husband remained in Freetown.

During the training Marie described the isolation she felt moving to the rural district, experiencing stigma as a health care professional coming from Freetown, "it was a big challenge for me to work as a new person in my district, coming from the EVD hotspot in the Western area." Due to these challenges, she was restricted from setting up her District Mental Health Unit (DMHU) in the hospital, and was not afforded access to the local communities, thus preventing her from seeing patients.

At three-month follow-up, Marie described how the Sababu training helped her to draw upon her personal network in the district in order to reach key individuals for necessary permission to work:

"Amazingly, Sababu has made a very good impact in my life. After the completion of the training I went back to my district. There were these big challenges I was having to work in my district but because of the Sababu training I was able to make links with people who could help me start to work. I used the influence I had with the matron [of the hospital] who had been a long-time friend of my family. I used that relationship as a tool to create my link to the District Health Officer who was the sole person who could help me to get integrated in the hospital so I could function. Because of the link, I can now work everywhere in the community with no limitations."

Marie had been seeing, on average, six patients per month since the training. In May 2015, according to UNHCR diagnostic criteria (2010), she treated one person with a substance use disorder, two with intellectual disabilities, one individual with psychosis, one with moderate-severe depression, two with other psychological complaints and one EVD survivor. Still struggling with how to treat those who need social and livelihood support, she explained that she was often calling a supervisor, a psychiatric nurse based at the Sierra Leone Psychiatric Hospital in Freetown for advice. Although Marie was empowered by the Sababu training to draw upon her network in establishing herself and her DMHU, she lacked confidence in translating some of that knowledge to her work with service users.

By September 2015, at six-month follow-up, Marie had increased her caseload and was seeing 16 patients. Six were new referrals and ten had been repeat/ follow-up patients. Of those new referrals, Marie treated one person with epilepsy, one with alcohol and other substance use disorder, two patients with psychosis, and two with moderate-severe depression. She conducted eight home visits that month but also described access to transport as a major challenge in enabling her to reach service users. Marie explained that she was working on improving her links with livelihood support in the community. She had gone back to the matron of the hospital who helped to connect with local partners.

In December 2015, during the nine-month follow-up and supervision meeting, some of the other nurses were struggling with their superiors in the hospitals. As one nurse stated: "I will not get permission from the DHO. I need to try to go other routes, to promote myself

in the hospital, to present myself." Marie used the skills she gained in relationship building and networking to teach her peers how they can connect within their districts. She explained,

"There is this hierarchy. You need to present yourself and identify the key person in the hospital or community. I built a personal relationship with the matron and the finance officer [at the hospital]. You need to massage their egos, and ask them how to reach and connect with persons in the community."

Through these discussions and using Marie's experience as an example, a step-by-step approach was developed that other nurses could use in their own districts. Drawing upon the skills developed in the initial Sababu training, the following steps were described and then role played:

- Mapping: observing and identifying the organisations, places, and people in the community
- 2. Hierarchy: collaborate with superiors in health care services, community leaders
- 3. Relationships: build trusting relationships, find common interests
- 4. Advocating: going to traditional healer, religious leaders and other community members to market self as mental health nurse.

## 8.5 Discussion

The primarily qualitative data provided useful insights into the impact and nature of the Sababu intervention, highlighting a number of ways its components can be adapted within the Sierra Leone context as well as the potential difficulties and barriers to longer-term implementation which will need to be addressed in future work. The intervention, based on the best available evidence, was developed following an extensive review of literature, a feasibility and acceptability study, and was co-produced using culturally and contextually appropriate information to ensure its specificity and applicability to train mental health workers in Sierra Leone. Results show post-training improvement of skills in communicating

and building relationships with service users, identifying assets and linking community resources to support recovery. The 20 mental health nurses participating in this pilot described feeling empowered by the Sababu intervention training, with increased confidence to take this learning back to their districts where they adapted the techniques from the model into their own practice context. In addition, valuable lessons about the challenges involved in implementing mental health training interventions in resource-poor LMIC settings, particularly during a humanitarian emergency, were also learnt.

The intervention training was designed to incorporate a variety of pedagogical techniques to enhance the teaching and learning experience for Sierra Leone's mental health nurses. The incorporation of practical sessions, for instance the extensive use of role play, and culturally appropriate hand technique for identifying a service users' social network, helped to break down the barriers they face in practice. Findings from other mental health training programmes in LMIC reflect that short, targeted interventions for the local population have the ability to improve nurses and other health workers' mental health knowledge, attitudes, and skills (Usher et al., 2014). However, in this study, the intervention differs from those that focus primarily on basic mental health knowledge. The Sababu intervention provides a more in-depth understanding of how to work with local communities in enhancing the social capital of people with mental health conditions and to do so where people may be especially isolated. The nurses trained in the Sababu model reported feeling empowered and ready to address psychosocial issues in their practice. They also reported feeling ready to expand their work in the local communities to engage and mobilise resources available to them and their service users.

This pilot study suggests, consistent with the aims, that the intervention has the potential to improve relationships between nurses, service users and family members.

Specifically, over the course of the nine-month evaluation, changes in the way nurses communicated and built trust with service users and family members were noted, with one

nurse calling this the "holistic approach." A survey from 144 patients at an outpatient service in rural Sierra Leone reported patient-centred care factors, such as doctor's friendly approach, the interpersonal relationship and information-sharing all scored high on a standardised measure of patient preferences (Lau, Christensen, & Andreasen, 2013). Furthermore, the patients in Lau's study expressed strong preferences for the doctors to understand the patient's perspective and the unique psychosocial context. They sought for shared power and responsibility with the doctors. Because mental health nursing is built on a trusted nurse and patient relationship (Barker, 2001), communication and clinical reasoning are two very important issues to master by nurses. The therapeutic relationship is of great importance for the outcome of care and treatment. So, this is a crucial part of nursing education and training and one that was limited during the qualifying training nurses received in Freetown two years prior, as indicated by results from the feasibility and acceptability study.

Participants reported using the techniques from training to identify trusting individuals, liaise with those people in their care, and encourage family and community members to involve the service users in ways they would not have done otherwise. For instance, enabling them to participate in household decision making or attend community meetings rather than to isolate them further. Compared to Western countries, African society is much more tightly knit, with both stronger family coercion and greater social support. There is almost always an extended family to rely upon, only in more extreme cases of violence or when the family's resources are stretched to breaking point, will mentally ill persons be excluded from their families, although they may be chained up or neglected Alem, 2008). Overall, it is families and communities who form the basis for mental health care in traditional societies. The Sababu intervention's ability to improve family support for people with mental health conditions is critically important, given that social context, and especially the role of the family context, has been implicated as critical in mental health interventions in sub Saharan Africa.

In the feasibility study participants expressed a lack of self-confidence, exacerbated by their social and professional isolation. The mental health stigma in Sierra Leone was not only subjecting service users to discrimination and isolation but was also impacting the nurses themselves. Furthermore, as several nurses described in the post-training evaluations, not only did they feel unprepared to carry out their clinical duties with limited technical equipment and referral opportunities, but most had not anticipated the cultural gap they experienced when joining their rural post. They reported frequent relational problems detrimental to their social integration: conflicts with the hospital leadership about their working conditions such as providing space in the hospitals for their mental health units, or disagreements with the district medical officer concerning boundaries in providing first line medical care and prioritising their role as mental health providers.

They also wanted advice on how to develop trusting relationships with the community, to overcome tense coexistence with traditional healers, to obtain permission from the Chiefs and Mammy Queens to participate in community activities and promote their services. In an anthropological study of health care access in the Koinadugu district by NGO Medicos del Mundo, findings suggest most health professionals maintain a double discourse regarding the causation of illness, yet most public health practitioners have a negative view towards local traditional healers (Carrasco Colom & Grasmuck, 2015). Van Dormael et al. (2008), in a case study of training for rural community doctors in Mali, found that many of the problems raised during training were related to human relations with the community and workplace and that these were exacerbated in rural locations where any work-related dispute easily becomes a broader community dispute.

The potential role of traditional healers and religious leaders in the delivery of community-based care has been discussed in public health and mental health literature in LMIC with some evidence emerging on effectiveness of interventions (Hanlon et al., 2010). The systematic review by Nortje et al. (2016) found that people routinely use both

conventional medical services and traditional healing when both are available. One example of traditional healers providing counselling services in conjunction with a community-based mental health service in Bangalore was been reported, although with no evaluation of patient outcomes. In the book, *Psychiatrists and Traditional Healers: Unwitting Partners in Global Mental Health* (2009), Incayawar et al. argue that the process of integration of traditional healing with modern medicine has to go beyond necessity and begin with an attempt to understand what traditional healing can usefully offer and what harm it may unintentionally do. As Case II illustrates, by nine-month follow-up one nurse had the confidence to develop a reciprocal partnership with the traditional healers in her community, finding a way to provide safe and effective care. Other nurses shared their experience of taking the tools learnt in training back to rural posts and were eager to discuss ways of thinking and behaving with traditional healers.

There was mixed feedback on some of the interactive pedagogic approaches used in training. On the one hand, during the training some participants expressed concern about the use of experiential learning which asked nurses to share difficult cases and success stories to relate the model to their own practice. Trainees were encouraged to use peer support as they discussed barriers to practice but what was encountered is that some nurses didn't feel there was learning happening if it came from peers and their own experience. A few individuals indicated that they should be told by the supervisors and trainers what to do, rather than to find the solutions themselves.

On the other hand, findings show that trainees appreciated the module inviting them to reflect on their own experience. Reflection is an important strategy which may increase the awareness and understanding of nursing situations experienced by the trainee; it is enabling for the student, and also develops the student's ability for critical thinking (Sunnqvist, Karlsson, Lindell, & Fors, 2016). A common experience of practitioners is that they know much more than they can explicitly articulate. Webber and Nathan argue that tacit knowledge

is formulated through a training hierarchy, beginning with qualifying coursework but is seen as continuing throughout working life as part of continuing professional development (Webber, 2010). The practitioner's knowledge is embedded in the support they provide to service users, without being able to make verbally explicit the theoretical or research base for that action. A practitioner who has the capacity to translate the knowing and reflecting-in action from a tacit knowledge, based on learned intuition, into a form of practice knowledge that includes reflection on that practice, where that knowledge is explicit and articulated. What is termed "explicit knowledge" (Webber, 2010).

Explicit knowledge will only be gained through continued practice and reflection of one's actions. Findings from this pilot study suggest that the time it took for participants to embed the model into their practice (as evidenced during role plays and observation of nurses-in-action) may reflect the mental health service context in Sierra Leone which has had significant challenges in implementation at the national, district and local levels (Alemu et al., 2012). From patient records in the month prior to training it's clear that 25% (n=5) of nurses were treating fewer than 10 people per month and two clinics were not operating. Nurses described difficulties in reaching service users and supervisors spoke of a lack of confidence in treatment approaches. Nine months post-training the nurses were seeing more patients, their confidence had improved and they articulated specific ways they could implement aspects of the model with their cases.

### 8.5.1 Limitations of the pilot study

While the research indicates promising results, it has several limitations. This study was planned as a pilot study on a limited budget, and therefore had inherent limitations within the design. As mentioned in the methodology section, the study faced challenges during the training delivery, which had a critical impact on study conduct and final outcomes. Some of these challenges are unique to Sierra Leone, as they are intricately connected to the mental

health system and its administrative aspects. Other challenges may be more common to resource-poor, LMIC settings, compounded by humanitarian emergency contextual factors (e.g., reticence to provide data during the EVD outbreak). These challenges and the strategies used to address them warrant a longer discussion, especially to highlight LMIC barriers towards contributing to global research agendas.

The small sample size means the results are not generalisable outside of Sierra Leone's limited mental health services. A larger sample size would allow for examination of the effect of the intervention for participants from different practice contexts. For example, with CHWs in Sierra Leone's 14 districts or with mental health nurses in different countries. As this was a pilot test of a newly developed intervention model and training programme, a larger sample might be available in the future.

Another limitation of this study was the inability to obtain baseline pre-intervention data, thus prohibiting the assessment of intervention effectiveness and the extent to which change in nurse practice can be attributed to the Sababu intervention. However, the rich data collected post-training, combined with the extensive knowledge of the training needs that was gained from data in the feasibility study and through ongoing partnerships over a period of three years, shows that the Sababu intervention model and training programme was indicative of achieving its aim to improve the capacity of mental health workers in Sierra Leone.

