



**The role of female community health volunteers
in maternal health service provision in Nepal: A
qualitative study**

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A thesis submitted to the University of Sheffield for the degree of Doctor of
Philosophy

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June 2016

Declaration

I declare that this thesis submitted for the degree of Doctor of Philosophy is the product of my own research and has been composed entirely by myself, except where states otherwise by reference or acknowledgment. It has not been submitted, in whole or in part, for another degree or qualification.

Sarita Panday

June 2016

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Acknowledgements

There are a number of people I would like to thank for their contribution to this study. I am grateful to my supervisors: Professors - Paul Bissel, Padam Simkhada and Edwin van Teijlingen – for all their support and encouragement throughout this PhD. Without their guidance and constant feedback, this PhD would not have been achievable. Next, I would like to thank Ms Claire Glenton from the Norwegian Knowledge Centre for the Health Services and Dr Muhammad Saddiq from the School of Health and Related Research (ScHARR) for helping me to clarify my research questions.

I would also like to acknowledge the faculty scholarship and the fund for data collection from the University of Sheffield, which made it possible to undertake this PhD.

I thank my research assistants –Mr Pravaas Kshretri and Ms Arati Lama - for helping me in my visit to the data collection sites in Nepal. I thank all my participants - health workers, female community health volunteers, and their service users – for giving their valuable time for interviews and group discussions as well as allowing me to see their work. I would like to show my gratitude to the people who welcomed me into their homes and shared their experiences. Their kindness made this work possible.

I am indebted to Ms Rajani Tamang and Mr Rajan Pandey for transcribing the collected data.

I thank my English teacher Deborah Cobbett for reading my work, and advising me on my use of English. I also like to thank Melanie Fitzgerald, Rachel L King, Philippa M Fibert, Helen G Eyre, Jacob A Andrews, Sophie L Reale, Hannah Penton and Jane Candlish for taking time to read my work and giving feedback.

I am grateful to my fellow research students – Ji Hee Youn, Samuel Lassa, Jiban Karki, Amy Whitehead, Jeshika Singh and Erica Atienzo – for their encouragement and motivation. I thank my friend – Laxmi Khatiwada – for her unparalleled support and inspiration throughout the PhD journey. Many thanks go to my mentor Kerry Abrams for reminding me to be kind to myself throughout the process of writing my PhD. Lastly, I would especially like to thank my parents and siblings for believing in my ability to achieve my academic goals.

Abstract

The role of female community health volunteers in maternal health service provision in Nepal: a qualitative study

Nepal achieved the Millennium Development Goal 5 by reducing its maternal mortality by more than two thirds. This achievement has been credited to Female Community Health Volunteers (FCHVs) delivering basic Maternal Health Service (MHS) to pregnant women and mothers in their communities. This thesis explores the role of FCHVs in MHS provision in two regions (the hill and Terai¹), from the perspectives of health workers, service users, and FCHVs themselves.

Data were collected between May 2014 and September 2014 using qualitative methods. Semi-structured interviews were conducted with 20 FCHVs, 11 health workers and 26 women in villages. In addition, four focus group discussions were held with 19 FCHVs and field notes were taken throughout the data collection. Data were analysed using thematic analysis.

The study found that most participants viewed FCHVs as a valuable resource in improving MHSs. In both regions, the FCHVs raised health awareness among pregnant women or mothers and referred them for check-ups. They shared health messages through mothers' group meetings and the meetings were also used for discussions around budgeting and finance, which sometimes left little time for discussion on health topics. Such activities, combined with the FCHVs' lack of education, often proved to be counterproductive to their service provision.

The roles of FCHVs were crucial in the hill region where there was limited access to professional healthcare. An important area of FCHVs' work involved accompanying and assisting women during delivery. In addition, they distributed medicines, administered pregnancy tests and informed women about emergency contraception and availability of abortion services. The FCHVs used novel methods to share maternal health information: for example, they sang folk songs which contained health messages or visited new mothers with food hampers. Such services were invaluable for women in the remote hill villages, who otherwise would not have received any healthcare.

¹ lowland or flat land region along the Southern border of the country

In terms of their motivations to volunteer, this study found that FCHVs viewed their work as a form of basic human and social responsibility. In addition, they reported feeling empowered as a result of training and socio-economic opportunities. However, a lack of financial and non-financial incentives was the key hindrance for them in delivering their services, followed by their perception of community misunderstanding about their services. In addition, health system factors such as lack of medical supplies and irregular supervision hindered them in carrying out their role effectively. In general, volunteers in the Terai received less support than those in the hill region. Furthermore, FCHVs perceived a lack of respect by some health workers towards them. A lack of coordination between government health centres and non-governmental organisations was also noted.

The thesis concludes with several recommendations for policy makers, practitioners and researchers in order to improve the services by FCHVs. These include providing the FCHVs with context specific support - financial and non-financial incentives, access to supplies, educational training, and supportive supervision - to enable them to deliver services more productively. Recommendations are also made for ensuring that FCHVs are recognised and respected for their contribution to MHSs by local health workers and their communities, as well as coordinating activities among local organisations that mobilise FCHVs to ensure that their services flourish in the future.

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List of Abbreviations

\$-Dollar

£- Pound

ANM- Auxiliary Nurse Midwives

ASHA- Accredited Social Health Activist

ASSIA- Applied Social Sciences Index and Abstracts

BPP- Birth Preparedness Package

CBS- Central Bureau of Statistics

CHW- Community Health Worker

CINAHL- Cumulative Index to Nursing and Allied Health Literature

CMA- Community Medicine Assistance

CPR- Contraceptive Prevalence Rate

DFID- Department For International Development

DoHS- Department of Health Services

EOC- Emergency Obstetric Care

FCHV- Female Community Health Volunteers or “volunteers”

FGD- Focus Group Discussion

FHD- Family Health Division

HEW- Health Extension Workers

HMGN- His Majesty’s Government of Nepal

INGO- International Non-Governmental Organisations

IRs- Indian Rupees

Kg- Kilogramme

LHW- Lady Health Workers

MCH- Maternal and Child Health

MDG- Millennium Development Goal

MGH- Mothers’ Group for Health

MHS- Maternal Health Service

MMR- Maternal Mortality Ratio

MoHP- Ministry of Health and Population

MRP- Manual Retention of Placenta

MVA- Manual Vacuum Aspiration

n- Number

NDHS- National Demographic Health Survey

NFHP- Nepal Family Health Programme
NGO- Non-Governmental Organisations
NHRC- Nepal Health Research Council
NHSP-IP- National Health Sector Programme Implementation Plan
NPC- National Planning Commission
NRs- Nepalese Rupees
P.- Page
PHC- Primary Health Care
SDG- Sustainable Development Goal
SOLID Nepal- Society for Local Integrated Development Nepal
UK- United Kingdom
UN- United Nations
UNFPA-United Nations Population Fund
UNICEF- United Nations Children's Fund
USA- United States of America
USAID- United States Agency for International Development
VDC- Village Development Committee
UHC- Universal Health Coverage
WHO- World Health Organisation

Glossary of Terms used in this Thesis

Community: Community or village is defined in terms of people who inhabit a certain geographical area within specific boundaries (e.g. a local community).

Community Health Worker (CHW): This is defined as “a health worker delivering health care who is trained in the context of the intervention, but has no formal professional or paraprofessional certificate or tertiary education degree” (Lewin et al., 2006, p.3). The World Health Organization (WHO) defines “CHWs should be members of the communities where they work, should be selected by the communities, should be answerable to the communities for their activities, should be supported by the health system, but not necessarily a part of its organisation, and have shorter training than professional workers” (Lehmann and Sanders, 2007, p.3).

In this thesis, the term CHW denotes the commonly used terminology to refer to this group of people. For example, the Medical Subject Headings (MeSH) term in Medline for this group is CHW. An exception to the use of the term CHW is for Nepal specific literature where I use the term ‘Female Community Health Volunteers (FCHV) or volunteers’ to distinguish this group from the rest.

Community mobilisation: It is defined as “a capacity-building process through which community individuals, groups, or organizations plan, carry out, and evaluate activities on a participatory and sustained basis to improve their health and other needs, either on their own initiative or stimulated by others” (Howard-Grabman and Snetro, 2003, p.3).

Empowerment: It means that comparatively powerless individuals work together to enhance control over measures that determine their lives and health (Laverack, 2006).

Filariasis: It is a mosquito borne disease and is endemic in the Terai of Nepal.

Lymphatic filariasis is a parasitic infection that can result in an altered lymphatic system and the abnormal enlargement of body parts, causing pain, severe disability and social stigma. The disease can be prevented by treatment with two medicines for people living in areas where the infection is present (WHO, 2015b). For its elimination, FCHVs distributed the drugs through mass campaign organised by the Nepal Government (DoHS, 2014).

Health system: The government health care system with supply of staff including CHWs, access to medical and logistic supplies, their financing and governance.

Maternal health: Health of women during pregnancy, delivery and up to 42 days post-partum.

Maternal health interventions or activities: Any interventions aimed at improving safe motherhood led by CHWs.

Maternal Health Service (MHS): This refers to any services during antenatal, delivery or postnatal time delivered by FCHVs to improve maternal health in the community.

Ministry of Health & Population (MoHP), Nepal: This manages the public health care system of Nepal.

Mobilisation: It is defined as facilitators supporting local communities to actively become involved and engaged in activities and decisions affecting the health of the community members, through the use of their own resources to address the health problems or themselves being an active agent of change (Rosato et al., 2008).

Neonates: Babies from their birth until 28 days of their lives.

Non-Governmental Organisations (NGOs): They are private organisations that pursue activities to relieve the suffering, promote the interests of the poor, protect the environment, provide basic social services, or undertake community development (World Bank, 2002).

Participation: It is either active or passive community involvement (Rosato et al., 2008).

Post-partum: The period beginning immediately after the birth of a baby and extends up to 42 days of delivery.

Post-partum haemorrhage: It is also known as post-partum bleeding, and is defined as the loss of more than 500 ml or 1,000 ml of blood within the first 24 hours following childbirth.

Skilled birth attendant: “A skilled attendant is an accredited health professional — such as a midwife, doctor or nurse — who has been educated and trained to proficiency in the skills needed to manage normal (uncomplicated) pregnancies, childbirth and the immediate postnatal period, and in the identification, management and referral of complications in women and new-borns” (WHO, 2004, p.1).

Skilled birth attendance: The presence of skilled birth attendant during childbirth.

Task shifting: It is defined as “... rational redistribution of tasks among health workforce teams. Specific tasks are moved, where appropriate, from highly qualified health workers to health workers with shorter training and fewer qualifications in order to make more efficient use of the available human resources for health” (WHO, 2007, p.2). Task shifting, initially applied to tackle human resource crisis in Human Immunodeficiency Virus or Acquired Immune Deficiency Syndrome (HIV/AIDS), has potential for wider healthcare systems.

Typhoid: It is a bacterial infection that can spread throughout the body, affecting many organs and can be fatal if prompt intervention is not taken.

Chapter One

Study Background

1.1 Introduction

This thesis explores the role of Female Community Health Volunteers (FCHVs) in Maternal Health Service (MHS) provision in Nepal. The research explores FCHVs' activities in MHS, including the factors that support or hinder their activities in two different regions of Nepal. This chapter outlines the aims and scope of the thesis. The next section explains the study rationale with some background to the study and describes where my interest in the subject began. Following this, the aims and objectives of the research will be outlined. Finally, the structure of the thesis and a brief summary of each of the chapters are provided.

1.2 Contextualising the Thesis

This thesis was informed by research which showed that there has been a substantial reduction in maternal mortality in Nepal (Ministry of Health and Population (MoHP et al., 2007). Evidence suggests that increasing coverage of key maternal health interventions, such as facility based delivery and skilled birth attendant at delivery, helps to reduce the Maternal Mortality Ratio (MMR) (Campbell and Graham, 2006; Requejo et al., 2011). However, provision of essential infrastructure and healthcare providers is far from a reality in Nepal. Nepal has a high home delivery rate (72%) and a low rate of skilled attendants at birth (36%) compared to the target in the fifth Millennium Development Goal (MDG 5) of 60% births attended by skilled birth

attendants (MoHP et al., 2012). Despite these relatively poor indicators, Nepal's MMR was reduced by nearly half from 539 to 281 deaths per 100 000 live births between 1996 and 2006 (MoHP et al., 2012). While there was a worldwide 47% MMR decline between 1990 and 2010, Nepal achieved a reduction of 78% over the same period, thus meeting the target in MDG5 of MMR reduction by three-quarters (WHO, 2012a). For this exemplary achievement, Nepal received a United Nations (UN) Summit Award (Ministerial Leadership Organisation, 2010).

This sharp fall in MMR is potentially surprising given the widespread poverty, instability and political conflict, alongside virtually no presence of the state in rural areas seen over the last decade (Devkota and van Teijlingen, 2010; Dhakal, 2007a; NPC and UN, 2013). However, the decline in MMR was supported by a subnational study of maternal mortality in eight districts of Nepal in 2008 showing a ratio of 229 per 100000 live births (Suvedi et al., 2009). This achievement is partly credited to the large number of community-based workers, FCHVs and their mothers' groups, that target disadvantaged groups and remote areas (Devkota and van Teijlingen, 2010; Engel et al., 2013; MoHP Nepal et al., 2014).

This improvement in maternal health has been explained by the combination of several factors. Data analysis from 172 countries found that 40% of MMR reduction was related to the use of contraception (Ahmed et al., 2012). A similar finding was reported for South Asia where the general fertility rate fell by 33% contributing to a 35% reduction in MMR between 1990 and 2008 (Ross and Blanc, 2012). Analysis of the Nepal Demographic Health Survey (NDHS) highlighted that intermediate factors such as women's education, use of family planning, and decline in fertility, played an important role in reducing MMR (Engel et al., 2013; Hussein et al., 2011; Karkee, 2012). The fertility rate reduced from an average of 6 children in the 1980s to 2.6 in

the year 2011 (MoHP et al., 2007, 2012). Usually distribution of temporary contraception including delivery of basic MHSs is undertaken by Community Health Workers (CHWs) in low-income countries (Byrne et al., 2014; Lewin et al., 2010).

In Nepal, FCHVs², a large group of CHWs are widely mobilised for the provision of contraception as well as other referral services including Maternal and Child Health (MCH) services across the country (Bhutta et al., 2010; MoHP, 2012; Naimoli et al., 2012; NFHP II and New ERA, 2010). Through training in MCH topics, FCHVs have knowledge and awareness in maternal health, which they share with other community members. Therefore, FCHVs are often credited with the recent success in maternal health improvement in Nepal (Devkota and van Teijlingen, 2010; Engel et al., 2013; MoHP Nepal et al., 2014).

1.3 CHW as a Response to an International Human Resource Crisis

While some parts of the world have made enormous progress to improve the health status of their populations, many others fail to provide access to basic health care services and skilled human resources. Over 30 years ago, Rosenfield and Maine wrote a popular article “Where is the M in MCH?” (Rosenfield and Maine, 1985). This question is still relevant when it comes to the rural communities of low-income countries, where the establishment of specialised maternity services is still far from being a reality (Costello et al., 2004). These countries account for almost 99% of global maternal deaths, which are mostly preventable (WHO, 2005). In such a situation, a rational distribution of roles and responsibilities among trained CHWs to undertake specific tasks which are otherwise provided by individuals with longer

² In this thesis, ‘FCHVs’ or ‘volunteers’ represents Nepal’s Female Community Health Volunteers and CHW represents any other Community Health Workers or associated terminologies.

training could improve both access (WHO, 2012b) and cost-effectiveness (Vaughan et al., 2015).

The history of CHWs dates back almost half a century to when China started to use barefoot doctors for provision of basic healthcare services to its population (Lehmann and Sanders, 2007). Seeing the success of China, the World Health Organization (WHO) considered the mobilisation of CHWs to provide access to basic health care services in order to reduce preventable deaths. This was because many developing countries suffered from critical shortage of skilled human resources for health. WHO promoted task shifting, where specific tasks are moved from qualified health professionals to health workers with shorter training, usually CHWs (WHO, 2007, p.2). CHWs became popular in the provision of Primary Health Care (PHC) in the years following the international conference on PHC at Alma-Ata in 1978 (WHO, 1978, 1989). Subsequently, large scale national level CHW training programmes began to meet the health needs of the poor in the developing countries.

In the 1980s, after the initial implementation of CHW programmes, however, there was a decline in CHWs' functions. This continued, as expectations were not met. This may be resultant of unrealistic expectations due to the limited capability of CHWs to deliver PHC. This is discussed in a review of CHWs in national programmes of Sri Lanka, Colombia and Botswana in as early as 1980s (Walt, 1990). Another possible reason for the failure of the PHC approach was the way politicians perceived CHWs. They were seen as a second-class care providers designed to reduce the costs for public healthcare. Priority was placed on curative services, often benefiting a small number of people and neglecting the majority of the poor (Hall and Taylor, 2003).

However, the assumption that CHWs are an inferior level of health care providers has changed and the programmes have gained global attention after the WHO's production

of document on *PHC now more than ever* (WHO, 2008). WHO has recently produced guidelines indicating the role of CHWs in different kinds of MHS provision at the community level which include health promotion, disease prevention and treatment of simple illnesses (WHO, 2015). Growing evidence suggests that rather than being a second option, CHWs form a distinct group which might be a desirable option to resource poor settings in order to increase access to PHC services (Bhutta et al., 2010; Glenton et al., 2013; Lewin et al., 2008; Neupane et al., 2015; Singh et al., 2015). In addition, the governments, Non-Governmental Organisations (NGOs), and international organisations such as United Nations Children's Fund (UNICEF), United States Agency for International Development (USAID) and United Nations Population Fund (UNFPA) support the CHWs (Naimoli et al., 2012; Perry and Crigler, 2013; Perry and Zulliger, 2012; WHO, 2015c).

1.4 CHW Increase Basic Health Service Access and Coverage

Recently, CHWs are assigned to an increasing number of tasks and responsibilities to solve the problems of basic access to MHSs at the community level (Bhutta et al., 2010; MoHP, 2015; Perry and Crigler, 2013; WHO, 2015c). CHWs have been viewed as crucial elements of the workforce for healthcare services regardless of developmental status of the country (Perry et al., 2014). In high-income countries, CHWs are mainly involved in the provision of promotional, counselling and support services (Glenton et al., 2013). For example, in the United States of America (USA) and the United Kingdom (UK), CHWs have been providing services for reducing the burden of non-communicable diseases such as hypertension and diabetes (Perry et al., 2014). In developing countries, CHWs represent a resource to reach and serve

disadvantaged populations, who provide preventive and treatment services to reduce preventable deaths (Lehmann and Sanders, 2007; Lewin et al., 2010).

CHWs in developing countries provide nutrition education, distribute supplements, inform mothers about MCH care, and counsel and distribute means for family planning services (Glenton et al., 2013; Perry et al., 2014). In addition, they are involved in activities such as assisting in outreach clinics, counselling and home care (Lewin et al., 2008). A systematic review reported a range of activities led by CHWs such as health education on malaria, tuberculosis, Human Immunodeficiency Virus (HIV)/Acquired Immuno Deficiency Syndrome (AIDS), sexually transmitted infections, and non-communicable diseases including common mental health problems (Bhutta et al., 2010).

CHWs have been widely mobilised to meet the target for MDGs for MCH, especially in resource-poor countries. After MDGs, the new set of goals, Sustainable Development Goals (SDGs) have been proposed. SDG target 3.1 aims to reduce the global MMR to less than 70 per 100,000 live births by 2030, significantly below the current global MMR of 216 per 100,000 or Nepal specific MMR of 229 per 100,000 (Suvedi et al., 2009; WHO, 2015a). Similarly, SDG target 3.7 aims to ensure Universal Healthcare Coverage (UHC) to sexual and reproductive health-care services, including family planning, information and education, and the integration of reproductive health into national strategies and programmes (WHO, 2015c). UHC recognises that women should not be neglected during pregnancy and they should not die from childbirth. In order to achieve such ambitious SDG targets in a resource-poor country like Nepal, CHWs can be an important resource because they provide MCH services to most women in the country. CHWs are regarded as the single most

important resources in poor healthcare settings by a prominent researcher, Paul Farmer, as he commented:

Hire community health workers to serve them....The problem with so many funded health programs is that they never go the extra mile: resources get hung up in cities and towns. If we train village health workers, and make sure they are compensated, then the resources intended for the world's poorest – from vaccines, to bed nets, to prenatal care...– would reach the intended users (Yamey, 2007, p.1557).

Thus, as a member of the community they are serving, CHWs can provide important MHS to the needy population provided that the programme is acceptable to the service users, the relevant professional health workers, and the CHWs themselves (WHO, 2012b). However, CHW programmes are not immune to criticism.