Lam and Bengo (2003), in a study comparing three types of retrospective self-reporting methods of measuring change in instructional practice, argue that a post+retrospective pretest method (reporting current practices and earlier practices), has unequivocally reduced response bias over the traditional pretest–posttest approach to measuring change. The study found that this method led to fewer socially desirable responses when compared to two other types of retrospective methods. For example, the post+perceived change method (reporting current practice and the amount and direction of change), and the perceived change method (reporting only the amount and direction of change).

Authors also state as a general recommendation for enhancing finding validity in programme evaluation is to use multiple measurements and multiple methods.

The pilot study was primarily evaluated based on self-report data, thus limited by the social desirability inherent in all self-report measures. Self-report questionnaires may contain bias because individuals tend to endorse socially desirable knowledge, skills, and attitudes and under-report socially undesirable knowledge, skills, and attitudes. The questionnaire was not validated prior to its use, but was created co-productively. This may have been compounded by a cultural desirability to respond favourably to questions asked of one's ability, as acknowledged in observations from the reflective practice module.

The chosen model of evaluation, by Kirkpatrick has been widely utilised in the evaluation of training programmes in a variety of contexts, and a number of critiques have arisen about this model. Bates (2004) identified limitations of the model asserting that the four-level approach presents an oversimplified view of training effectiveness that does not consider individual or contextual influences in the evaluation of training (e.g., the learning culture of the organisation). The multi-faceted approach used to evaluate the Sababu training programme overcame the oversimplified evaluations by assessing self-report questionnaires, in-depth interviews with participants, trainers and supervisors, and researcher observations within and across each level of Kirkpatrick's model.

#### 8.6 Conclusion

This chapter reported findings from the pilot study which evaluated the impact of the Sababu model on the practice of 20 mental health nurses in Sierra Leone. These nurses are Sierra Leone's front line mental health workforce, based in 14 district hospitals. The district health workforce has been seen as essential to the functioning of public health systems in LMIC (Bellagio District Public Health Workshop Participants, 2016) although in countries such as Sierra Leone such practitioners need to be re-oriented and supported in the skills

required to practice public mental health. Therefore, results from the pilot, indicating post-training improvement of skills in communicating and building relationships with service users, enhanced identification of assets and linking community resources to support recovery, may be useful in designing future training programmes for district mental health workers. The findings from the pilot study, in conjunction with the previous two phases of the methodological framework, are discussed in the next chapter.

# **Chapter 9: Discussion**

#### 9.1 Introduction

This thesis developed a methodological framework for adapting and testing a mental health social intervention, theoretically based on social capital, that was context-specific and responded to changing needs of Sierra Leone communities during a humanitarian emergency. This chapter revisits the aim of the thesis, to explore the potential for social interventions to reduce the mental health treatment gap and the burden on resource-poor services in Sierra Leone. The chapter integrates findings from the three phases of the framework. First, the quantitative and qualitative results are summarised according to the research objectives and gaps in knowledge the thesis aimed to fill. Next, the strengths and weaknesses of the Sababu intervention model and the methodological approach are discussed. In light of these findings, recommendations are made related to the various challenges of delivering a mental health social intervention in Sierra Leone.

## 9.2 Synthesis of findings

This thesis aimed to explore the contribution that social interventions could make to addressing the mental health treatment gap in low- and middle-income settings. It was hypothesised that by applying social capital theory in a locally adapted intervention, mental health worker's knowledge, skills, attitudes, and behaviour may be enhanced using core social work strategies to build capacity of their ability to support people with mental health conditions in the community.

There is an established body of literature arguing that social capital is important for mental health (Ehsan & De Silva, 2015). Intervention research has shown that some of the burden of mental health conditions might be reduced by strengthening individuals, their friends and families, and the communities in which they live (Webber & Fendt-Newlin,

2017). But evidence for the effectiveness of mental health social interventions has been predominantly from HIC.

As reported in Chapter 3, very few intervention studies in LMIC include a focus on the wider social environment. The systematic review showed that interventions with a livelihoods component can address some challenges faced by people with mental health conditions to earn a living and improve their mental health outcomes. Training on non-specialist CHWs was found to promote social participation and engagement of key community leaders supported social inclusion. Stigma was also found to be broken down in communities when mental health social interventions when social networks were re-extended. The common features of interventions identified in the systematic review could be applied to the development of the intervention model later in the study.

Scaling up evidence-based interventions in LMIC is needed to address the treatment gap, but however, the imperative of scaling up medical and psychological interventions potentially ignores local realities, and may also discredit or replace local frameworks for responding to distress. This thesis has shown that it is particularly important to develop psychosocial interventions in their local context to ensure they are acceptable, feasible and effective. This experience suggests that no matter how effective models of care are in their originating countries, any attempt at replicating these internationally should be preceded by a careful feasibility and modelling phases prior to piloting.

## 9.2.1 Research objective 1

To critically examine stakeholder perceptions of the feasibility and acceptability of developing a social intervention that addresses an under capacity of mental health professionals in Sierra Leone.

The first research objective was addressed in Chapter 6, reporting on the feasibility and acceptability phase of the study. It was hypothesised that an adapted version of the CPI

could be beneficial to developing the mental health workforce capacity in Sierra Leone, but the context-specific factors that would potentially be enablers or barriers to intervention effectiveness needed to first be understood. Many psychosocial interventions, like the CPI, have been conceptualized in high income countries but assessing their feasibility and acceptability in LMIC has been lacking (Brooke-Sumner et al., 2015). A failure to take into account factors impacting on feasibility and acceptability threatens long-term sustainability and disregards the perspectives of people who would benefit most from the intervention: people with mental health conditions and their families.

In order to bridge the mental health treatment gap in a way that did not undermine local efforts and culturally-bound coping strategies, the CPI needed to be adapted to capture the nature of the social, political and cultural environment. This phase provided a critical link between the application of social capital theory to addressing the treatment gap which was elucidated in Chapters 2 and 3, and the development of a co-produced and locally appropriate model of mental health care in Sierra Leone. The feasibility and acceptability phase of research was conducted to avoid simply applying models that have been found effective in HIC and presuming they will be feasible and acceptable in very different contexts.

This is the first study to explore the experiences and perceptions of a diverse range of local stakeholders in Sierra Leone's mental health services. The findings from this study represent the views of the key individuals who are making progress toward more effective and accessible services nationally. After collecting data for more than one year from a variety of sources, synthesis of the available data allowed number of broad conclusions to be drawn about the acceptable and feasible components of an intervention. The findings highlight the importance of pre-intervention research in understanding the beliefs, sociocultural context, and capacity of the workforce to ensure a collaborative approach to intervention development can take place.

The chief lesson learned from this study is that building strong relationships with key stakeholders at several levels of mental health services in Sierra Leone during early stages of intervention development research enables a method of co-production. There was a strong endorsement for a hybrid system that connects community and district-level health systems of care. The importance of engaging existing resources such as family and caregivers, and influential community and religious leaders were identified as key intervention components.

Another important finding relates to the complexities of culturally based conceptions of mental illness. Beliefs about mental illness in Sierra Leone are commonly spiritual or supernatural in nature, and associated with help-seeking from traditional healers or religious institutions, thus preventing people from accessing the already-limited mental health services available in the country. Mental health stigma was found to be a key barrier to accessing care as well as having a profound impact on social exclusion with people being deprived of interpersonal relationships, alienated from family life and shunned from community activities. The need to include community advocacy and breaking down stigma in a mental health social intervention was underscored by many participants.

Supervisors and practitioners were in agreement that psychotropic medicine is critical in treating patients with severe mental illness, but the supervisors believed that skills for engagement with service users and psychosocial treatment could enhance the workforce capacity to perform their jobs in the absence of medication. Findings from this study indicated substantial training needs for Sierra Leone's mental health nurses (e.g. communicating with service users, difficulties working with families, counselling skills in the absence of medication). Stakeholders felt these competencies needed to be addressed as priority, before other cadres of the workforce were trained (e.g. CHWs, social workers).

The findings from the first phase of research helped to identify the key enablers and barriers to developing a mental health social intervention that would be feasible and

acceptable in Sierra Leone. Such factors were then explored in conjunction with the wider literature and components of the CPI in the second phase of research.

### 9.2.2 Research objective 2

To amalgamate findings from the feasibility study in the development of a co-produced mental health social intervention model and training programme for nurses in Sierra Leone.

The second research objective was addressed in the modelling and intervention development phase, described in Chapter 7. Evidence-based interventions often fail to achieve their goal when tested in different contexts (de Savigny & Adam, 2009). Multiple contextual barriers impact on their effectiveness (e.g., human resources, infrastructure, information and service provision, people's participation, knowledge, perception of services, help-seeking behaviour and governance related issues) and some type of adaptation or modification is needed. In doing so, tension exists between the process of cultural adaptation and attaining fidelity to the evidence based intervention. To date there has been no consensus about the criteria for determining when cultural adaptation is needed, nor a single, correct way to culturally adapt interventions. Arguably these seem like two separate endeavours: the cultural adaptation of existing interventions and the movement toward evidence-based practice (Bernal, 2012). This thesis contributes to the literature that purports cultural adaptation of evidence-based interventions is possible.

In order to maintain fidelity to the outcomes that had been tested in the CPI, "core" intervention components were maintained, i.e. those that emphasise the use of existing community resources and strengthening of social connections, enhancing relationships between providers and service users (Allen et al., 2012). In contrast, "adaptive" elements that reflected the cultural context were integrated into the model such as focussing on communication skills of the nurses, reflective practice exercises, engaging family members, discussions around cultural coping and addressing issues of trust in the community specific to

the Ebola outbreak. Stakeholders in Sierra Leone and members of the UK Diaspora community were consulted in the modelling phase to confirm cultural relevance of the intervention. A first set of adaptations were made based on the formative research and another set of alterations were applied to fine-tune the content and delivery mechanisms as the needs of the communities in Sierra Leone changed during the Ebola outbreak.

Modelling components from a variety of sources helped to ensure the intervention fit with and reflected the complexities of the practice environment in Sierra Leone. The development of the intervention model followed a multistep process. While the core structure was based on the CPI and existing evidence base, a first set of adaptations were made after the formative research in phase 1. Then, as a result of changing needs in the country and focus groups with stakeholders, another set of alterations were applied to fine-tune the content and delivery mechanisms, resulting in the current version of the model that was piloted in the districts.

Explanatory models of illness were explored to articulate the social determinants of mental health. Deep-level cultural adaptations in the development of the Sababu model illustrate the interconnections between the sociocultural belief systems, knowledge of mental illness, access to care, and ultimately the outcomes for service users. The co-produced model needed to incorporate the understanding from traditional beliefs as a way to enable mental health workers to connect with people in their communities and promote their practice.

As the group of (now) 19 nurses in Sierra Leone serve as one of the only resources for mental health care in the community, outreach is a crucial component to their role. Therefore, combining the diverse interpretations of community care was done in order to enhance understanding of the model's approach to working in the community. The importance of involving families in interventions to address mental health was highlighted in the feasibility and acceptability phase. "Care-for-the-carer" techniques were used to build capacity of the nurses to engage and empower family members in supporting the service user. The aim of this

component was also to take some burden off the resource-poor health system and reduce stigma.

Two modules were added to the intervention training, conceptualising the model within an emergency response framework and revisiting training nurses had in Psychological First Aid. Surface level adaptation involved customising intervention messages, and approaches to the observable cultural characteristics of the local population in order to enhance the intervention's appeal, receptivity, and feasibility.

The intervention was then manualised to provide trainers with key learning outcomes, background information and activities to facilitate learning within each core component of the model. This required a more structured approach to intervention training and delivery than was demonstrated in the UK pilot of the CPI (Webber et al., 2018).

## 9.2.3 Research objective 3

To test intervention content within the limited scope of mental health practice in Sierra Leone.