CHWs programmes have faced significant criticism for not necessarily providing services with better health outcomes and because the quality of service has been poor in the absence of resources and proper supervision (Lehmann and Sanders, 2007; Walt et al., 1989a). Sometimes CHWs are regarded as fourth grade health workers or cheap substitutes for the regular health staff which may lead to non-functioning CHWs or low take-up by users (Berman et al., 1987; Prasad and Muraleedharan, 2007). Women or mothers may not use these services if they are unaware of CHWs' services or feel that the service quality is of inferior quality. This has been shown by the fact that almost 67% of women never sought services from FCHVs and more than 50% of them were unaware of their services in a remote region (Miyaguchi et al., 2014). Raising community awareness of FCHVs' services seems important for the adequate use of services.

Overall, CHWs play an important role in the health care system if they are supported well (Bhutta et al., 2010; Lehmann and Sanders, 2007). Given present pressures on health systems and their proven inability to respond adequately, the existing evidence

suggests that CHW programmes are not cheap or easy to implement. However, investing in CHWs is worthwhile, since the alternative in reality is no care for the poor living in geographically inaccessible areas (Lehmann and Sanders, 2007). The value of investing in CHWs has been accepted by countries such as Pakistan, Nepal, and India (the Chhattisgarh state), where strong government led support has resulted in a wide scale expansion of CHW programme (Bajpai and Dholakia, 2011; New ERA et al., 2006; Wazir et al., 2013).

1.5 Rationale for the Study

There is little evidence concerning the role of CHWs in MHSs (Perry and Zulliger, 2012; UNICEF, 2004). Prior to the commencement of the present research study, a literature search was performed on the role of CHWs in maternal health improvement in developing countries. The search found that the majority of the literature was about child health with little research devoted to about maternal health. For example, a systematic review of effectiveness of CHWs on MCH showed that CHWs are effective in increasing immunisation coverage, improving breastfeeding rates, reducing infant mortality and improving tuberculosis treatment (Lewin et al., 2010). However, a lack of evidence on the maternal health aspect of the CHW programmes was noted.

This research is timely and important in the context of Nepal. Firstly, FCHVs form the foundation of Nepal's community-based PHC system. They provide MHSs to most of its rural population with limited access to basic health care services (MoHP, 2010).

They are the first point of contact for most rural women and hence bridge the gap between the community and the healthcare centres. They provide health education to mothers, make referrals, provide commodities and treat some illnesses – diarrhoeas

and pneumonia in children under the age of five. Without volunteers, many women would have to travel long distances to receive public healthcare or would simply be deprived of services. Moreover, health workers rely on reporting from volunteers for their community health activities (Department of Health Services (DoHS), 2014).

Secondly, there has been a renewed interest in public healthcare approaches which put community at the centre as shown by the community level practices and the Nepal Government's policy. The national health policy of Nepal aims to improve the quality of healthcare services through capacity building of FCHVs and provision of necessary incentives (MoHP, 2015, p.10). In addition, my review of the literature on "community based innovations in implementation and upscaling of maternal and newborn interventions in fragile states, a systematic review" (Panday et al., 2012, unpublished) showed that almost all community level MCH interventions operated by government or NGOs involve FCHVs and they have some role to play. This is because the volunteers are trusted in their communities and are a means to reach pregnant women and mothers (Glenton et al., 2010). Despite the reporting of a wide use of FCHVs in MCH programmes, there is a lack of studies on the volunteers' perception of their role, including their needs and challenges they face in providing MHSs.

Thirdly, FCHVs have no support system despite their vital roles within PHC programmes (Rasmussen, 2014). As expected, FCHVs with specific training, incentives and focused activities, for example, those organised by NGOs or with specific programme activities, have been reported to be successful in improving maternal health outcomes (Manandhar et al., 2004; McPherson et al., 2006; McPherson et al., 2010; Morrison et al., 2010). However, there is no study which has

explored the perceptions and experiences of volunteers operating in rural communities within the public health programme of Nepal.

While there has been a research study looking at the experiences of programme managers to find the factors that promote or hinder volunteers' work (Glenton et al., 2010), no previous study has attempted to bring the different perspectives together and compare different settings within Nepal. This research emphasises the experiences and perspectives of FCHVs, while also exploring the perspectives of service users and their local health supervisors in order to complement the responses from the volunteers. Given the upscaling of the programme and an expansion of FCHVs involvement in MHSs in the villages, and a simultaneous significant reduction of MMR in Nepal, it is crucial to explore FCHVs' perspectives on MHS provision. More specifically, there is a lack of high quality qualitative evidence in this area of research.

This study used a qualitative approach and there were several reasons for this. My literature review suggested the need to explore FCHVs' perspectives, as there is limited evidence in this area. I was surprised to see the number of anecdotal reports showing the success of FCHV programme in Nepal (Engel et al., 2013; Hua, 2015; Mishra, 2014), which is further discussed in Chapter Three. Furthermore, my own work as a health officer in remote areas of Nepal helped me to focus on the FCHVs who had limited roles in the past compared to their more demanding and ever-expanding role at present. By considering both service providers' and users' experiences in the context of MHS provision in rural Nepal, this study aimed to give a voice to one of the most utilised, yet underrepresented groups in the research. Understanding their perspectives is important for effective policy decision-making, as policy makers need to consider the views and experiences of those who have been working on the ground.

1.6 Research Aims and Objectives

General Aim

The aim of this study is to explore the perceptions of the role of FCHVs in MHSs in two areas (the hill and Terai) of Nepal, from the perspectives of health workers, service users, and FCHVs themselves.

Specific research objectives are to:

1. explore FCHVs' perceptions of their roles in MHS provision in the hill and Terai regions of Nepal;
2. elicit the service users' perceptions about the roles of FCHVs in MHS provision;
3. explore health workers' perceptions about the roles of FCHVs in MHS provision;
4. explore and assess factors that promote or hinder FCHVs in their service provision;
5. compare and contrast any misunderstandings/gaps or similarities in the perceptions of FCHVs' role in MHS provision in the two parts of Nepal.

Specific research questions are as follows:

1. What do FCHVs perceive their role to be in MHS in the hill and Terai regions of Nepal?
2. What are services users' perceptions of FCHVs' MHS provision in their villages?
3. How do health workers perceive the roles of FCHVs in MHS provision?

4. What factors promote or hinder FCHVs in the service provision?

4. Are there any gaps in perceptions of the roles of FCHVs in MHS provision?

It is essential to note that whilst the research questions are presented here for the convenience of the reader, they were informed by the literature review (Chapter Three).

1.7 Outline of the Thesis

This thesis is divided into eight chapters. Chapter One presents a brief background to the study, its rationale, aims and objectives, and the thesis outline. Chapter Two looks at the context in which the research is set. It briefly introduces Nepal's socio-political situation followed by its maternal health policies and human resources for maternal health. Nepal managed to reduce its MMR despite severe constraints on human resources for health and ongoing political conflict. This reduction in MMR is attributed to FCHVs who provide MCH services throughout the country and are involved in the majority of community-level health interventions. Therefore, the chapter highlights the role of FCHVs in the key maternal health programmes such as birth preparedness, safe motherhood, and safe abortion services. Chapter Two concludes with the importance of research on the role of FCHVs in the context of MHS provision.

Chapter Three reviews literature related to MHSs provided by CHWs in South Asia with a particular focus on Nepal. Studies of CHWs from some countries of Africa were also included, as publications of volunteer CHWs were noted in later stage of PhD. The review chapter begins with the review methods followed by presentation of

characteristics of CHWs in South Asia. The review is summarised thematically under the following headings: CHW interventions in maternal health, effectiveness of such interventions, and factors that promote or hinder CHWs at their work. Factors affecting the service provision of CHW are reviewed on topics such as selection of CHWs, training, financial or non-financial incentives and community recognition. In addition, the health system factors are reviewed which include supervision, access to supplies, referral facility, attitude of paid health workers towards CHWs, and NGO involvement in mobilisation of CHWs.

The literature review shows that FCHVs are widely mobilised for maternal health promotion, disease prevention and treatment activities. They are often praised for their contribution in increasing access to MHSs; however, empirical studies exploring the experiences of FCHVs in MHSs are largely missing in the literature. Furthermore, there are limited empirical studies exploring the available support to FCHVs, what they think about those supports, and what challenges they are experiencing while providing MHSs in their communities. This research aims to fill these gaps.

Chapter Four presents detailed methods for the research. My own position in relation to the choice of methods is discussed. Given the lack of qualitative evidence in this area, this method was deemed to be suitable to answer the research questions. The chapter explains the multiple methods of data collection: semi-structured interviews, group discussions and field notes, in two different regions, the hill and the Terai of Nepal. Subsequently, the use of a combination of purposive and snowball sampling to select the village and the interviewees is described. This is followed by a description of data management, transcribing and translation procedures. Then, the use of thematic method for the data analysis is explained and steps in analysis are presented in detail. Subsequently, reliability and validity of the study, and the researcher's positionality

within the research are described. Finally, the chapter concludes with ethical considerations for the research.

Key findings derived from this study are discussed in Chapters Five and Six. Chapter Five identifies the main MHSs provided by FCHVs in the local communities across the different groups of data sets – FCHVs, their service users and health workers. The findings are then compared and contrasted with reference to the two study regions: the hill and the Terai. Regarding the FCHVs' involvement in MHSs, four main themes are discussed: a) access to MHS in rural villages, b) maternal health promotion through informal routes, c) maternal health promotion through formal routes and d) FCHVs taking the role of formal healthcare providers. Findings showed that generally in both regions, poorer women received the services, thus making FCHVs an important human resource in improving access to MHS in the regions. Overall, the study shows that FCHVs are providing a wide range of MHSs to their communities despite their limited training and education.

Chapter Six complements Chapter Five by providing an account of key factors that promote or hinder MHS provision by FCHVs. The key factors affecting FCHVs' services are presented into three levels: a) individual, b) community and c) the health centre. At the individual level, four key factors were noted: (a) age of FCHVs, (b) education of FCHVs, (c) motivation to volunteer, and (d) concerns for financial and non-financial incentives. Although volunteers were very concerned about financial and nonfinancial rewards for the smooth delivery of their services, they were motivated to volunteer. The four key reasons for FCHV motivation are described: serving people as an expression of social responsibility, the opportunities for learning or training, the desire for employment and the motivation of friends and family.

At the community level, community recognition of FCHVs' services and FCHVs' concern regarding community misunderstanding of their services are presented. FCHVs were recognised in their communities mainly because they were from the same village, provided some medicines and had some visible tools. On the other hand, FCHVs reported that some community members viewed them as paid workers and even providers of needless or harmful medicine. Such concerns served to demotivate FCHVs.

Finally, at the health centre level, support of health centres and NGOs in terms of FCHVs' selection, training, supplies of medicines, supervision and incentives, are presented. The absence of any of the above factors had a marked effect on the level of services provided. Two other factors that hindered FCHVs' service provision are presented: FCHVs perceived a lack of respect by some health workers towards them and a lack of coordination between government health centres and NGOs was also noted.

Chapter Seven draws together the main findings identified in the study for discussion in the light of current literature. Building on the analysis of literature related to CHWs, the discussion focuses on three key thematic areas: (1) FCHVs' involvement in MHS provision (informal routes, formal routes – regular mothers' group meetings, and additional role of FCHVs); (2) motivation to take part in volunteering (regarding 'service' as social responsibility, perceived self-empowerment and community recognition); and (3) challenges of the volunteer programme: financial and non-financial concerns of volunteers, lack of education of volunteers, volunteers' perception of community misunderstanding, avoidance of healthcare use by service users of certain ethnic groups, and inadequate health centre support. In both study regions, FCHVs were passionate about their services and felt empowered, but they

demanded financial compensation for their services. The importance of health system support for FCHVs to work effectively in their communities is discussed. Following this, the chapter moves on to explain the study's strengths, limitations and challenges. Thus, this chapter sets the basis for discussing the implications of the study.

Chapter Eight concludes the thesis by presenting the key achievements of this study. The main finding of the study is that FCHVs are critical human resources for MHS provision in the remote hill villages where formal health care systems and skilled health care resources are limited. They are motivated to serve people; however, they lack the necessary health system support to do so. In order for them to work effectively, context specific support – financial and non-financial incentives, access to supplies and supportive supervision – is necessary. In addition, effective coordination between government health centres and NGOs is necessary. The last chapter also presents study implications in terms of the future of FCHVs and recommendations are made for developing guidelines for policy and practice, including potential areas for further research.

Chapter Two

Study Context

2.1 Introduction

This chapter sets the context in which the FCHVs provide MHSs in Nepal. The chapter begins with brief information on the general context of Nepal followed by a brief description of being a woman in Nepal. Subsequently, description of the health system of Nepal, the maternal health situation, policies addressing maternal health and human resources for maternal health are presented. This section then moves on to discuss the FCHV programme, FCHVs' involvement in maternal health, mobilisation of FCHVs by NGOs, and the financing of FCHVs. This chapter helps to set the overall context for this research while describing the role of FCHVs in MHSs in Nepal.

2.2 General Context of Nepal

Nepal is a land-locked country situated between India and China. With a land area of 147,181 km² (51,454 miles), Nepal consists of three distinct topographical zones (Figure 1): the Himalayas, the hills and the Terai (flat lands) with population of 6.7%, 43% and 50% respectively (Central Bureau of Statistics (CBS), 2012). The difficult geographic terrain of the diverse countryside isolates many people and thus deprives them of access to services. Access to Himalayan region is the most difficult; therefore, this area was not included in this study (Section 4.4.1).

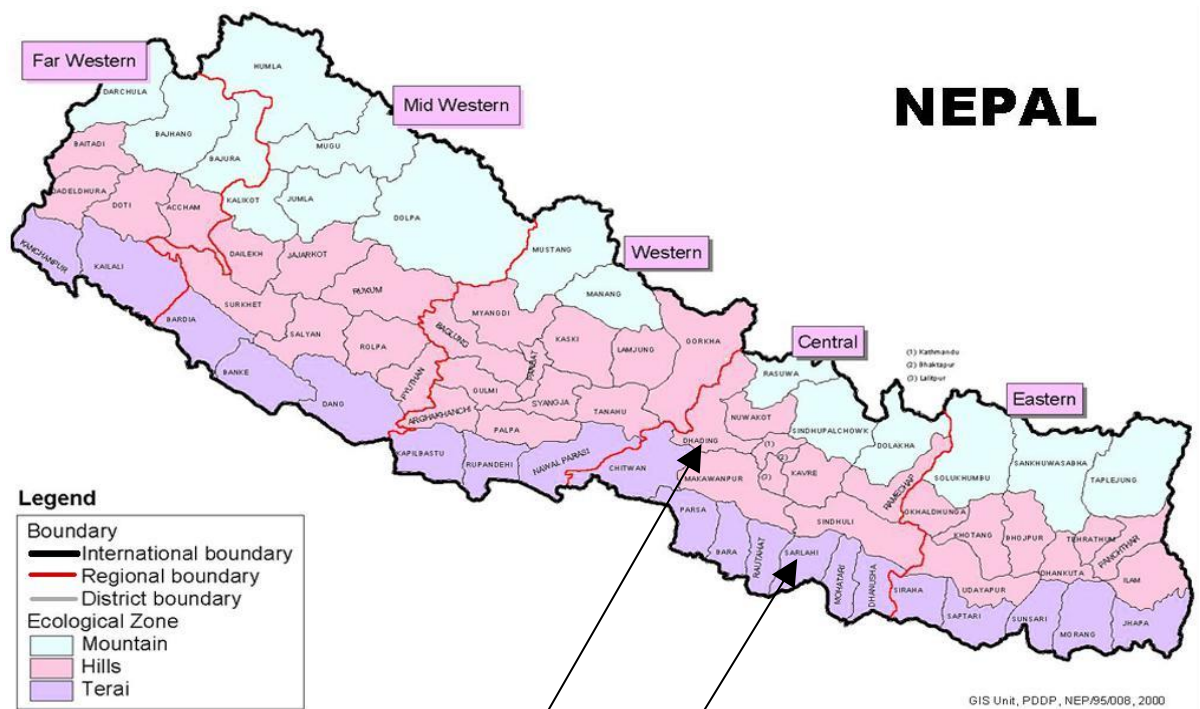


Figure 1 Study sites (indicated by arrows)

Source: e-Pop Info Nepal (<http://www.eawpbmohp.gov.np/epop/index.php/national>)

Administratively, Nepal is divided into 75 districts and has a population of about 26.5 million with a yearly population growth rate of 1.35%. It has 3,754 Village Development Committees (VDCs) covering most (80%) of the population. The country is multi-religious, multi-ethnic and multilingual. Hinduism is the most popular religion (about 81%), followed by Buddhism (9%), Islam (4.4%), Kirat (3%) and Christianity (1.4) (CBS, 2012).

With a human development index of 0.46 in 2012, Nepal is in 157th position out of 186 countries and has gross national income per capita in purchasing power parity of US\$2,194 with life expectancy of 68 years (United Nations Development Programme (UNDP), 2013). A quarter of its population live below the poverty line (CBS, 2011). A significant contribution to poverty reduction is made by remittances from Nepalese emigrants working in other countries (Saadat et al., 2014) which constitute 29% of total gross domestic product of Nepal (World Bank Group, 2016). This reliance on

global labour markets creates uncertainty about their continued impact on poverty reduction in Nepal (NPC and UN, 2013).

Nepal was ruled by a monarchy for most of its history except for the brief period of multiparty democracy in 1959. In the mid-1990s, due to the growing inequality and discrimination based on caste and ethnicity, a Maoist insurgency began (Stewart, 2003). This insurgency lasted a decade (1996-2006) with intense conflict among the most disadvantaged groups (Murshed and Gates, 2005). After over 17,265 deaths (Gautam, 2012) and the destruction of much of the country's infrastructure including 40 health posts (Ghimire and Pun, 2006), a peace agreement was reached in 2006 between Maoists and other political parties. The monarchy was abolished and the country became the Federal Democratic Republic of Nepal after the Constituent Assembly election of 2008. In 2015, after years of struggle, Nepal adopted a new constitution, which faced severe criticism from people in the Terai.

2.3 Being a Woman in Nepal

Nepal is a signatory to several international women's rights treaties and conventions, for example, the International Covenant on Economic, Social and Cultural Rights adopted by the United Nations General Assembly on 16 December 1966, and the Convention on the Elimination of All Forms of Discrimination Against Women. Despite the country's progressive policies and legislation related to gender equity, Nepal has high gender inequality, ranking 145th out of 187 countries (United Nations Development Programme (UNDP), 2013). Nepalese women in general are rarely involved in household decision-making (Furuta and Salway, 2006; Simkhada et al., 2014). Women, especially from the rural and Terai regions, are less likely to make decisions about their own health and have less autonomy (Acharya et al., 2010; Nixon,

2015). This may be related to deep rooted gender stereotypes and cultural norms arising from a patriarchal society (Nixon, 2015).

On the other hand, it has been argued that women who have been able to take on the role of FCHVs have experienced growth in their leadership and empowerment in the village. FCHVs are empowered as a result of training and education they receive as volunteers (Glenton et al., 2013). Empowerment refers to FCHVs being equipped with knowledge around the management of health issues including how to manage them within their communities and this eventually leads to increased social status. For example, some FCHVs have been elected as village committee members in local elections (Family Health Division (FHD, 2010). These FCHVs are also better prepared for taking care of their families. That is why investment in FCHVs is also investment in women which is important for their overall development.

2.4 Health System of Nepal: Organisational Structure

The Department of Health Services (DoHS) under the Ministry of Health and Population (MoHP) is responsible for the provision of healthcare services in Nepal. According to the institutional framework of DoHS (Appendix 1), the first contact point for basic health services is the Sub-Health Post (SHP) or Health Post (HP). Every level above the SHP is a referral centre in a hierarchical system, from health posts to PHC centres, and then to district, zonal and regional hospitals, and finally to the speciality tertiary care centres. At community level, Nepal has an extensive coverage of volunteers – FCHVs – throughout the country, who report to the SHPs (indicated by an arrow in Appendix 1 (DoHS Annual report, 2013/14). However, in

practice, some users go directly to secondary healthcare sites – hospital – without first visiting SHPs or HPs.

2.5 Maternal Health Status in Nepal

Nepal has achieved significant progress in reducing maternal mortality over the last decade (Figure 2). However, there are still many maternal deaths as one Nepalese woman dies every four hours from pregnancy-related causes and most of these deaths occur in rural areas (MoHP et al., 2012). The 2008-2009 maternal mortality survey indicated that pregnancy and childbirth-related factors accounted for 93% of maternal deaths and that the leading cause (24%) of such deaths remained post-partum haemorrhage (Suvedi et al., 2009). Other avoidable causes such as eclampsia, abortion, obstructed labour and puerperal sepsis were reasons for more than two-thirds of maternal mortality (Rijal and Uprety, 2012; Suvedi et al., 2009). Often these deaths can be prevented if FCHVs can make the community members more alert to the danger signs of pregnancy, and if there is immediate referral and access to health care services.