The third research objective was explored in the pilot study, described in Chapter 8. The intervention was piloted with Sierra Leone's only district-level mental health professionals, a group of 20 nurses. Nurses have been identified as fundamental frontline personnel who provide mental health services for people in LMIC (Kakuma, 2011). Research suggests that the optimal role for mental health nurses is to integrate their knowledge and skills with other allied health professionals to achieve a wide range of quality, patient-centred health outcomes (Ellis et al., 2016). However, in many low-resource settings, as is true for Sierra Leone, nurses may be the only qualified mental health professionals available in the communities. They often do not have other specialists to provide supervision or multidisciplinary care, and mental health service provision in the districts is solely their responsibility.

The primarily qualitative data reported in Chapter 8 provided useful insights into the impact and nature of the Sababu intervention, highlighting a number of ways its components can be adapted within the Sierra Leone context as well as the potential difficulties and barriers to longer-term implementation which will need to be addressed in future work. Post-training improvement of skills in communicating and building relationships with service users was reported, as well as enhanced identification of assets and linking community resources to support recovery. The 20 mental health nurses participating in the pilot described feeling empowered by the Sababu intervention training, with increased confidence to take this learning back to their districts where they adapted the techniques from the model into their own practice context. In this way, the intervention model became bespoke to each district as the nurses used their skills learnt in different contexts. For example, to network with district health leadership and advocate for their services, linking with existing resources such as child protection, education, and Ebola-response initiatives, or working in collaboration with traditional healers to improve access to facility-based care.

Training reactions were very positive though need to be taken with caution as there is a cultural bias toward positive training reactions. This was exhibited in the session on reflective practice which was more difficult than expected for the nurses to analyse their own weaknesses. New skills in relationship building and "linking" were the key lessons the nurses took away from training. They spoke of holistic care for individuals, involving families, community members and other existing services.

Behaviour was impacted by improved confidence to practice alone in their districts.

Nurses reported they had more confidence to treat individuals, with supported supervision, but also that they could take on a case management role in work with other services available to them. The interactive teaching methods used in training and use of role plays enabled assessment of the nurses' knowledge and acquisition of skills, even when direct clinical observation was not possible. This enhanced nurse competence in communicating and

building relationships with service users and family members, and knowing how to address social needs in their consultations.

The intervention has the potential to improve relationships between nurses, service users and family members. Over the course of the nine-month evaluation, changes in the way nurses communicated and built trust with service users and family members were noted, with one nurse calling this the "holistic approach."

The range of skills that practitioners use when working with service users is a tacit knowledge, where they rely on their common sense and intuition. Such skills do not depend on practitioners being able to describe what they know how to do. As Webber and Nathan described (2010), a common experience of social workers is that they know much more than they can clearly articulate. With mental health social work models, like the Sababu model, practitioners are better able to articulate the skills they are using in practice. Over the ninemonths supervisors witnessed how the Sababu model made tacit knowledge explicit, formalising their learning, changing their behaviour in consultations.

This research has outlined major challenges in training and capacity building amid an extremely limited health system and humanitarian emergency, as well as recommending concrete strategies about how to overcome them.

### 9.3 Strengths of the study

Various strengths of the thesis are considered in the following section. These include strengths in the contribution this thesis adds to the literature, the Sababu model itself and the methodological framework used in the study.

Despite increased awareness of the importance of addressing the burden of mental health conditions on a global scale there is a paucity of research that targets the wider social environment and its impact on the cause and maintenance of mental health conditions. This is important because mental health and many common mental disorders are shaped to a great

extent by the social, economic, and physical environments in which people live (World Health Organization and Calouste Gulbenkian Foundation, 2014). The contribution of mental health social work is a largely neglected area of research in the movement to improve care and support for people with mental health conditions in LMIC. This thesis attempted to address this gap by reviewing the evidence base for mental health social interventions in LMIC and to develop a methodological framework for modelling and piloting such interventions. This is the first study to develop a mental health social intervention in Sierra Leone and during a humanitarian emergency.

The review of mental health interventions measuring social outcomes presented in Chapter 3 revealed that many studies made few adaptations to interventions for which an evidence base was established in HIC. In contrast, this thesis attempted to present a framework for intervention development that maintained core concepts of the CPI and social capital theory, but was contextualised for Sierra Leone. The methodological framework presented in this thesis placed emphasis on theory-informed interventions without being too prescriptive, allowing for adaptations and flexibility to respond to the local context. The study adopted an innovative, pragmatic approach to modelling core components for the Sierra Leone context. The Sababu model is integrative in that it drew on a broad range of the available literature, both published and unpublished, first-hand researcher experience, and the informed opinions and perspectives of local stakeholders. The Sababu model offers a theoretical base which practitioners can translate into effective mental health practice, thus potentially producing a more feasible and sustainable model than individual approaches that may have be implemented in isolation.

The intervention was co-produced through engagement with local stakeholders, indepth analysis of the feasibility and acceptability, and then multiple iterations of an adapted intervention to target the gaps in skills and competencies of the mental health workforce. It also responded to the changing psychosocial needs of the communities in Sierra Leone during a humanitarian emergency. It might, therefore, be an especially useful approach in other humanitarian settings where the intervention can be targeted and iterative to the changes happening in the local setting. The approach to co-producing and piloting the intervention model is also consistent with recommendations in the Africa region and other low-resource settings. For example, in a systematic review of literature on community mental health interventions in Africa, Hanlon and colleagues (2010) recommend evaluative research that considers innovative service models which include engagement with key community stakeholders such as traditional healers, assessing clinical and social outcomes in a systematic way, promoting advocacy of mental health to reduce stigma and building the interface between primary and secondary health services to impact delivery of mental health care.

The Sababu model makes a unique contribution to current thinking about mental health nursing in low resource settings for several reasons. It places the community and how to engage and mobilise social resources at the centre of the discussion about capacity building in the mental health workforce. It may have an effect on reducing the burden of extremely limited resources in the formal health services. Promoting social inclusion for people who are stigmatised and discriminated through the training and retention of a critical health workforce is increasingly expected to make important contributions to the achievement of results-oriented Sustainable Development Goals (United Nations, 2015). Additionally, the intervention model recognises that the different contributions of the mental health workforce and community actors are necessary, both of which have a critical and mutually supportive role to play in enabling and supporting people with mental health conditions in extremely limited health systems.

A further strength of this study was that it was focussed on enhancing the capacity of the existing nursing workforce, which is more sustainable in Sierra Leone than say, the social workers who are not supported by the government for future employment beyond their qualifying course. Task-shifting mental health services to CHWs has been a hallmark of the

GMH movement. And indeed, an emphasis on social intervention models also points to this cadre of the workforce as one which reaches communities that formal health services cannot. However, in the case of Sierra Leone the local stakeholders righty identified the limited capacity of the health services to address mental health needs and felt that by building capacity of CHWs it would be doing a disservice to people with mental health conditions who could then not be referred for treatment and care.

This research used both quantitative and qualitative methods to explore the impact of a mental health social interventions, facilitating an in-depth and holistic understanding of the experience of Sierra Leone's mental health workforce. This approach enabled particular attention to be paid to the needs of the intervention participants. Experience in the training and the impact of training on practice was measured in a way that was acceptable to the participants, though it meant that data collection was compromised (more on this in the next section, limitations).

The analysis of qualitative data used a constant comparative method of analysis, which had the following advantages over alternative qualitative approaches: (i) the analysis method was systematic, coherent and rigorous; (ii) it was inductive and did not require preconceived hypotheses, which was beneficial given the absence of pre-existing mental health research in the study population; (iii) enabled the researchers to capture the views of stakeholders as relationships were being developed, and to repeatedly reflect on the changing circumstances in the country.

### 9.4 Limitations of the study

This research had a number of methodological limitations. Some of these arose as a result of the opportunistic nature of the PhD study, which was based on limited funding that needed to be applied for prior to each phase of research. Other limitations were related to the changing context in Sierra Leone and the impact that a humanitarian emergency had on the

study participants and the research protocol. Here, the impact of key methodological limitations are discussed related to: the intervention model; the study design and sample size; the measures used to evaluate the intervention; the reliability and validity of the data; and the generalisability of the findings.

#### 9.4.1 The intervention model

The model should not be interpreted as normative guidance for how to improve mental health nurse performance. It is a working theory in the absence of strong scientific evidence on the definitive causal pathway to improved performance. This does not mean that the different components included in the model do not work or do not merit support. It means that continuing implementation of promising activities expected to influence performance should be accompanied by prospective monitoring and documentation of the effect that specific activities have on practice and service user outcomes. More rigorous research should be conducted when and where possible. Furthermore, prior to piloting the intervention model underwent several steps of alterations but additional fine-tuning is needed based on results from the study.

Studies have demonstrated that development of locally appropriate intervention models and training alone does not improve the management of mental health conditions, but wider changes in the system of care are required to augment training and encourage reliable impacts on practice, and more specific educating models are necessary (Goncalves et al., 2013; Jordans, Luitel, Pokhrel, & Patel, 2016). Through the study's partners, KSLP, EAMH, and the MHC, communication was made with representative in the Ministry of Health and Sanitation throughout the study. However, this was primarily to grant access to conduct research, training and supervision with the nurses and other mental health stakeholders in the country. It did not directly impact the provision of services. Some of the changes that occurred in Sierra Leone's mental health services during the course of the pilot study, for

example allocation of district mental health offices and procurement of psychotropic medicines, cannot be attributable to the intervention itself. But it is possible that building confidence of the nurses to advocate for their services with district health officers helped to roll-out plans for these offices and to network with other services that had procured medicines.

## 9.4.2 Study design

Social capital, and particularly the foundation of the CPI, informed the nature of the intervention and the anticipated effects of the intervention. A theory-driven approach acknowledges and takes into consideration the complexity of the real world of practice where multiple factors interact to influence outcomes (Vogel, 2012). Such an approach advocates for empirically examining the factors that influence delivery of the intervention account for variability in the characteristics of clients, interveners, and settings. For example, characteristics of the nurses in Sierra Leone and the environment in which they're living and working that influence how nurses implement the intervention, and in turn influences the achievement of its intended outcomes. From a research perspective, modelling variables that may influence the delivery of the intervention and achievement of the outcomes reduces the error variance in the statistical analyses. But this is only true with a much larger sample than the one in this study.

The theory-driven approach used in this study facilitated the development of a conceptual framework that was used to guide the intervention and research. The methodological framework presented in this study was largely based on the MRC framework for developing complex interventions, with variation for social intervention development. Because of time and financial constraints, the study design was refined after each phase of research. This was advantageous in terms of the intervention model being developed in response to the data collected and ultimately to the communities in need during the Ebola

outbreak. However, this may have biased the qualitative analyses, particularly in phase I, because researchers had extensive knowledge of major factors influencing the intervention feasibility and acceptability.

The participatory methods enabled strong trusting relationships to be built with local stakeholders and the participants themselves. This may have played an important role in people's agreement or refusal to participate as well as in the quality of their involvement. However, it did not produce objective research observations or interpretation of data. The intervention model and training programme was delivered by the research team; who also collected data on the participant's experience of the intervention. In the initial study protocol, there were plans to train local researchers from University of Makeni, who could provide an objective view of the pilot study. However, the university was closed during the Ebola outbreak and it was impossible to recruit and train local researchers.

#### 9.4.3 Sample size

A further limitation of the study was the very small sample size across all three phases of research. This was primarily based on the limited availability of mental health practitioners in Sierra Leone. There were attempts to mitigate the effects of such a small sample, such as reaching out to Sierra Leone Diaspora in the UK for focus groups (Chapter 7). But as a result, the sample was too small to make any true statistical inferences and the study was greatly underpowered.

The lack of a control group in the pilot study is a design weakness and makes it hard to confidently ascribe changes in nurses' responses to the training intervention. However, the methods undertaken in the evaluation of the intervention was appropriate given the constraints of limited research funds and ethical considerations, such as limited usual care options for a control arm when there is effectively no existing mental health care in Sierra Leone outside of the district level nurses involved in the study.

#### 9.4.4 Measurement

There are a number of methodological limitations based on the measures used in this study. Across all three phases of research, mixed methods design was used, leaning heavily on the qualitative data to facilitate the development of a culture-specific intervention and adaptation of evidence-based practices to a diverse population and setting. The research protocol initially planned for more rigorous quantitative methods, in-line with Kirkpatrick's model of training evaluation, but the measures needed to be further adapted during the week of training (as described in Chapter 8). Although not as rigorous as planned, the repeated use of mixed methods that also captured the intervention development process has been found to be particularly relevant to the comprehensive evaluation of conditions necessary for effective intervention and can thus help to facilitate translational research (Nastasi et al., 2000).

Training effectiveness is concerned with why training works and it is much more "macro" in nature, looking at the training intervention from a systems perspective. The success of training depends not only on the method used but on how training (and learning) is positioned, supported, and reinforced within the organisational context; the motivation and focus of trainees; and what mechanisms are in place to ensure the transfer of the newly acquired knowledge and skills to practice. Training evaluation on the other hand, examines what works and is much more "micro" (i.e. focused on measurement). This distinction has made some significant contributions to practice possible and, more importantly, is helping avoid the simplistic view that training is just a curriculum rather than the complex interaction of many organisational factors (Salas, Tannenbaum, Kraiger, & Smith-Jentsch, 2012). For this reason, confidence in skills and other training outcomes for the nurses were assessed. However, the self-report measures used by the study are vulnerable to inflation through presentational biases. More research aimed at uncovering why training works is, of course, desirable.

# 9.4.5 Reliability and validity of the data

Reflexivity is the conscious attempt to identify how and what social understandings have been produced in the process of research (D'Cruz, Gillingham, & Melendez, 2007). This is particularly challenging in qualitative research, especially when evaluating a training programme delivered by the researcher. It is important to consider the implications that those relationships had on the data itself, how it influenced the interpretation of results. In the original proposal, student researchers from a local university were to be involved in data collection, particularly for collecting service user outcomes. When the university closed, movement was restricted and a lack of trust in the communities was pervasive during the Ebola outbreak it was impossible to employ objective researchers. In fact, the subjectivity, the relationships built with the participants and the awareness of tacit knowledge production is what provided the richness of data.

The Hawthorne effect (McCambridge, Witton, & Elbourne, 2014) whereby research activity positively impacts the effectiveness of the intervention, is a significant issue in this study, particularly given the limitations in robust evaluation. Knowing that the content of training sessions was being assessed may have directly affected the behaviour of nurses, leading them to improve their diagnostic skills through a heightened awareness of researcher observations. This effect may have been minimised with more robust evaluations, in particular if more practice observation had been possible or if patient outcomes from the intervention could have been evaluated.

There were other logistical challenges related to conducting research in a low-resource setting that contributed toward limitations in the reliability and validity of the data. This study piloted an intervention for mental health services where no prevalence data nor ongoing reporting systems are available. The lack of valid and reliable mental health indicators in

Sierra Leone prevented any comparison the study could have made for people with mental health conditions using services.

### 9.4.6 Generalisability of the findings

Stakeholders in the feasibility and modelling phases of research were leaders in mental health. It would have been insightful to explore perceptions of other public health officials, to better understand the views of mental health from those not working in the field. Pilot study participants included nearly all of the mental health practitioners in Sierra Leone and in this way, were representative of the availability of care.

Attempts to account for the changing conditions in Sierra Leone during the Ebola outbreak influenced study design and also an understanding of the setting. Such context changes contributed to difficulties but also made the study very localised in nature, very specific to Sierra Leone. It may be possible to replicate study findings again in Sierra Leone but the intervention model should not be used outside this setting without substantial adaptation. However, the methodological approach, the intervention development framework, can and should be tested in other low-resource settings globally.

## 9.5 Challenges and potential solutions

In this section challenges faced in the study are described and potential solutions for further intervention are explored. Challenges include: insufficient support for mental health at the national level; an under-resourced mental health workforce; a lack of trained supervisors to provide ongoing support for non-specialists; a deficit in practice-based learning; stigma associated with mental health conditions; and increased barriers faced during a humanitarian emergency. Some of the challenges listed in this section have been noted by other studies in LMIC and therefore the potential solutions based on experience of conducting this study in Sierra Leone may be applied in a range of settings worldwide.

## 9.5.1 Challenge: Insufficient support for mental health at the national level

A fundamental problem underlying the mental health treatment gap in Sierra Leone is the low priority of mental health issues by the government, as well as low levels of knowledge about how to use available resources more efficiently (Abdulmalik, Kola, Fadahunsi, Adebayo, & Yasamy, 2013). An indication of this low priority has been the lack of a clear policy, plan and legislation for mental health. Until 2009 Sierra Leone had no mental health policy, except the Lunacy Act of 1902.

When the Mental Health Coalition of Sierra Leone was formed in 2011, bringing together national and international stakeholders in mental health, its members began by collectively advocating for mental health at the national level. The Mental Health Policy, developed by the Ministry of Health and Sanitation with the support of WHO, enacted in 2012 offers a framework for the development of mental health systems in the country (Government of Sierra Leone, 2012). The Mental Health Strategic Plan 2014–2018 outlines strategies for the development or revision of mental health curriculum for all levels of training in health and social work, though to date this has yet to be fully implemented (Government of Sierra Leone, 2014). Despite these efforts, a WHO Consultation Meeting in Freetown in 2015 concluded that the country was not sufficiently prepared to deal with the psychosocial effects of the EVD outbreak and that the international response tended to focus on short-term solutions rather than on sustainable development of a mental health care system.

These developments were ongoing during the course of this study. However, it was difficult for members of the research team to be involved in such advocacy due to limited funding and scope of the project. The research team was based in the UK and primarily collaborating from a distance with members of the Mental Health Coalition and other incountry partners such as EAMH and KSLP. As reported in the feasibility and acceptability

phase (Chapter 6) these partners described substantial resistance from the Ministry of Health and Sanitation to drive mental health services forward.

One potential solution to remedy the insufficient support for mental health at a national level might be to enhance collaboration with NGOs and mental health organisations who can provide in-country advocacy and ongoing presence in the ministries. It is now recognized that effective advocacy to generate political will has to be a central component for increased attention to mental health service improvement (Caldas de Almeida, 2015). The mental health nurses trained in this study were spread across the country in district hospitals but their mandates came from central government. As reported in implementation barriers of the pilot study (Chapter 8), nurses described district health officers prohibiting their mental health practice until letters of support from the MOHS were prepared. In order to make change at the district level, advocacy with policy makers and public health planners at the national level is required.

Maintaining communication with national mental health focal points (the MOHS has one) and supporting those individuals to effectively advocate is one practical way to engage policy makers. This can be achieved by inviting those individuals to research meetings and planning workshops, or seeking their opinions on decisions effecting mental health services. Creating policy briefs, with only essential information about the treatment gap, mental health service needs, and estimated costs of enhancing service provision may help to present arguments that are convincing and actionable.

### 9.5.2 Challenge: An under-resourced mental health workforce in Sierra Leone

Future interventions for mental health require a non-specialist workforce, trainers, supervisors and facilities for referral of cases of severe mental health conditions. Though slightly improved from 2012 when this research began, the country still has fewer than five psychiatrists (most are expatriates), one psychiatric hospital in the urban capital Freetown and

only 18 nurses based in district hospitals. The country's mental health services still face an "urban bias," in which training programmes and the tertiary hospital are concentrated in cities and there is a reluctance of many health professionals to work in remote areas among disadvantaged populations. Indeed, findings from the pilot study indicate nurses may be hesitant to work in remote areas, they face issues of mobility and access to the communities and even cultural and language challenges.

Evidence shows that the effectiveness and long-term sustainability of non-specialist health workers depend critically on an appropriate balance and strong collaborative linkages with professional cadres (Thornicroft & Tansella, 2013). Many CHW programmes have failed because they did not successfully incorporate professionals into the existing workforce (Kok et al., 2017). With so few specialists and opportunities for referral it was deemed inappropriate to train CHWs or social workers.

A critical problem for task-shifting programmes is the high rate of attrition for non-specialist health care workers, influenced by a complex set of factors affecting motivation and retention, and how these factors play out varies considerably from place to place (Bhattacharyya, Winch, LeBan, & Tien, 2001). For example, CHWs do not exist in a vacuum. They are part of and are influenced by the larger cultural and political environment in which they work. In many countries, they are currently unpaid and are overburdened by multiple task-shifting roles. The concern about overburdening CHWs and volunteer staff has also led to a clear division of tasks and training of different cadres of health workers (i.e. making a distinction between prescribing and non-prescribing staff). Moreover, it has resulted in the decision to not rely entirely on the cadre of community health volunteers (Jordans et al., 2016).

Decentralising services to district level facilities—away from urban psychiatric hospitals and with clear links to community care—has been a hallmark of addressing the workforce challenge in mental health globally. The nurses trained in the pilot study were the

first to receive mental health training in Sierra Leone and were then posted to all 14 districts in efforts to expand their reach beyond the capital of Freetown and other urban city centres. During the study, they were new to their district posts and many were reluctant to practice in their new environment. Faced with cultural differences, language barriers and resistance from DMOs, most nurses did not have an allocated space in the hospitals or even authorization to practice when the pilot began. In this context, the nurses carried much of the burden on Sierra Leone's limited mental health treatment capacity. Stakeholders felt their clinical skills needed to be strengthened before other cadres of the workforce could be trained. Although decentralising services to the district offers one solution to the workforce challenge, it should also be combined with training community level providers to improve access and enhance referrals.

Improving in-service training for the existing workforce is key; so too is the preservice and in-service training of new cadres in the mental health workforce, such as CHWs and social workers. This second solution will be needed in the future to expand district mental health services in Sierra Leone beyond the 18 nurses. In a cost analysis of implementing district mental health care plans across five LMIC, Chisholm and colleagues (2016) found that a key cost driver to the community-based service model was the assumption that no psychiatrist will be available within the district and that health extension workers will form the backbone of service provision. Therefore, appropriate policies and processes for the successful recruitment, training and retention of community-based mental health workers in Sierra Leone's 14 districts can be expected to have a major bearing on financial flows over time.

Local organisations can also be effective at facilitating intersectoral coordination, for instance between ministries of health and social care, to enhance the delivery of services across sectors and make the most of critical workforce shortages. In other LMIC such as India, psychiatric social workers are an emerging cadre of the workforce trained to assess and

manage people with mental health conditions by understanding their social and/or environmental factors. They primarily service as case managers to refer people to specialists where available. Though psychiatric social work is not yet a recognised or supported profession in Sierra Leone, such cadres of the workforce might be an opportunity to bridge the gap between health and social care sectors.

Local organisations are also best placed to engage local trainers to conduct training, to avoid initiatives that create parallel systems of care, or new cadres of the workforce that are unsustainable in national health and social care systems (Inter-Agency Standing Committee (IASC), 2007). Coordination between governmental and nongovernmental agencies should take place when planning training so that content is consistent, roles are clearly defined and use of resources is maximized.

A third solution to address workforce challenges is to enhance retention through training and incentives for motivation. Mental health workers in LMIC are under immense pressure to perform their roles where no other mental health professionals practice, the stigma is high and remuneration low (Vesel et al., 2015). A perennial challenge in the sustainability of a mental health workforce is the question of how to incentivise those workers under such circumstances. The "incentives" are often understood as specific forms of reward—payments, promotions, or awards—to motivate workers to perform specific tasks or achieve a certain level of performance (Bhattacharyya et al., 2001). However, one can also define incentives as any factor that increases motivation to engage and perform well in the community.

In the pilot training it was observed that the idea of tangible incentives carries over into what the nurses expect to obtain from training. Questions arose about what the incentive of training would be when knowledge was not immediately seen as a take-away. It took time to develop mutual understanding around the purpose of the Sababu training and how it could be seen as an opportunity to enhance practice, to better support the work they're doing.

In Bhattacharyya's (2001) seminal review on incentives for CHWs, the authors used the concept of "incentives" (and "disincentives") as a more expansive idea than just the explicit financial or non-financial incentives offered by programmes to reward particular behaviours. Decent salaries and opportunities for advancement may motivate the general health workforce, but so too can supportive colleagues, appreciation, infrastructure for career development. Opportunities for mentorship and nationally recognised professional qualifications may be used for motivation in the absence of financial incentives. In a qualitative needs assessment of psychiatric trainees in Zimbabwe, Abas et al. discuss barriers to retention, highlighting commitments to family and country as "encouraging the respondents to stick in Zimbabwe" (2014, p. 457)(pg. 457) and mentorship through an apprenticeship model incorporating sub-specialty training.