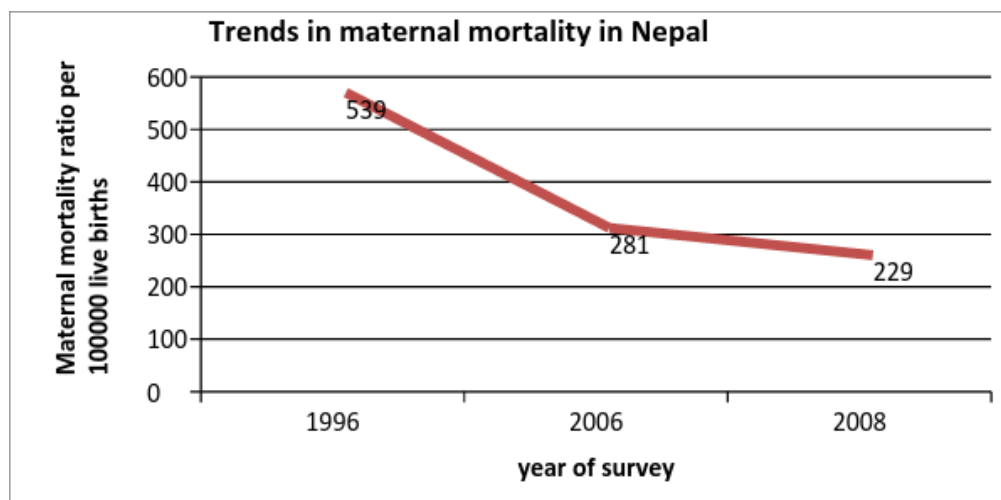


Figure 2 Trends in estimates of Maternal Mortality Ratio (MMR) in Nepal

Source: (MoHP et al., 2007; Suvedi et al., 2009)

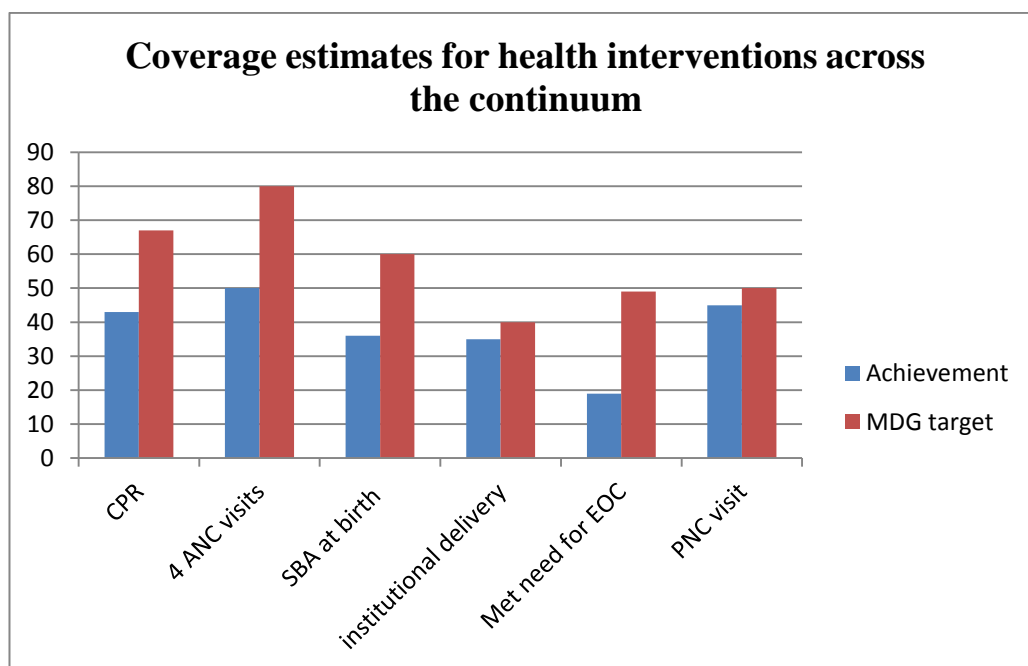


Figure 3 Coverage estimates for health interventions across the continuum

(CPR- Contraceptive Prevalence Rate, ANC- Antenatal Care, SBA- Skilled Birth Attendance, EOC- Emergency Obstetric Care, PNC- Postnatal Care)

Source: Nepal Demographic Health Survey (MoHP et al., 2007, 2012)

Figure 3 shows the coverage estimates for maternal health indicators. Skilled attendant at birth and availability of emergency obstetric care are far below the MDG target (MoHP et al., 2012).

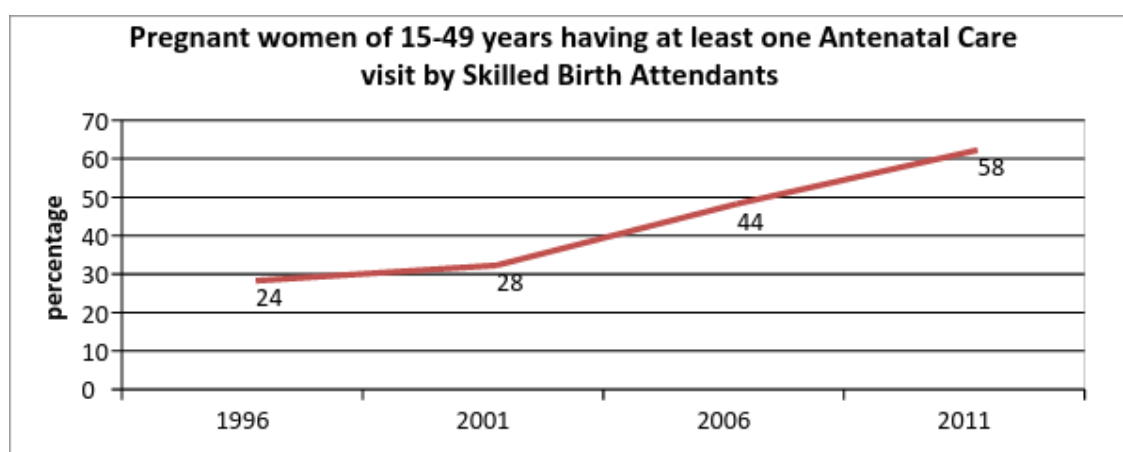


Figure 4 Pregnant women having at least one antenatal care visit by skilled birth attendants

Source: Nepal Demographic Health Survey (MoHP et al., 2007, 2012)

Figure 4 shows the increasing trend of pregnant women having at least one antenatal visit linked with skilled birth attendants over the years from 1996 to 2011, yet, more than 40% of women do not make antenatal care visits.

2.6 Policies Addressing Maternal Health

Reproductive health rights have been stated as a basic health right in the constitution of Nepal (MoHP, 2015). Maternal Health was one of the priority areas in the National Health Policy 1991 and it is the priority in the new National Health Policy 2015 which aims to extend the PHC system to the rural population through community-based activities. Accordingly, health care policy ensures the availability of free essential healthcare services in basic health care facilities in every district (MoHP et al., 2012). In addition, the safe abortion policy introduced in 2002 allows trained health personnel to perform the abortion with no restriction in the first 12 weeks of pregnancy (MoHP, 2012); however, implementation and coverage of most of these plans and policies are partial and usually limited to accessible regions only (McPake et al., 2013).

Community specific policies include the FCHV Strategy 2010 which dictates the role of volunteers, and specifies which programmes they can serve for. FCHVs are mobilised in community interventions such as the community-based integrated management of childhood illness programme, the community based neonatal care package, and the National Health Sector Programme – implementation plan 2 (NHSP-IP2) 2010-2015. The NHSP-IP3 2015-2020 also need to continuously train and educate FCHVs to meet its goal for improving referral and providing services to poor. The FCHVs are also involved in implementation of the following policies: a) family planning services policy, b) the national nutrition policy and c) the national safe

motherhood and new-born health long-term plan 2006-2015 (DoHS, 2014). This indicates a broad role of FCHVs in various PHC activities, in which provision of MHSs is one of their key functions. This is also the area of my interest. Major policies and programmes on maternal health in Nepal are summarised in Table 1 in chronological order.

Table 1 Policies and major programmes for maternal health in Nepal

Year	Policy/Programme
1988	Female Community Health Volunteer Programme (for maternal and child health improvement)
1995	Safe Motherhood Policy
1998	Reproductive Health Strategy
2002	Safe Abortion Policy
2002	Nepal Safe Motherhood and New-Born Health Long Term Plan (2002-2017)
2004	National Neonatal Health Strategy
1997-2004	Nepal Safe Motherhood Programme
2005	Safe Delivery Incentive programme
1997-2017	Second Long Term Health Plan (Primary healthcare system delivered reproductive health package)
2005	Support to Safe Motherhood Programme
2004	Safe Abortion services
2006	Revised Safe Motherhood and Neonatal Health Long Term Plan 2006-2017 (Includes integrated plan for mothers and new-borns, addresses equity and access)
2006	Free Healthcare Policy (2007) (Free basic healthcare services)
2006	Gender Equality Act (Provides 33% reservation for women in government system)
2006	National Policy on Skilled Birth Attendants
2014	National Blood Transfusion Policy
2007	Skilled Birth Attendant Strategy: National In-service Training Strategy for Skilled Birth Attendants: 2006-2012.
2008	Aama (safe motherhood) Policy
2009	Aama Surakshya (Safe Motherhood Programme
2008	Safe Blood Programme
2011	Safe Abortion Implementation Guidelines
2015/2072 BS	Nepal Health and Population Policy 2072

Source: (MoHP, 2010, 2015, MoHP et al., 2012)

2.7 Human Resources for Maternal Health

Nepal suffers from a chronic shortage of technical human resources for health.

Currently, there are 7 health workers per 10,000 against the WHO guidance of 23 per 10,000 population (WHO, 2010). This has weakened the performance of the public health system. Huge shortages in the workforce have been noted in the recent human resources for health plan 2011-2015, as the population in the last decade increased by 45% compared to a rise of merely 3% in human resources (MoHP, 2012). Moreover, the migration of skilled health workers from rural to urban areas and to other countries is causing challenges for the health care system. Further issues exist in relation to disproportionate and unequal allocation of health workers with the majority of skilled workers living in urban regions (Society for Local Integrated Development Nepal (SOLID Nepal) and Merlin Nepal, 2012) and working for the private sector (McPake et al., 2013).