9.5.3 Challenge: A lack of trained supervisors to provide ongoing support for non-specialists

A major barrier to improving mental health services in LMIC is lack of supportive supervision (Abera, Tesfaye, Belachew, & Hanlon, 2014), as without a system of competency-based supervision, training will have limited impact. Reviews have shown that short-term training by specialist mental health professionals with ongoing monitoring and supervision can improve confidence, detection, treatment, and treatment adherence of individuals with mental health conditions and reduce caregiver burden (Kakuma, 2011). Peter Ventevogel (2014), in his critique of the medicalisation of GMH described of short term trainings, "they are not useful, as only after several trainings with on-the-job supervision can one witness primary care workers begin to use their new skills" (p. 674). For provision of effective clinical mental health care, short training without follow-up supervision is unlikely to be adequate.

In the pilot study, supervision was provided through the partner NGO on an ongoing basis, from quarterly visits by the supervisors to each district as well as quarterly supervision

meetings with the entire nursing group in Freetown. As the researcher was not based in Sierra Leone during the intervention period, it was essential to rely on those local supervisors to assess knowledge acquisition and changes to practice in the nurses. However, in future interventions it is recommended that supervision be more formally built-in for the researcher to also observe skills in practice.

The use of technology to provide distance supervision has been increasingly popular in low-resource settings, particularly given the mental health workforce shortages (Abas et al., 2014). Medical schools in Africa are beginning to try new educational techniques and programmes, which could be applied to mental health education and training and supervision. For example, the use of technology for distance learning or simulated patients to teach psychiatry in Zimbabwean medical schools (Piette et al., 2015). During the pilot study, the researcher kept in regular contact with the nurses through email and Whatsapp messaging. Social media was also used by the nurses to enable peer support for difficult cases (without sharing confidential information). Findings from the internet access survey during the feasibility and acceptability study (Chapter 6) indicate improved access to internet during the course of the study. Therefore, this may be a viable solution to the challenge of limited supervisors where internet and smart phone access permits.

Fairburn and Patel (Fairburn & Patel, 2014) argue that it is unlikely there will ever be sufficient human resources in mental health and instead "programme-led" treatments which involve self-help (i.e. individuals treating themselves) may offer an option where the mental health workforce and supervisors are so limited. Self-help interventions are increasingly begin delivered through new technology. Self-Help Plus is a new WHO psychological intervention for managing stress and coping with adversity, currently being evaluated in Uganda (Epping-Jordan et al., 2016). The intervention does not require much time from experts for implementation by using a guided self-help format and is delivered through a pre-recorded audio course. Mental health specialists will always be essential for supervision and for

management of severe cases. Yet these self-help or technology-based interventions may reduce reliance on scarce specialists, thereby hopefully making mental health care more widely available to those in need.

9.5.4 Challenge: Complex needs of people with mental health conditions cannot be easily addressed by one professional

As mental health conditions are inextricably linked to the wider social environment, addressing the needs of people with these conditions goes beyond the provision of mental health services and requires a multidisciplinary approach. For example, when a person is diagnosed as having psychosis, care becomes a series of transitions from home to hospital to rehabilitation facilities and back to home again, ideally engaging a host of multidisciplinary professionals—social workers, nurses, therapists, doctors, counsellors, etc—who must work together to provide a web of health services (Frenk et al., 2010). However, in the case of Sierra Leone, and in many LMIC where there are too few providers trained in mental health, a multidisciplinary team arguable infeasible (Mental Health Commission, 2006).

Where other professionals were accessible in the districts, the nurses complained of having to work directly with CHWs in treating and managing cases. In Sierra Leone, nurses are non-prescribers whereas the CHWs have the capacity to prescribe, which undermined the nurses' ability and was a source of contention as the leading experts on mental health in their districts. Whilst the dynamic of the nurses group is increasingly connected and they are relying on one another for peer support more now than before, the issue with CHWs and unwillingness to work as a team was not overcome during the pilot study.

An alternative solution that was demonstrated by the nurses is a case management approach. As observed in the cases (Chapter 8), the nurses built a relationship with an individual and his/her family members to better support that person at home, as well as linked them to existing resources in the community. One nurse was able to support teenage girls who

were EVD survivors and did not have immediate family members. She formed support groups with the girls and linked them child protection services and NGOs offering psychosocial support to survivors. Case management approaches have been shown to be effective for CHWs in low-resource setting, particularly for maternal child health programmes (Schneider, Okello, & Lehmann, 2016) and should be further explored in mental health interventions.

## 9.5.5 Challenge: A deficit in practice-based learning in sub-Saharan Africa

Commitment to building capacity of the mental health workforce in Africa is increasing but with little agreement on strategies to train workers in mental health or evaluation of training efforts. In Sierra Leone, as with much of sub-Saharan Africa, pedagogical methods give priority to approaches centred on memorisation and restitution. Research has shown that few institutions in sub-Saharan Africa focus on teaching that encourages learners to develop their intelligence and creativity, major social issues are not given sufficient consideration, and there is a lack of linkage between education and working life. A recent systematic review evaluating 31 mental health education initiatives for health workers in 11 African countries found that 94% of the interventions used didactic strategies and fewer than half the studies evaluated skill or practice and only two studies investigated clinical outcomes (Liu et al., 2017). This posed particular challenges for the ways in which the nurses reacted to interactive training sessions and ultimately how they adopted skills in practice. It was also likely a factor in skill development during their initial 18-month mental health course, which did not instil confidence in counselling skills or working with service users (Chapter 6).

One potential solution to addressing this challenge in Sierra Leone is to emphasise the importance of setting clear learning objectives and matching these to assessment frameworks that measure knowledge, skills, and competencies. Kohrt and colleagues (2015) developed the ENhancing Assessment of Common Therapeutic factors (ENACT) rating scale for assessing

therapeutic competence in Nepal that could be applied across settings and cultures. The training materials developed for the Sababu intervention are context-specific but can be further adapted for other settings using the methodological framework and integrity to the social capital themes. Using valid and reliable measures, as well as longitudinal evaluation can be used to determine what training strategies help with retention of competencies, incorporation of learned skills into routine practice, and improved service user outcomes.

9.5.6 Challenge: Stigma toward people with mental health conditions, their families and the mental health workforce

The WHO proMIND profile on Sierra Leone (2012) identified stigma as a major issue affecting mental health in Sierra Leone. Brief surveys done by an international NGO showed that most inhabitants of local communities believed mentally ill people to be evil, violent, lazy, stupid, unable to marry or have children, and unfit to vote (Asare & Jones, 2005). Deeply engrained negative attitudes towards people with mental health conditions were also repeatedly emphasised by participants in all phases of this research. It was mentioned as being an obstacle to generating political will in the MOHS, through to the communities that isolate people with mental health conditions and impact help-seeking behaviour. Social stigma and discrimination was then associated with EVD, including towards persons who have been infected, their family members and health care and other frontline workers. This compounded the mental health needs of people in Sierra Leone during and after the EVD outbreak (Hughes, 2015).

Steps should be taken at all phases of research to address stigma and discrimination, and to promote the integration of people with mental health conditions. This includes enhancing the effectiveness of existing services and community leaders (including traditional healers and religious leaders as well as mental health service users and families) to understand the sources of stigma and the steps that can be taken to dispel any unnecessary fears and

misconceptions. It also includes developing targeted awareness raising campaigns and community interventions to educate communities about mental health and generate a demand for services. Although the Sababu intervention did not specifically focus on awareness raising activities, the skills nurses learned in training enabled them to provide individual case management, linking with existing services and community members, enhancing family support, and delivering services in the community through home visits and outreach.

Awareness raising efforts were ongoing during the study, led by partners EAMH (e.g. radio programmes spreading news of the mental health nurses and their contact details, posters and other materials for primary health units).

9.5.7 Challenge: Additional barriers to implementation during humanitarian emergencies

There is increased risk of mental health conditions arising both from pre-existing mental health conditions and emergency-induced mental distress (de Jong et al., 2003), and poor pre-existing health systems that are ill-equipped to deal with the increased need for services (Kruk, Freedman, Anglin, & Waldman, 2010). The Ebola epidemic demonstrated that the response of local governments and international institutions to emergency epidemics is insufficient. This provoked discussions regarding the need to strengthen African health systems and examine the capacity of local communities to respond to global crises. The inability of local governments and international institutions to respond quickly to the EVD outbreak was the result not only of deficiencies in the health care infrastructure (lack of doctors and other medical personnel, a paucity of ambulances, insufficient hospital places, etc.) but also due to widespread mistrust of government and fear among those communities most at risk of EVD (Polygeia, 2016).

The issue of trust is significant, because trust is at the heart of social capital and was one of the key components of the Sababu intervention. The delivery methods of the warnings about Ebola were impersonal and often evoked hostility. The most important first points in

seeking help in any crisis are immediate family and friends, but the EVD public health messages omitted family and community responsibilities. The former WHO director-general Margaret Chan described how fear behaviours propelled Ebola virus transmission, citing symptomatic patients escaping from treatment units, families harbouring sick relatives at home, and preferential use of traditional healers. Mistrust and fear behaviours not only led to rapid transmission but also to stigma and social isolation that may contribute toward the onset of common mental disorders. Such mistrust is a distinct contrast from the way in which communities hit by war or natural disasters typically rally around victims. When interviewed, community leaders such as Paramount Chiefs, religious leaders, health workers and civil society organisation leaders all spoke of the collective traumatisation of their communities following the rapid death caused by EVD.

Lessons from the EVD outbreak published in the UK (Polygeia, 2016) and UN coordination committee (IASC, 2016) stated that community ownership of health should be prioritised and would strengthen local health system to more effectively respond to crises. Community groups, leaders and institutions understand local needs and how to respond sensitively. During the EVD outbreak, however, social support networks were fragmented. One of the most important actions to consider in an emergency response is to recognize and support these community resources so that they can function effectively. In collaboration with communities, humane interventions that account for the challenges created by the emergency need to be developed (e.g. speaking with others from a distance and maintaining communication when people are unable to be in close proximity). Mathbor (2007) argues that community capacity building through effective utilisation of social capital is crucial in disaster management projects enabling a stronger, more cohesive response to disasters. Therefore, social mobilisation was a key component of the Sababu intervention model and also became a key pillar to the EVD response in Sierra Leone.

## 9.5.8 Summary of challenges and potential solutions

A number of challenges encountered in Sierra Leone during the course of this study have been outlined. As the evidence shows, these are challenges also faced in many other settings globally, and thus the potential solutions presented here may be considered when developing and implementing mental health interventions elsewhere. Potential solutions start with effective advocacy and garnering of political will to enhance mental health services at the national level. Though the primary health care at the district level has been endorsed as the most appropriate place for intervention (De Silva et al., 2015), effectiveness and long-term sustainability of non-specialist health workers depends on a balance and strong referral pathways to specialists (both secondary and tertiary) as well as links with community-based care. Where resources are especially limited, multidisciplinary teams may be unfeasible but case management approaches could reduce the treatment gap in overburdened services.

Improving both pre-service and in-service training for mental health is needed across cadres of the workforce. Partnering with local organisations is a potential solution to engage local trainers, to avoid initiatives that create parallel systems of care, and new cadres of the workforce that are unsustainable in national health and social care systems. In training and ongoing supervision, matching learning objectives to assessment frameworks that measure knowledge, skills, and competencies is important for measurement of clinical skill acquisition. Opportunities for mentorship and nationally recognised professional qualifications may be used for motivation in the absence of financial incentives.

Steps should be taken at all phases of research to address stigma and discrimination, and to promote the integration of people with mental health conditions. This can be done by developing targeted awareness raising campaigns and community interventions to educate communities about mental health and generate a demand for services. Community ownership of health should also be prioritised as a means to strengthen local health systems, particularly during emergencies.

These solutions can be considered when determining priorities for future action in research, policy and practice. Chapter 10 concludes with a discussion of the broader implications of findings from this thesis.

## **Chapter 10: Conclusion**

The last chapter considers the contribution to knowledge that is made by this thesis, including the broader implications of findings from this research for the role of social work in the emerging field GMH. The chapter begins with a discussion of a number of themes identified in the study that would benefit from further evidence on effectiveness. What follows is a discussion of the unmet training needs that could be addressed by improving preservice and in-service mental health training of the workforce in LMIC. Policy and health system implications are then explored. The last section of this chapter details how findings from the study are currently being used to enhance mental health services in Sierra Leone and how these results have informed research in other contexts.

## 10.1 Contribution to knowledge

The findings from this study elucidate the role that social work and social interventions may have in addressing the mental health treatment gap and contributing to the emerging field of GMH. The methodological framework for designing interventions that captures the sociocultural context, and the application of this approach during a humanitarian emergency, provides a potential way-forward in improving treatment and care for mental health conditions in LMIC.

In particular, this research indicates that the Sababu intervention model and training programme developed and delivered to the 20 participants from Sierra Leone was beneficial. The first study to measure the impact of a mental health social intervention in Sierra Leone, participants reported the intervention had a meaningful impact on their knowledge, skills, and attitudes for the delivery of mental health care. This research extends previous research that reports effective outcomes of mental health training in Sierra Leone and other LMIC (Abas et al., 2014; Mufunda et al., 2007; Stewart et al., 2016). This research is seminal to the field as

there is nothing currently available to inform the development of social interventions for mental health workers in the Sierra Leone and uniquely in response to the Ebola outbreak.

The pilot of the Sababu intervention measured the impact of training on mental health workers' practice. It therefore contributes to addressing the treatment gap, by building capacity of the workforce. It also included components that have been found to be critical for strengthening mental health services in LMIC (World Health Organization, 2018), such as the awareness raising and community participation component, as well as advocacy with decision-makers (e.g. the nurses who needed to advocate for their mental health specialty to be recognized within the district hospitals). Because it was successful in boosting confidence of the nurses to practice in their communities represented in all 14 districts of Sierra Leone, this work contributes to strengthening service delivery and coverage for mental health conditions across the entire country.

The use of this intervention model poses both challenges and opportunities for researchers, practitioners, educators and policy makers. Based on the findings, reflection of important implications for future research and practice are described below.

## 10.1.1 Implications for research

This study is the first to explore the role of social capital in development of a culturally appropriate, co-produced mental health social intervention for nurses in Sierra Leone. Keeping in mind the study's limitations (Chapter 9), further research is required to expand on this methodological framework and confirm or refute results for the effectiveness of such an intervention in this resource-limited setting. In particular, a longitudinal pre-post pilot study measuring both the impact of training on nurse practice and its effect on service users will help to identify if this intervention could be replicated with future cohorts of nurses, CHWs and social workers in Sierra Leone. The use of validated measures for the study population, in particular measuring access to resources for service users would elucidate the

mechanisms that connect social capital to mental health and wellbeing, particularly during a humanitarian emergency. Some recent research has been done in this area, for example a systematic reviews by Ehsan and De Silva (2015) and Noel, Cork and White (Noel et al., 2018). But more could be done to understand the specific mechanisms of social capital that are beneficial to people with mental health conditions in different contexts and further translation between countries (e.g. from LMIC to HIC with assessment of refugee and asylum seeker populations). Additionally, piloting this approach in other low-resource settings could help to evaluate the effect of social capital on mental health conditions more robustly, unpicking the contextual factors needed for intervention adaptation and observing how the effect of social capital may vary according to socio-demographic context.

The study has identified several areas for improvement and unmet training needs that could be incorporated into future research. Further exploration of the effectiveness of core intervention components is needed; particularly for more attention to be paid to the wider social implications on mental health and wellbeing. As the pilot study results showed, some of the nurses successfully engaged with the community to raise awareness of mental health conditions and the services that exist, such as the nurse who worked with the traditional healers to develop referral pathways. But low levels of knowledge about effective treatment of mental health conditions means that even where these services are available, a very small proportion of people may utilise these services. Interventions to increase service use, such as those that raise awareness and provide community outreach, are an essential component of the health system (Eaton et al., 2017).

The nurses reported feeling more confident and relaxed at delivering the intervention with time and practice. However, difficulty with critical appraisal was repeated by supervisors throughout the intervention. Supervisors mentioned the nurses were still struggling with assessing the mental health symptoms presented or making diagnoses. Such concerns could be explored in group training and peer support.

The intervention model involves a deeper understanding of the role that the social context plays in the cause and course of mental health conditions. It also provides practical tools for relationship building and collaborative working. Some of the nurses reported the training improved their confidence in working with others in the district health settings, such as networking with their superiors and other health workers. There may be potential for the intervention to provide a mechanism for comprehensive service delivery using team working strategies and enhancement of referral pathways, however this would need to be evaluated in future research.

As the limitations of this thesis reflected, there is also a need for research training in Sierra Leone. There is some capacity at education institutions like Fourah Bay College, COMAHS), University of Makeni to engage faculty and students in conducting research. Although this was explored prior to commencement of the pilot study, the EVD outbreak prevented any research capacity building as all universities closed for more than one year. Future research capacity building is needed to train in methodology and engage faculty/students in designing and carrying out both qualitative and quantitative studies. For this to be actualised, public policy and government spending on research priorities and capacity building in the universities is also needed.

### 10.1.2 Implications for education and training

To a large extent, the intervention model and training programme was compensating for shortcomings of the pre-service qualifying course the nurses had received from 2012 to 2013 at COMAHS. Numerous stakeholders and supervisors had observed limited skills in the intervention components, especially relationship building, communicating, and community involvement. A reasonable approach would be to incorporate this kind of training in the basic curriculum for mental health training in Sierra Leone, both for future cohorts of nurses as well as explore opportunities for CHW, social workers and traditional healers.

Furthermore, greater steps to support nurses in district level posts through in-service training are needed. The newly developed DMHU in Sierra Leone are critical, so as to not alienate the newly trained professionals. However, "once installed, rural doctors face challenging situations and are in need for peer-based reflection and support, especially when they start with rural practice and are at highest risk of encountering discouraging critical incidents" (van Dormael et al., 2008, p. 6). Prevention of attrition in future trainees could be ensured through a training package consisting of continuous training, mentoring, supportive supervision and regular meetings, all provided within a professional association or with the support of NGOs working in mental health (e.g. the Building Back Better programme which has evolved from EAMH). The tools that were developed by this study such as the training manuals may be adapted to promote retention.

Supervision provided by the local partner organisations, KSLP and EAMH, was essential to the pilot of the intervention. Upon reflection, this could have been better structured, for example, identifying topics during training that would be useful to discuss in supervision and addressing barriers to implementation on an ongoing basis. Concerns could be addressed by highlighting feedback from nurses that the focused nature of the intervention helped them to learn new skills and achieve their goals in practice. A more structured approach to supervision might have potential to increase fidelity to the model and implementation of the intervention in the long-term. The ability to sustain intervention effects relies on continuing supervision, quality assurance, and support for the mental health workers (Wainberg et al., 2017).

Global workforce education has witnessed a major resurgence of policy attention, partly driven by imperatives to achieve national and global health objectives as set out by the SDGs, and under the umbrella of universal health coverage. Recent reports underscore the centrality of the workforce to well performing health systems to achieve national and global health goals (World Health Organization, 2013b; World Health Organization and Global

Workforce Alliance, 2008). All the reports draw attention to the global crisis of workforce shortages estimated worldwide at 2.4 million doctors and nurses in 57 crisis countries (Frenk et al., 2010). The crisis is most severe in the world's poorest nations that are struggling to achieve the SDGs, particularly in sub-Saharan Africa. The shortages also emphasise associated issues, including imbalances of skill mix and maldistribution of health workers such as health systems failing to ensure adequate rural coverage while generating unemployed professionals in capital cities, and the international migration of professionals from poor to rich countries. Some evidence exists to suggest that traditional healers and CHW may be particularly important to addressing universal health coverage (Nortje et al., 2016; Schneider et al., 2016).

## 10.1.3 Implications for mental health practice

This research sought to advocate for increased focus on mental health social interventions in low-income settings by using Sierra Leone as a particular case. Although Sierra Leone is challenged by an overwhelming disease burden, a lack of resources along with a lack of qualified mental health workforce, connections within the community are especially important. In Sierra Leone, most patients come to the hospital due to illness that they cannot get treatment for in their villages. If there is no basis for an admission the patient will likely return to the village on the same day, and follow-up consultations rarely occur. The short-term interaction between the patient and the mental health provider tests the establishment of good interpersonal relationships and makes good communication skills even more important as the provider may have only this single visit to ensure the patient's care.

In this study, the nurses learning to communicate and build trusting relationships with service users, family and community was critical to enhancing their ability to practice in the resource limited setting and particularly in the context where trust and social cohesion was threatened by EVD. As was mentioned by one of the case examples in the pilot study, the

nurses benefited from skills in self-promotion through the intervention, whereby one of the nurses worked with traditional healers to break down stigma and demonstrate to the wider community that she can effectively support people with mental health conditions. These "success stories" become critical to raising awareness about their services in the districts.

## 10.1.4 Implications for policy

When future training programmes can be implemented in existing services the more cost effective they will be for low-resource health systems (Chisholm et al., 2016). One opportunity to apply learning from the Sababu intervention may be to map existing resources so as to not overburden the very limited resources available. Engagement with local communities and resources for care may help to enhance the support provided by loved ones and trusting individuals.

The WHO has a stepped process for developing mental health policy and services (World Health Organization, 2005b) that includes: developing provincial strategic plans for mental health, in keeping with national policy; develop guidelines for safe and effective mental health services within regional and district hospitals; develop specialist mental health teams to support primary health care staff. Lessons from this study might be integrated into future mental health policy in Sierra Leone and service guidance for the newly established district mental health teams, referral pathways between cadres of the workforce (e.g. CHWs mental health nurses and other specialists), and strategic plans for community outreach or awareness raising.

## 10.2 Next steps

There are a number of ways that lessons from this study have been used to enhance mental health services in Sierra Leone and international locations. The local partner

organisations such as EAMH, KSLP and the Mental Health Coalition have continued to build the capacity of mental health workers and non-specialists.

During and shortly after the Ebola outbreak, co-ordinated efforts facilitated by the international response emphasised the need to address the psychosocial impact but also scrutinised the lack of mental health services available at the primary care level. Funding was earmarked for MHPSS and a coordination group was established. A group was formed to develop a Psychosocial Support (PSS) Toolkit for practical use by psychosocial workers in Sierra Leone. Grounded in the local context, the toolkit made use of tools and exercises being used by organisations and agencies that have acquired expertise in psychosocial. Members of the PSS Toolkit Working Group consulted the Sababu manual and drew upon several aspects from the training programme. For example, the Toolkit features a section on social mobilisation, engagement in the community and the role of linking women and girls to social networks. Drawn from all regions of Sierra Leone, this culturally appropriate Toolkit was intended for practical use, both in the post-Ebola recovery process as well as for more general application in the country. The Toolkit includes a training of trainers manual, as well as a practical manual for psychosocial workers to promote psychosocial wellbeing and heightened resilience in Sierra Leone.

Since the outbreak, EAMH has evolved into an implementation programme based on the WHO framework (2013a), *Building Back Better: sustainable mental health care after emergencies*. The programme links mental health services with those aimed at gender equity and health equity in post-conflict and post-Ebola rebuilding efforts. Through this programme the district mental health nurses remain supported through ongoing training and supervision. The nurses continue to utilise aspects of the Sababu intervention in their work. For example, most recently in working with families affected by the August 2017 mudslide that killed more than 500 people and left more than 3,000 people homeless. The nurses said they were able to use the concepts of "linking" to help support people in the aftermath of the mudslides.

In the future, the intervention model and training programme may benefit from further adaptation for use with CHW and social workers, to provide basic mental health training and build referral pathways within the health system. More rigorous evaluation through a trial might provide a better understanding of intervention effectiveness on outcomes for service users.

This approach has been taken outside Sierra Leone, with ongoing intervention development projects building upon initial advances using the CPI approach in the UK and Sierra Leone. In South eastern Nepal, the research team has co-productively worked with local stakeholders to adapt a culturally appropriate model and gather outcome data about the likely efficacy of the CPI amongst bonded labourers. 60 staff of local partner organisations were trained in an adapted model which was then delivered in 45 community support groups over a period of six months. The RCT measured the impact on psychiatric symptoms, daily functioning, social support, and stressful life events for 103 beneficiaries of the group sessions. Results forthcoming (https://www.york.ac.uk/spsw/research/icmhsr/themes-and-projects/imschrproject-labourersinnepal/).