In the above circumstances, provision of professional midwives combined with the availability of emergency obstetric care services can prevent up to 90% of maternal mortality (UNFPA, 2012). However, Nepal does not have professional midwives (Bogren et al., 2013b), and maternity care in the villages is provided by community level workers such as MCH workers, village health workers and FCHVs (Advancing Partners & Communities, 2014). A brief outline of these groups is given below.

MCH workers are paid health workers who receive a monthly salary of NRs 14,000 or £93. They provide immunization and outreach services and linked to SHPs as village health workers. In addition, they provide antenatal care and postnatal care and assist with deliveries at the health facility or home. There are 3,129 MCH workers in Nepal (Advancing Partners & Communities, 2014). They are slowly being phased out as a cadre and either being trained as auxiliary nurse midwives or being replaced by these

midwives. MCH workers are married women from their own community, have eight years of schooling and have completed three months of training. They supervise FCHVs.

Village health workers receive the same amount of money as MCH workers. They provide immunisation and outreach services within the catchment areas of health facilities. In total 4,013 village health workers are working (Advancing Partners & Communities, 2014), but their number also might be reduced as they are slowly phased out or further trained and upgraded as auxiliary health workers. Village health workers have a minimum 10 years of schooling and have completed three months of training. They also supervise FCHVs.

FCHVs are volunteers and are the main group providing MCH care in the community. There are total of 51,470 FCHVs across the country (DoHS, 2014, p.72). They can be either literate or illiterate (Table 2 p.28). My research focus is FCHVs as MHS providers, so the rest of the thesis will discuss them.

2.8 FCHV in Maternal Health

This part of the literature review is based on information on FCHVs gathered from Nepal through national strategy documents, peer-reviewed journals, local journals, newspapers and international reports from WHO, USAID and the UNICEF. This review sought to present four key areas for FCHVs in Nepal: a) the introduction of the FCHV programme (its origins and objectives), b) FCHVs' activities in maternal health (general maternal health activities, FCHVs in national programmes, and their recording activities, c) Mobilisation of FCHVs by NGOs, and d) financing of FCHVs.

2.8.1 Introduction of FCHV programme

Here, I will briefly describe the FCHV programme, its goal, types of FCHVs, and their selection, training, and supervision. The FCHV programme was begun in 1988 by the Government of Nepal while recognizing the importance of women's participation in health promotion. Initially, the programme was started in 27 districts, but it expanded to the whole country by 1995 (Family Health Division (FHD), 2002). This programme focuses on improving access to MCH services while minimizing the cost associated with access to these services. FCHVs are considered the least-skilled informal health service providers in the public health system (FHD, 2010).

The overall goal of the FCHV programme is to contribute to reducing fertility and under 5 mortality and MMR with an emphasis on family planning and MCH through community participation in public health activities. These goals are expected to be achieved through provision of knowledge and skills for women's empowerment (Section 2.3), increasing awareness of health issues and involvement of women in local health activities (FHD, 2010).

There are two types of FCHVs: ward-based (hill and mountain regions) and population-based (the Terai). In the former, there is at least one volunteer per ward, while in the latter the allocation is in proportion to the number of residents. In general, there is expected to be one FCHV for every 250, 350 and 1000 population in the mountain, hill and Terai regions respectively (New Era et al., 2007). According to the FCHV strategy, volunteers are selected in each village by the mothers' group executive committee, which meets every month to discuss health issues. Upon selection, FCHVs receive 18 days basic training on selected PHC topics, MCH care and family planning. The training is divided into two separate sessions of nine days each (FHD, 2010). Then, each FCHV receives a uniform, education and

communication materials, a nameplate displaying her volunteer service, and a kit box with necessary drugs and supplies for conducting outreach services (Advancing Partners & Communities, 2014). Such training and supplies are provided from government health facilities.

The FCHVs meet with health workers monthly and biannual which is also an opportunity for them to check and update the work (FHD, 2010). In addition, refresher training for five-days is provided every five years. However, there is no provision of regular support to FCHVs (Advancing Partners & Communities, 2014, DoHS, 2014).

Table 2 Characteristics of female community health volunteers

Number	51,470 working throughout the country (DoHS, 2014)
Median Age	38 years old (4% over 60 years)
Coverage	97% rural wards
Literacy	62% - literate (22% literate but no school education) 42% - never attended a school
Caste/Ethnicity/Religion	FCHVs represent indigenous groups at about their rate in the population, but they represent half of the Muslims and Dalits (untouchable) population
Attrition rate	4% average annual turnover
Workload	5.1 hours per week on average
Main sources of information	Local health facility, training, radio
Supervision	89% regular supervision meeting, 71% had meeting one month prior to survey

Source: (New ERA et al., 2007)

Table 2 shows characteristics of FCHVs. The median age of FCHV is 38 years. Approximately two-thirds are literate while a substantial minority (42%) never attended school. The representation of FCHVs from Dalit and Muslim populations is half compared to the general population. The attrition rate is very low with 4% annual turnover. They work part-time for approximately 5 hours a week.

2.8.2 FCHVs' activities in maternal health

In this section, the main roles of FCHVs are discussed in terms of their health promotion role, disease prevention role, and curative roles. Then FCHVs' involvement in general maternal health activities is presented. Subsequently, a description of FCHVs in national programmes for maternal health is provided. Finally, their role in reporting of health activities is briefly presented.

2.8.2.1 Maternal health activities

FCHVs' main role is to promote the health of pregnant women, mothers and children. They do so through information sharing at the mothers' groups for health meetings held monthly in their local communities (MoHP, 2010). They share information about family planning, antenatal care, delivery at health facilities and postnatal care. They refer pregnant and post-partum women with danger signs to nearby health centres and encourage them to receive four antenatal visits and promote institutional delivery in remote villages (Dahal, 2011; Schwarz et al., 2014).

Another important role of FCHVs is disease prevention through provision of medical supplies. They give iron supplements and folic acid tablets to pregnant and lactating women which has reduced the prevalence of anaemia by almost half in women (from 67% to 35% from 1998 to 2011) (DoHS, 2014). Other medications that FCHVs supply are albendazole tablets for deworming and vitamin A capsules for prevention of night blindness. In addition, they provide temporary family planning measures such as condoms and oral contraceptive pills and make referrals for permanent methods (DoHS, 2014). Moreover, for the prevention of haemorrhage after childbirth, FCHVs provide misoprostol tablets to pregnant women. These tablets are known as "mothers'

safety pills” because they help to prevent excessive bleeding after the birth of the baby which accounts for 25% of maternal deaths (Ejembi et al., 2013). Frequently, the FCHVs are mobilised in mass campaigns where they distribute certain medicines and vitamins at the population level (New ERA, 2008).

Finally, FCHVs also have a treatment role which is relevant in treating diseases such as pneumonia and diarrhoea in children under five. Volunteers provide cotrimoxazole to treat pneumonia in new-born, and zinc and oral rehydration solution to treat diarrhoea in under five children. In 2011, the Government of Nepal implemented a community-based neonatal care programme where FCHVs distributed chlorhexidine to pregnant women for umbilical cord care in neonates. Since the beginning of this programme, neonatal deaths were reduced by 23% among the group that received chlorhexidine as shown by a pooled analysis from studies in Nepal, Bangladesh and Pakistan (Imdad and Bhutta, 2012). As of 2015, this neonatal healthcare package became available in 49 out of 75 districts (DoHS, 2014).

2.8.2.2 FCHVs in national programmes for maternal health

Brief information is provided here on the roles of FCHVs in three main national programmes for maternal health: a) the Birth Preparedness Packages (BPP), b) the aama (motherhood) programme, and c) safe abortion services.

a) Birth Preparedness Package (BPP)

The BPP programme began throughout the country to spread awareness on pregnancy and its potential complications. FCHVs communicate health information to mothers and pregnant women using flip charts. Currently the BPP programme is available in 71

out of 75 districts (DoHS, 2012, 2014). However, no significant changes in the utilisation of skilled attendants at delivery or use of emergency services were found despite the continued presence of the programme (McPherson et al., 2006).

b) Aama programme

The *Aama Surakchhya* (Safe Motherhood) programme was implemented by the government in 2009. The programme contains four components: a) safe delivery incentive programme - a cash incentive scheme from 2005; b) free institutional delivery care from 2009; c) incentive to health workers for home deliveries; and d) incentives to women for receiving four antenatal care visits. Pregnant women who attend all four antenatal visits receive financial incentives of NRs 400 (£2.51)³. Mothers who deliver at government approved health facilities in the Terai, hill and mountainous regions receive NRs 500 (£3.14), NRs 1,000 (£6.29) and NRs 1,500 (£9.43) respectively. FCHVs' role is to disseminate information on available incentives and free health care services to potential users. In some places, FCHVs also receive small incentives for referring women for antenatal check-ups and accompanying them for hospital deliveries (DoHS, 2012, 2014).

However, several issues were noted with this incentive programme. Many women did not have access to funds for prepayment of transport or they did not believe they would get the reimbursement once they arrived at the health centre. There were often delays in transferring funds from the central to district level thus delaying payment to women (Powell-Jackson et al., 2009). The main barrier for this was a limited capacity of the district health centre. On the other hand, the impact of the abolition of user fees

³ The rates are shown in exchange rate of £1=Rs 159 as per 2nd September 2013 (similar rate on 6th June 2016)

was positive as the free health check-ups increased the utilisation of services by poor people (Witter et al., 2011). However, it is important to note that the continuity of such incentivised programme depends on substantial donor support, as half of the health budget of Nepal is dependent on external partners (McPake et al., 2013).

c) Safe abortion services

Before the legalisation of safe abortion services in 2002, women frequently risked their lives to terminate unwanted pregnancies using traditional methods and relying on untrained and quack practitioners. These methods and practitioners accounted for almost 50% of maternal deaths (Ganatra and Johnston, 2002; Regmi et al., 2010; Shakya et al., 2004). Such deaths fell with increased availability of safe abortion services after the legalisation of abortion in Nepal (Samandari et al., 2012). However, many (62%) women are still unaware of these services (MoHP et al., 2012). Therefore, both the government and an international NGO (Ipas) are working together to train and mobilise FCHVs to increase awareness about the availability of safe abortion services in villages (Ipas, 2012).