### 10.3 Summary

Findings from this thesis reflect a multiyear effort to develop and test theory, design, and evaluation of a mental health social intervention that is specific to culture and context. This thesis makes an original contribution by extending the evidence base for the role of social capital theory in addressing the treatment gap of mental health conditions in low-resource settings. The thesis not only contributes to the discussion of theoretical application but also of the utility to design and test effective interventions in the field of social work. The core intervention components that were adapted from the CPI and modelled for the Sierra Leonean context may have relevance in other low-resource settings globally. Collaboration with local organisations will be essential to apply these lessons in future interventions. This

study has demonstrated that interventions which enhance social capital are feasible, acceptable and can be effective in reducing the global burden of mental health conditions.

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## Appendix A: Systematic review tools

## 1. Example search terms for PsycINFO

Construct	Search Terms
Low- and middle-	(Afghanistan or Albania or Algeria or (American Samoa) or Angola or
income countries	Antigua or Argentina or Armenia or Azerbaijan or Bangladesh or
	Barbuda or Belarus or Belize or Benin or Bhutan or Bolivia or Bosnia or
	Botswana or Brazil or Bulgaria or (Burkina Faso) or Burundi or (C\$te
	d'Ivoire) or Cambodia or Cameroon or (Cape Verde) or (Central African
	Republic) or Chad or Chile or China or Colombia or Comoros or Congo
	or (Costa Rica) or Cuba or Djibouti or Dominica\$ or DRC or Ecuador or
	Egypt or (El Salvador) or Eritrea or Ethiopia or Fiji or Gabon or Gambia
	or Gaza or Georgia or Ghana or Grenada or Grenadines or Guatemala or
	Guinea or Guyana or Haiti or Herzegovina or Honduras or India or Indonesia or Iran or Iraq or Jamaica or Jordan or Kazakhstan or Kenya
	or Kiribati or Korea or Kosovo or (Kyrgyz adj2 Republic) or Lao\$ or
	Latvia or Lebanon or Lesotho or Liberia or Libya or Lithuania or
	Macedonia or Madagascar or Malawi or Malaysia or Maldives or Mali
	or (Marshall Islands) or Mauritania or Mauritius or Mexico or
	Micronesia or Moldova or Mongolia or Montenegro or Morocco or
	Mozambique or Myanmar or Namibia or Nepal or Nicaragua or Niger or
	Nigeria or Pakistan or Palau or Panama or (Papua New Guinea) or
	Paraguay or Peru or Philippines or Principe or Romania or (Russian
	Federation) or Rwanda or (S\$o Tom\$) or Samoa or Senegal or Serbia or
	Seychelles or (Sierra Leone) or (Solomon Islands) or Somalia or (South
	Africa) or (Sri Lanka) or (St Lucia) or (St Vincent) or Sudan or
	Suriname or Swaziland or Syria\$ or Tajikistan or Tanzania or Thailand
	(Timor adj2 Leste) or Togo or Tonga or Tunisia or Turkey or
	Turkmenistan or Tuvalu or Uganda or Ukraine or Uruguay or
	Uzbekistan or Vanuatu or Venezuela or Vietnam or (West Bank) or
	Yemen or Zambia or Zimbabwe) OR (exp Developing Countries/) OR
	(LAMIC or LMIC or LAMI) OR (low adj income) OR (middle adj
Mental Health	income)  (ovn Montal Disorders /) OP (montal sedi? (health or ill ser disorders or
weniai Aeaim	(exp Mental Disorders/) OR (mental\$ adj2 (health or ill\$ or disorder\$ or disab\$)) OR ((psychotic or mood or affective or obsessive?compulsive
	or panic or stress or common mental) adj2 disorder\$) OR (psychiatric or
	psychiatry or psychology\$ or neurotic or neurosis or neuroses or
	depress\$ or anxiety\$ or anxious or schizophreni\$ or schizotyp\$ or
	psychos\$ or mania or manic or delusion\$ OCD or phobia\$ or phobic or
	somatic or somatoform or suicide\$)
Methodology	(knowledge adj (transfer or translat\$)) OR intervention\$ OR (Random\$
21112 112 10 07	adj1 control\$ adj1 trial\$) OR RCT OR (clinical adj2 (trial\$ or stud\$))
	OR ((effect\$ or impact or outcome\$ or process\$ or program\$ or
	implem\$) adj3 (evaluat\$ or assess\$)) OR ((quasi-experiment\$ or quasi
	experiment\$) adj1 stud\$

## 2. Data extraction tool adapted from SCIE Data Extraction Tools

A. Publication details	
A.1 Author; A.2 Year; A.3 Title;	A.4 Publication; A.5 Country
B. Nature of the Study	
B.1 Aims	
B.2 Study Setting/context	User/carer/stakeholder involvement
B.3 Population	B.3.1 Inclusion; B.3.2 Exclusion
B.4 Sample Size	B.4.1 Intervention; B.4.2 Control; B.4.3 Total Sample
B.5 Characteristics of participants	Mean age; Sex; Ethnicity; SES; Education
B.6 Study Design	B.6.1 Descriptive; B.6.2 Correlational; B.6.3 Experimental; B.6.4 Review
B.7 Theory/conceptual	Detail
B.8 Sampling procedures	
B.9 Methods of data collection	
B.10 Analyses used	
C. Nature of Intervention	
C.1 Intervention title	
C.2 Aims	
C.3 Location/setting	C.4.1 Community mental health team; C.4.2 Voluntary/Not-for-Profit agency; C.4.3 Independent/Private agency; C.4.4 Statutory; C.4.5 User/peer/self-advocacy agency; C.4.6 Further/higher education institution; C.4.7 Commercial business; C.4.8 Social firm/Co-operative; C.4.9 Occupational health;
	C.4.10 Employment agency; C.4.11 Joint provider; C.4.12 Other (please specify)
C.4 How delivered	C.5.1 Group; C.5.2 Individual; C.5.3 Mixed
C.5 Theoretical framework	
C.6 Model elements and main features	
C.7 Control Group	
C.8 Duration	C.8.1 Unclear; C.8.2 <one +1="" +1-2="" +2-3="" +3-6="" +6-12="" c.8.3="" c.8.4="" c.8.5="" c.8.6="" c.8.7="" c.8.8="" month;="" months;="" week-1="" week;="">one year</one>
C.9 Frequency	C.9.1 Unclear; C.9.2 Daily; C.9.3 Weekly; C.9.4 Fortnightly C.9.5 Monthly; C.9.6 > Monthly
C.10 Follow-up	C.10.1 Unclear; C.10.2 Post intervention- <1 day; C.10.3 1 day-1 week; C.10.4 1 week-1 month; C.10.5 1-3 months; C.10.6 3-6 months; C.10.7 6-12 months; C.10.8 1-2 years; C.10.9 2-3 years; C.10.10 3-5 years; C.10.11 >5 years
C.11 Implementation Issues	
D. Outcomes and results	
D.1 Main measures (Quantitative	; Qualitative); D.2 Secondary measures; D.3 Summary
findings; D.4 Costs reported; D.5	Strengths/limitations; D.6 Author's conclusions

## 3. Quality appraisal tool from SIGN50

Study design	Criteria for quality appraisal
All study designs	Presentation of appropriate and clearly focused
	research question, risk for bias due to selection,
	confounding and/or measurement, and reporting
	of confidence intervals.
Case control studies (quasi-experimental,	Comparable cases and controls, same exclusion
non-random)	criteria, participation rate, similarities at baseline,
	clear case-control definitions, clear establishment
	of controls, blindness to exposure, reliability of
	exposure measure, identification of potential
	confounders and use of sensitivity analysis.
Cohort studies	Comparable baseline, response rate, outcome
	present at baseline, losses to follow-up, impact of
	losses to follow-up, clearly defined outcome,
	blind outcome assessment, acknowledgement of
	impact of non-blind assessment, reliable
	exposure assessment, validity of outcome
	assessment and reliability of exposure measure.
Randomised-Control Trials	Presentation of appropriate and clearly focused
	question, assignment of subjects to treatment
	groups is randomised, adequate concealment
	method is used, comparable baseline, blindness
	to exposure, validity of outcome assessment and
	reliability of exposure measure, intention to treat
	analysis.

## **Overall ratings**

- (++ Low risk of bias) All or almost all of the above criteria were fulfilled, and those criteria that were not fulfilled were thought unlikely to alter the conclusions of the study.
- (+ Moderate risk of bias) Some of the above criteria were fulfilled, and those criteria that were not fulfilled were thought unlikely to alter the conclusions of the study.
- (- high risk of bias) Few or no criteria were fulfilled, and the conclusions of the study were thought likely or very likely to alter with their inclusion.

## **Appendix B: Training Manual**

Please find the Sababu training manual using the following link: https://www.york.ac.uk/media/spsw/documents/cmhsr/Training%20Manual.pdf

## Appendix C: Consent forms, interview guides and questionnaires

Phase I





An Academic Health Sciences Centre for London

#### Study title

Connecting People Intervention International Feasibility Study

#### Introduction

Mental health problems are often inter-connected with social problems and the wider social environment. Research shows there are links between enhanced social relationships and improved wellbeing for adults with mental health problems. However, there is little evidence for effective interventions that promote social engagement, particularly in low-income countries where mental health services have limited capacity. The Connecting People Intervention (CPI) is a social intervention centred on the partnership between a health worker and an individual with mental health problems. It is based upon the principles of co-production, whereby workers and individuals work together to improve an individual's well being and connections with other people.

#### What is the purpose of this study?

Connecting People Intervention International Feasibility Study explores how social interventions can help to meet the needs of people with mental health problems. By identifying and addressing the challenges of resource-limited mental health care in Sierra Leone, researchers from the United Kingdom will collaborate with local stakeholders to develop innovative approaches to addressing those challenges. Our exploratory work will determine whether or not it will be possible to adapt the Connecting People Intervention and co-produce a version for the local context in Sierra Leone.

### What will happen to me if I take part?

This study will use informal discussions and observations with a number of people in Sierra Leone. If you are interested in taking part, **Meredith Newlin** will discuss with you the current mental health services in Sierra Leone, public perceptions of mental health and ways in which workers encourage individuals to develop and maintain relationships with other people. The meeting will last approximately one hour and will be audio recorded.

It is up to you to decide to take part. We will describe the study and go through this information sheet. You are free to withdraw at any time without giving a reason.

### Will my taking part in the study be kept confidential?

Everything you say is confidential unless you tell us something that indicates that you or someone else is at risk of harm. We would discuss this with you before telling anyone else. We will anonymise all quotes used in the publications arising from the study. You have the right to check the accuracy of information about you and correct any errors.

#### What are the possible benefits and risks of taking part?

We cannot promise the study will help you, nor the mental health services provided in Sierra Leone, but the information we gather from the study will help to inform significant gaps in services and how we might seek to improve care in future research. There are minimal risks associated with taking part in this study. The research team has extensive experience working with mental health workers and service users and will be able to answer and concerns you may have about participation in the study.

Meredith Newlin Research Fellow Centre for Mental Health Social Research, University of York meredith.1.newlin@kcl.ac.uk / meredith.newlin@york.ac.uk +44 (0)20 7848 1861 Dr Susannah Whitwell Consultant Psychiatrist/Mental Health Lead King's Centre for Global Health, King's College London Susannah.whitwell@slam.nhs.uk +44 (0)20 7848 5168





An Academic Health Sciences Centre for London

## Study title

Developing social interventions for people with mental health problems in Sierra Leone

#### **Prior to Interview**

Before engaging in informal discussion and creative sessions with the stakeholders, the researcher will first explain why the research is being done and what the session will involve. It will be explained that it is up to them if they would like to take part in the research and if they are happy for the interviews to be audio recorded and detailed field notes to be taken. All data collected during the first stage of research will be kept confidential and quotes anonymous. We can offer to remove names or job titles from publications, and anonymise affiliations where necessary.