Currently, in some districts of Nepal, FCHVs are informing women about access to abortion services (DoHS, 2014). A study found that FCHVs were able to detect early pregnancy and make referrals to the health facilities (Andersen et al., 2013). As of January 2013, the programme had been implemented in 19 of the 75 districts in Nepal (Ipas, 2012).

2.8.2.3 Recording and reporting by FCHVs

Besides involvement in all the activities mentioned above, FCHVs have an increasing role in recording and reporting community health activities. They keep records of their activities in a pictorial ward register which they submit every month to the health centre (DoHS, 2014). This activity is important, as the reports received from them are passed to the SHPs or HPs, then to the PHC centres, the district and finally the data is fed into a national report (Appendix 1).

2.8.3 Mobilisation of FCHVs by NGOs

NGOs have been increasingly working as an alternative health care provider with the same goal as public organisations, but often with fewer resource challenges (Gilson et al., 1994). In Nepal, the growth of modern NGOs has proliferated since the 1990s with a number of 234 International NGOs (INGOs) and 39,763 NGOs registered as of 2016 (Social Welfare Council (SWC), 2016). The involvement of NGOs and community-based organisations to promote the health of people has also been promoted through the national health policy of Nepal (MoHP, 2015). The role of NGOs in addressing the poor maternal health over the years has been important to address the gaps in basic MHS provision that are not addressed by available health care resources (Nunns, 2011). Available evidence suggest that the majority of NGOs at the community level mobilised FCHVs to deliver their MHSs (Andersen et al., 2013, Kc et al., 2011, Manandhar et al., 2004, McPherson et al., 2010, Morrison et al., 2005, Schwarz et al., 2014).

NGOs performances, however, vary across the country. While some NGOs are performing well, others face numerous challenges such as lack of transparency in their

work, and poor communication and inadequate coordination with governmental agencies (Dhakal, 2007b). There is a need to ensure better coordination between both public organisations and NGOs to focus on strengthening the existing health care services (Dhakal, 2007b; Nunns, 2011). However, these studies were not based on empirical evidence.

2.8.4 Financing of FCHVs

Foreign aid makes up a substantial portion of Nepal's health spending, with about half of the country's total healthcare budget coming from donors. Financial support for FCHV programme is mainly provided by international organisations such as USAID, UNICEF and UNFPA, though the programme is operated and owned by MoHP Nepal (DoHS, 2014). About 75% of the national health budget focuses on MCH especially in marginalised populations (DFID, 2011). Recently the MoHP and the USAID launched the "Health for Life" project worth \$18 million to strengthen the government's ability to provide quality and equitable MCH and family planning services in Nepal (USAID, 2013).

2.9 Chapter Summary

Nepal still has a high level of MMR but progress in reducing this in the last two decades has been remarkable. The MMR was reduced by almost half even before the implementation of some new policies and programmes such as the safe motherhood programme and safe abortion services. Despite the deep poverty and health human

resource crisis, Nepal has mobilised a huge cadre of FCHVs for more than two and half decades to provide basic MHSs at the community level.

FCHV raise health awareness during pregnancy, refer pregnant women and mothers for health check-ups and provide them with temporary means of family planning.

They provide health promotion, disease prevention and treatment activities within their communities. They are widely involved in the implementation of national health programmes aimed to improve maternal health at the community level. They are also mobilised by NGOs. Although they have been massively involved in healthcare activities, the financial support to this group is minimal.

The next chapter moves on to present the review of literature about CHWs in maternal health in South Asia.

Chapter Three

Literature Review

3.1 Introduction

The overall aim of this literature review is to assess the use of CHWs in MHS provision mainly in South Asia, but also in Africa. These geographical focuses allow a selection from the growing volume of literature on the topic, and are relevant because most countries in these regions, exhibit similar characteristics in terms of resource scarcity and mobilisation of CHWs for maternal health improvement. The literature review begins with the review methods followed by presentation of characteristics of CHWs in South Asia. Finally the review will be summarised thematically under the following headings: CHW interventions in maternal health, effectiveness of such interventions, and factors that promote or hinder CHWs at their work.

3.2 Review Methods

This review has been conducted using a narrative synthesis method, which helps to tie multiple studies on different topics together (Baumeister and Leary, 1997). The literature review draws together the findings of systematic reviews, narrative reviews and original research to address the role of CHWs, particularly focusing on their activities around antenatal, delivery and post-partum periods. Initially, a systematic literature search was undertaken for South Asia and later, studies from African countries were added as more studies of CHWs became available. The review also includes the guidelines and recommendations from international organisations such as WHO, UNICEF, USAID, and UNFPA who are involved in maternal health

development in the regions. Literature is reviewed in three key thematic areas to answer the following questions:

1. What CHW interventions are employed to deliver MHSs in South Asia?
2. Are CHWs effective in improving MHSs?
3. What factors support or hinder MHS provision by CHWs specifically focusing FCHV literature in Nepal?

An iterative approach has been taken to review the literature: some literature was reviewed during the confirmation report, and some during the analysis and interpretation stage of the research. The literature informing this review was obtained from books, journals, policy documents, web-based resources and grey literature. A search of systematic reviews and original papers was undertaken using a systematic search strategy process. Search strategies were designed by drawing up a list of key search terms related to CHWs and MHSs. The search was conducted in electronic databases using the search terms shown below. Following this, the literature review was guided by snowball search methods - reference tracking of relevant studies. Some grey literature, such as Nepal health policy documents and FCHV strategy, was obtained through personal communication.

3.2.1 Search strategy

The search strategy for electronic databases was formulated from the research objectives for the study (Section 1.6). Help from information specialists was obtained and different versions of the search strategy were tried in various databases and search engines.

The following search terms were run through different databases.

1. (MH "Community Health Workers")
2. (community health worker*) OR (lay health worker*) OR (lady health worker*) OR (swasthya sevika*) OR (shasthyo sebika*) OR (shastho shebika*) OR (accredited social health activist*) OR (female community health volunteer*) OR (village health worker*) OR (village health guide*) OR (community health volunteer*) OR (health volunteer*) OR (front-line health worker*) OR (front line health worker*)
3. 1 or 2
4. Maternal health/maternal welfare
5. (Maternal health) or maternal or (maternal welfare) or mother* or pregnancy or maternal or maternity or (safe motherhood) or antenatal or prenatal or postnatal or post-partum or delivery or mother
6. 4 or 5
7. India or Nepal or Sri Lanka or Pakistan or Bangladesh or Afghanistan or Maldives or Bhutan
8. South Asia /
9. (South Asia) or (Southern Asia) or (South Asian)
10. 7 or 8 or 9
11. 3 and 10
12. 3 and 6 and 10
13. 11 or 12
14. Limit to from 1990, English

Table 3 Inclusion criteria for study selection

	Inclusion criteria
Types of population	Studies related to CHWs or lay health workers delivering MHSs who can be paid or voluntary workers.
Types of intervention/ exposure/ studies/ reviews	Any interventions or studies delivered by CHWs aiming to improve maternal health or ensuring safe motherhood at household level (antenatal care, delivery care and postnatal care).
Outcome measure	Utilization of CHW services, increased referral, increased antenatal visits, increased postnatal visits, increased hospital delivery, and long term impacts on reduced maternal morbidity and mortality.
Context	South Asia
Study designs	Systematic reviews, reviews, qualitative and quantitative, including grey literature on FCHV
Year published	1990 –September 2015
Language	English
Study synthesis	Narrative synthesis

3.2.2 Identifying studies in databases

Databases were searched for articles published in English from January 1990 until September 2015 considering that CHW programmes were first implemented after the 1978 Alma-Ata conference. First, searches were made for systematic reviews in Cochrane databases; these produced 123 articles in total but 19 of them were not required in the title screening, so 104 were extracted for review. Other databases searched were: Medline, Embase, CINAHL (Cumulative Index to Nursing and Allied Health Literature), Scopus, Web of Science, Psych Info and ASSIA (Applied Social Sciences Index & Abstracts), which produced 432, 403, 108, 43, 448, 37, and 38 articles respectively. Thus in total 1577 articles were retrieved, of which 669 duplicate articles were removed. The remaining 908 articles were title-screened, which left 142 articles for abstract reading and 90 of them were considered for full text reading. Furthermore, reference tracking of relevant articles located (n=9) articles for full text review.

3.2.3 Study selection

The initial search strategy selected a great number of studies that were not central to the research objectives; therefore, all the studies identified were screened using pre-defined inclusion criteria as shown in Table 3. Articles were selected based on their relevance to the review questions (Section 3.2). Potential systematic and traditional reviews were searched and included.

While the systematic search was undertaken and written up for CHWs in South Asia, studies from Africa (Ethiopia, Kenya and Tanzania) were also included in the literature during the thesis writing stage. This was because recent evidence showed

increasing use of CHWs in MHS provision in parts of Africa which were characterised by having a resource poor setting similar to Nepal. In addition, apart from studies of CHWs known as Health Extension Workers (HEWs) in Ethiopia, others were volunteer CHWs from the region. Wherever possible, Nepal specific studies on FCHVs were highlighted first followed by the studies from South Asia and Africa.

3.2.4 Assessment of study quality

Due to the exploratory nature of this comprehensive literature review, specific evaluation of the methodological quality of publications was not conducted other than to note that there were some systematic reviews and a small number of randomised controlled trials. In addition, many studies conducted in Nepal were either available as grey literature, online news or opinion pieces. Some empirical studies had small sample sizes and lacked rigour in their methods. However, they were included in the review if they presented CHWs' work in MHSs. The study methods were noted although formal tools to assess the quality of study were not used.

3.2.5 Summarising the results

The next step involved noting key information from studies that were included in the review. Information was retrieved on author(s), publication year, study aim, key findings on the use of CHWs in maternal health and the factors that support or hinder their activities. Similar information was categorised together thematically to summarise the review findings under the following headings: a) characteristics of CHWs in South Asia, b) their involvement in MHS provision, c) effectiveness of

CHW interventions and d) factors that support or hinder CHWs in their MHS provision.

3.3 Characteristics of CHW in South Asia

The term “CHW” often “refers to very different typologies of volunteer or salaried, professional or lay health workers whose level of training, competencies, scope of practice and integration in health systems vary widely” (WHO, 2015c, p.1). As the name of CHWs varies in various countries, so do their characteristics as shown in Table 4 p.44 (Lehmann and Sanders, 2007). A brief description of the CHWs in South Asia (Nepal, India, Bangladesh, Pakistan, Sri Lanka and Afghanistan) is presented first, followed by a summary of their characteristics in Table 4.