Public	
	The researcher has read through the information sheet with the participant
	The participant has had an opportunity to ask questions and the researcher has answered
	The participant is happy for the session to be audio recorded
	The participant understands everything discussed will be kept confidential
	The participant has been given a copy of the information sheet and encouraged to contact the researcher with further questions about the study
	nterview I the participant wish to receive a copy of the study report? YES NO
Are th	ere any safety concerns needed to be further addressed? YES NO
Please	explain and state who will informed of this information disclosed during the interview:
We wi transc contai	Collection and Storage Il anonymise all research data upon return to the United Kingdom at the point of data entry and ription. During the visit to Sierra Leone, audio recording devices, notes, and computers ning identifying information of participants will be kept locked and stored in a safe location. The all be held by the researcher during this time.
	The researchers' laptop and audio device have been encrypted
	First names and codes have been used to keep participant data secure.
	Field notes are kept in the researcher's notebook and stored in a locked suitcase
	Audio recordings have been uploaded to the computer and stored in a locked suitcase

## Discussion guide

#### **Demographic Details:**

### Start by asking participants to tell us a bit more about themselves, probing on the following points.

- 1. Age
- 2. Gender
- 3. Religion4. Family background- where did s/he grow up?
- 5. Job title
- 6. Education/Qualifications
- 7. Experience- ask about background in mental health and story of how their work began
- 8. Length of time in current role

#### Understanding the context of mental health in Sierra Leone

- 1. In the UK, we often refer to individuals with mental health problems as 'service users'. How do you talk about the people with whom you work?
- 2. Public perceptions of people with mental illness- stigma
- 3. Access to and quality of mental health care
- 4. Identifying those in need of care5. Working with families or communities
- 6. Discuss social networks, capital, participation and how these constructs relate to their communities
- 7. Do you currently use any psychosocial models of intervention? Please tell me about these

#### Coalition specific:

their roles and main objectives

perspectives on the direction of care?

MH policy initiatives

How are workers building relationships, referrals, identifying those in need

who does outreach work in the communities?

To what extent do services look at basic needs and risk assessments

Role of traditional healers

Gaps in services

## Social capital themes

#### I. Rapport:

- 1. When you work with someone, how do you go about developing a working relationship with him or her?
- 2. What skills do you use?
- 3. To what extent is it important for you to encourage a service user to develop a secure attachment with you?
  - a. Why is that important?
  - b. If not important why is that not important?
  - c. What are the skills you use to develop a secure attachment? Please provide an example.
- 4. Can you tell me a bit about the care pathways and the journey of an individual within this service?
- 5. How do you help service users to meet other health professionals or other supportive resources? i.e. direct referrals or relationships with other professionals, verbal contracts
  - a. How easy/difficult is it to connect people to mental health resources?
  - b. What are the barriers/ constrains you have faced- give an example
- 6. What helps this process e.g. Workshops, friendships, net working sites networking with agencies. Please provide an example

## II. Opportunities to have social capital

- 1. To what extend do you have opportunity to discuss an individual's concerns about creating and maintaining relationships with other people?
- 2. If someone finds it difficult to make friends, what advice do you offer? With examples
- 3. Do you have opportunity to 'broker ' relationships?

- a. Do you think this is part of your role
- b. How important this role is in a ten-point scale?
- c. How do you help someone who finds this difficult? Please provide an example

#### III. Linking clients with resources

- 1. How might a service user's friends, family or acquaintances help him or her? Please provide an example
- 2. Have you discussed with a client about occasions when they have asked someone else for help, advice, to gather information, support/ other resource?
  - a. If so how did this go?
  - b. If not, why do think that might be? Please provide an example
- 3. Have you ever offered advice to someone to make contact with a 'resourceful' person?
  - a. If so how did you do this?
  - b. If not, what made you not do that?
- 4. What is your understanding of resourcefulness in this context

### IV. Reflecting and evaluating the usefulness of linkages

- 1. Do you have the opportunity to reflect with a service user on the outcome for them of obtaining resources from someone in their social network?
  - a. If so, what is your experience of this? Please provide an example.
  - b. If not, why do you think that is?

## V. Essential skills needed for enhancing social capital

- 1. For you, what are the essentials skills required to enhance someone's access to social capital?
- 2. Do you think you have the necessary skills/confidence to do this?
- 3. What training do you think you might need?

## Introduce the Connecting People Intervention model its most fundamental aspects.

Discuss each section: worker, individual, agency, partnership, outcomes, and how this might relate to the discussion we've just finished about their work and the mental health services in Sierra Leone.

1. Ask how these sections might be modified to fit their current practice. This includes the structure of the model as well as specific content.



#### Study title

Developing social interventions for people with mental health problems in Sierra Leone

#### **Background**

Mental health problems are often linked with social problems and the wider community. Research shows there are links between stronger social relationships and improved wellbeing for adults with mental health problems. However, there is little evidence for effective mental health treatments that promote social engagement. The evidence is especially limited in low-income countries where mental health services have limited capacity, and particularly during humanitarian crises such as the Ebola outbreak.

Sababu Intervention Model is a social intervention framework developed coproductively between researchers and practitioners from the United Kingdom and Sierra Leone. As a framework for mental health practice, Sababu focuses on how a nurse may build a relationship with a service user, his or her family, and members of the surrounding community to support that person in their recovery.

#### **Purpose**

We are conducting a focus group with members of the Sierra Leone Diaspora community in London who are also working or have some connection to mental health services. You are invited to participate. The purpose of the focus group is to examine the *Sababu Intervention Model and Training Programme* for its applicability with mental health nurses in Sierra Leone following the Ebola outbreak.

Specifically, we want to understand how the manual and training materials may be adapted for cultural relevance and considerations we may need to take in the evaluation of the *Sababu Intervention Model*. We will use this information to adapt programme for a refresher training and evaluation in July 2015.

#### **Procedures**

If you participate in this study, you will be in a group of approximately 4-6 members of the Diaspora community. There will be a facilitator who will ask questions and facilitate the discussion. If you volunteer to participate in this focus group, you will be asked some questions relating to your experience with Krio language, Sierra Leone cultural and also your knowledge of mental health services. These questions will help us to better understand how the programme can best be adapted.

Meredith Newlin, Researcher and PhD Candidate International Centre for Mental Health Social Research, University of York Social Care Workforce Research Unit, King's College London meredith.1.newlin@kcl.ac.uk / meredith.newlin@york.ac.uk +44 (0)20 7848 1861

Your participation is completely voluntary. You may withdraw from this study at any time without penalty.

#### **Benefits and Risks**

We cannot promise the study will help you, nor improve the mental health services provided in Sierra Leone, but the information we gather from the study will help to inform significant gaps in services and how we might seek to improve care in the future.

There are minimal risks associated with taking part in this study. We encourage you to ask questions of the researcher, Meredith Newlin, before agreeing to take part, and also to please contact the researchers at any time during the study for more information.

#### **Confidentiality**

Anonymous data from this study will be analysed by the researcher, Meredith Newlin, and written in a report about the development and adaptation of the *Sababu Intervention Model*. No individual participant will be identified or linked to the results. All information obtained in this study will be kept strictly confidential. All materials will be stored in a secure location within King's College London and access to files will be restricted to members of the research team.

#### **Ethical Approval**

This study has been approved by the Office of the Sierra Leone Ethics and Scientific Review Committee and the Social Policy and Social Work Departmental Ethics Committee, University of York.

#### Consent

By signing this consent form, you are indicating that you fully understand the above information and agree to participate in this focus group.

I would like to take part in the research. I've had an opportunity t ask questions and the researcher has answered. I am aware that can withdraw at any time.		Yes No
I know that the researchers are going to use this information to write a report. I am happy for them to use information from the audio recording of the focus group discussion, without my using name or other identifying information.		Yes No
Name of Participant		
Signature of Participant	Date	
Signature of Researcher	Date .	

Meredith Newlin, Researcher and PhD Candidate International Centre for Mental Health Social Research, University of York Social Care Workforce Research Unit, King's College London meredith.1.newlin@kcl.ac.uk / meredith.newlin@york.ac.uk +44 (0)20 7848 1861

## Phase III

## Co-produced, post training evaluation

No help at all

Slightly helpful

		Evaluat	ion of	Training (	Nurses)			
The training pro	ogramme was_	(	please	circle all t	hat apply b	oelow):		
Useful	Necessary	Confi	using		Interes	ting	Dema	nding
Encou	raging	Incomplete		Enjoy	able	Thou	ght-pro	voking
Relevant	Pract	ical	Uns	suitable	(	Convenient		
Please tick one	<b>box</b> for each st	atement below	based	on how tr	ue it is of y	our experien	ce in the t	raining
				Not at all True	Slightly True	True half the time	Mostly True	Completel True
This training wa	as worth my tin	ie						
The trainers we	ere effective co	nmunicators, th	ey					
		nded to questio	ns					
This training me	et my learning o	bjectives and						
expectations								
I gained new sk	ills during the t	raining						
The methodolo	gies and use of	learning activiti	es					
were appropria	te (e.g., role pla	ys, discussions)						
		oks, powerpoin						
model posters)	were of high q	uality and useful						
The logistics of	the training we	re well planned	and					
appropriate (e.	g., venue, food,	timing)						
What specific s	kills did you dev	elop during the	traini	ng?				
To what extent	do you feel the	group was resp	ondin	g, interacti	ing and en	gaging in the	training?	
Not Much	A Little	Some	what		Much	А	Great Dea	I
Can you name o	one <b>strategy</b> or	<b>tool</b> you learnt i	in the	training th	at you will	use in praction	ce?	
Was the trainin social networks		seful or helpful	in dev	eloping yo	ur skills in	linking a servi	ice user to	his/her

Fairly helpful

Very helpful

How confident a	re you in identifying	a service user's as	ssets, social network, and	supportive contacts?
0			O	
No	Not so	Moderate	Somewhat	Complete
Confidence	Confident	Confidence	Confident	Confidence
•	•		s making connections in t and neighbours of service	he wider community (e.g., users)?
O				
Unimportant	Of little Importance	Moderately Important	Important	Very Important
To what extent w	vill this training help	you to perform y	our role as a mental healt	th nurse?
0				
Absolutely Not	Probably Not	Maybe	Quite Likely	Definitely
Probably Not What steps will y	May		Quite Likely	Definitely
What steps will y	ou take to <b>impleme</b>	e <b>nt</b> your learning f	rom this training in practi	ce? Your future plans?
What were the h	iggest <b>strengths</b> of t	the training?		
What were the b	iggest <b>strengths</b> or			
M/hat ware the h	:tl	-f.th.o.tuo.iu.iu.u.2		
what were the b	iggest <b>weaknesses</b> (	or the training?		
Any other comm	ents, suggestions fo	r improvement? _		
•		-		

Thank you!

3-month follow-up evaluation form (as an example for follow-up at 6 and 9 months).

# Sababu Evaluation three months follow-up Please think about your work and experience since the Sababu training in April...

1. What speci	ific <b>skills</b> did you	develop during the	Sababu training? _	
	-	your practice has ch		elationships and
0				
Not Much	A Little	Somewhat	Much	A Great Deal
3. Can you na	ime one <b>strategy</b>	<b>/tool</b> you learnt in S	Sababu training tha	t you used since April?
4. How confide people?	dent are you in <b>id</b>	entifying a service	user's assets, social	network, and support
No Confidence	Not so Confident	Moderate Confidence	Somewhat Confident	Complete Confidence
5. Please providoing.	vide an example o	of one of your servi	ce user's <b>interests</b> a	and what they enjoy
6. How do yo	u facilitate this se	ervice user getting <b>i</b>	nvolved in activitie	s?

7. What are sor	ne examples of	f <b>GOALS</b> that yo	u help ser	vice users to	o set?
8. With how ma	any service use	rs have you use	d Sababu,	or social oth	ner interventions?
0-1	2-3	4-5	6-7	8+	
			· -		<b>S</b> in the community?
<b>O</b>		<del></del>			
Not Much	A Little	Somewhat		Much	A Great Deal
11. What was y	our biggest <b>ach</b>	<b>nievement</b> in us	ing Sabab	u since April	?
-					
12. Have you be Circle one: YES /		ch the Sababu t	raining to	others in yo	ur clinic?
13. Who did yo	u train?				
14. What was y	our experience	e in training othe	ers?		

	your biggest <b>chall</b>	<b>enge</b> in using S	ababu since April?	
16. To what ex health nurse?	tent has the Saba	bu training hel	ped you to perform yo	our role as a mental
Absolutely Not	Probably Not	Maybe	Quite Likely	Definitely
-	your own practi			
		you like to be α	doing in your work tha	at you're currently
		you like to be o	doing in your work tha	at you're currently
unable or not o	doing?			at you're currently

Thank you!

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