India

In India, the CHW programme began in 1977 providing basic healthcare services at the doorsteps of community members. The CHWs have been known by different names over the years such as community health volunteers or village health guides. The programme was state sponsored until 2002 when CHWs were reviewed in terms of abilities, honorarium and their long-term viability. Then the funding from the central government stopped, which caused the demise of this particular CHW programme (UNICEF, 2004). However, in 2005 another group of CHWs known as Accredited Social Health Activists (ASHA) were selected from their communities and trained to provide antenatal counselling, accompany delivery and to advise about breast-feeding and immunisation. Each ASHA was meant to cover a population of 1,000 (Table 4) and received performance-based incentives (Saprii et al., 2015). The

roles of ASHAs were closer to those of a facilitator or linker rather than a change agent (Fathima et al., 2015; Mony and Raju, 2012).

Bangladesh

CHWs in Bangladesh are known as Swasthya Sevika. A private organization (BRAC) employs 100,000 volunteer CHWs who deliver a basic package of MCH and family planning services to a population of about 110 million (Perry et al., 2013). BRAC found sufficient local financing to motivate CHWs to carry out their activities. They are from the local communities that they serve and are supported by both BRAC and the government. They are preferably educated and receive four weeks of basic training. However, they struggle for acceptability in the pluralistic healthcare environment where they are often viewed as second-rate healthcare providers (Standing and Chowdhury, 2008). From 2007, a new MCH project began to provide service in the continuum of care during pregnancy, intrapartum and post-natal periods while improving the link between CHWs and health. Women's empowerment was one of the reasons for progress in maternal health in Bangladesh, which has run a CHW programme for the last 25 years (Chowdhury et al., 2013).

Pakistan

CHWs providing MCH services in Pakistan are known as Lady Health Workers (LHWs). With 110,000 LHWs, the programme is one of the world's largest successful CHW programmes. With strong government support, the LHW programme has wide coverage (60-70% of the rural population) and includes intense supervision leading to the success of the programme (Wazir et al., 2013). LHWs receive 15 months of

training on various PHC topics and are paid a salary. LHWs in Pakistan resemble Nepal's MCH workers who are paid health workers assigned to the first level of public health care centre, rather than unpaid FCHVs.

Sri Lanka

CHWs in Sri Lanka are volunteers, work part-time and have merely educational tasks. Their exclusive role in health education was not effective, which might be due to their inadequate communication skills. This might be the effect of short training – five days (Gilson et al., 1989; Walt et al., 1989a). In the 1980s, there were about 100,000 trained CHW volunteers, but their number was reduced substantially and fell to as low as 15,000 (UNICEF, 2004). There were no incentives for the volunteers and they received nothing except a certificate, which could possibly be the reason for the higher attrition rate among these volunteers (Walt et al., 1989a).

Afghanistan

In Afghanistan, CHWs are local volunteers and they function as a link between the community and health care providers in the rural region of the country. They are trained by the MoHP, Afghanistan and provide services to mothers and children. They receive monetary incentives such as travel expenses, lunch money and educational stipends and non-monetary incentives such as stationery (Najafizada et al., 2014). Apart from two peer-reviewed articles on CHWs in Afghanistan (Edward et al., 2015; Najafizada et al., 2014), other information could not be located despite a wide search on the internet.

Table 4 Characteristics of CHWs in South Asia

References	Country/ beginning of CHWs' services	CHWs /Gender	Total CHWs	Age in year	Education	Training duration	Working hours	Population coverage	Supervision	Payment	Retention
(New ERA et al., 2007)	Nepal /1988	Female communi ty health volunteer	52,000	20	literate or willing to attend literacy class	18 days (refresher training every five years)	part-time volunteer , 5-10 hours per week	1/ 400	not regular	volunteers	95%
(Saprii et al., 2015)	India/2005	Accredite d social health activist/ female	820,000	25-45	grade 8	23 days then attend weekly meeting	part-time	1/10,000	not regular	volunteers (performance based financial incentives)	
(Alam et al., 2012b)	Bangladesh/ 1977	Shasthya shebika/ female	100,000	25 - 35	literate, some years of schooling	three or four weeks	part- time, 15- 20 hours	1/1,500 (200 households)	not regular	volunteers sell merchandise	84-89%
(Hafeez et al., 2011)	Pakistan/1992	Lady health workers	90,000	18 or above	grade 8	15 months	full-time	1/1,000 (cover 200 houses)	monthly, central government supports	\$343 per year	
(UNICEF, 2004; Walt et al., 1989a)	Sri Lanka/1976	Communi ty health volunteer s/female	15,000 (reduced from 10,0000)	22-26 years	educated	5 days	part-time	10 houses	not regular	volunteers	high attrition
(Najafizada et al., 2014)	Afghanistan/ 2003	Communi ty health workers/ male and female (49%)	28,459	17-45	most of them are illiterate	six months including 4 months field work	part-time	150 houses	monthly supervision	volunteers, but small incentives available	up to 10%

The following section reviews literature on CHW intervention in maternal health in South Asia.

3.4 CHW Involvement in MHS Provision

For the provision of MHSs, CHWs are involved in three key areas: (a) mothers' group interventions, (b) home visits and (c) therapeutic services.

3.4.1 Mothers' group meetings

The main role of CHWs in a developing country is to promote the health of pregnant women and mothers through awareness and educational activities (Bhutta et al., 2010; Glenton et al., 2013). One usual approach is sharing health messages through regularly held meetings where mothers and women in their local communities participate and discuss MCH issues. While such participation is often difficult to achieve because of the need for substantial time investment (Lehmann and Sanders, 2007), evidence shows the positive effects of community participation in maternal health. For example, a meta-analysis of seven trials (119,428 births) showed that participation in women's groups was associated with a 37% decline in maternal mortality (Odds Ratio 0.63, 95% CI 0.32–0.94), with high heterogeneity ($I^2=58.8\%$, $p=0.024$). However, none of the empirical studies were sufficiently powered to accurately assess maternal mortality (Prost et al., 2013).

In one example in India, a participatory intervention using women's groups involved local CHWs providing health information. This intervention involved the participation of all interested members including men, relatives of the pregnant women and health

workers; all the members shared their problems and the participants offered support to each other (Rath et al., 2010). The same study concluded that the acceptability of services of CHWs, the active targeting of marginalised women in the communities, and the active recruitment of newly pregnant women into the mothers' groups helped to increase safe delivery practices.

Similarly, in the rural communities of Nepal, mothers' groups involving CHWs were helpful in reducing MMR. A paid literate female facilitator was trained to facilitate the group where local FCHVs were also present. The facilitator led the women's group through ten monthly meetings using a participatory learning method where health messages on preventing illness in mothers and infants were shared. In the control group, training of traditional birth attendants was held and the findings were compared with the intervention group. The findings showed a significant improvement in maternal health as MMR dropped from 341 to 69 per 100,000 in the intervention group. Though the reduction in MMR was not statistically significant (Manandhar et al., 2004), it indicated that CHWs were able to encourage women to participate in the groups and discuss maternal health topics (Morrison et al., 2010).

Maternal health improvement in Nepal has been credited to FCHVs facilitating mothers' groups to raise awareness among community members (Mishra, 2014). Such groups were first started by the Nepal Safer Motherhood project in 1997 (DFID and HMGN, 2004) and are currently functioning in about 76% of rural communities (DoHS, 2014). Their presence in the remote villages may be the reason for the improved health status of Nepalese women even while the country faced a decade long conflict (Devkota and van Teijlingen, 2010). For example, women attending mothers' groups were more likely to use health services (Manandhar et al., 2004; Miyaguchi et al., 2014; Morrison et al., 2005). In recognition of the importance of mothers' groups led by FCHVs, the

Department for International Development (DFID) is planning to continue to fund the maternal health activities including the women's group intervention in Nepal (N Squires 2014, personal communication, 5th February 2014).

However, mothers' groups in Nepal have faced some challenges. For example, there were cases where mothers' groups became inactive after the initial group formation (DoHS, 2014; New ERA et al., 2006). A study reported that mothers' groups were less engaged in identifying and solving maternal health problems in the groups as the groups spent their time dealing with other issues such as collecting money from group members. The group members saved money to support each other in case of financial need, and sometimes these financial matters took priority over the discussion of health matters (Kc et al., 2011). However, this study did not provide information on how many groups were included, or how many participants were involved. Moreover, when mothers' groups were not functioning effectively, it was difficult to establish conclusively whether any health message was shared amongst community members.

3.4.2 Home visits

A systematic review reported that home visits along with community mobilisation and training of CHWs have the best chances of improving community level maternal health outcomes. Maternal health outcomes such as antenatal care, tetanus immunisation coverage, referral and initiation of early breast-feeding were improved while the rate of antenatal hospital admission was reduced through interventions led by CHWs (Lassi et al., 2012). In Bangladesh, door to door visits by CHWs using birth registers were effective in identifying pregnant women and assessing them from pregnancy to postnatal period (Chowdhury et al., 2013). Similarly, in Pakistan health service at the doorstep was important for the success of CHWs' services, especially in the

mountainous region where CHWs were able to raise the proportion of pregnant women who delivered with a skilled birth attendant to 51% compared to the national average of 39% (Hafeez et al., 2011). In Nepal, FCHVs generally do not visit houses but when they do so, they are trained to undertake specific activities. For example, they visit houses to provide misoprostol tablets to pregnant women in order to prevent haemorrhage after childbirth (DoHS, 2014; Rajbhandari et al., 2010) (Section 2.8.2.1).

With respect to service users, some mothers were concerned about confidentiality during home visits by CHWs, and others reported that CHW services were not relevant, especially if they provided only health promotional services (Glenton et al., 2013; Walt et al., 1989a). Therefore, many CHWs are also involved in the provision of some basic therapeutic services as presented below.

3.4.3 Therapeutic services

CHWs providing medicines to members of their communities are often well recognised in their communities and are more likely to be approached by their community members (Glenton et al., 2013). Conversely, if CHWs do not provide medicine then they are not valued by their community members and their preventive work could be undermined. For example, in Sri Lanka, where the role of CHWs is restricted to health education, they could not produce any effective results, which led to decline in the number of volunteers (Walt et al., 1989a). In contrast, communities in India responded to CHWs more positively when they provided curative services (Mony and Raju, 2012). Similarly in Nepal, the role of volunteers was more highly valued after their involvement in medicine distribution campaigns such as those for malaria or polio (Curtale et al., 1995).

3.4.4 Key Gaps

While FCHVs have been utilised in a wide range of MHSs in their local communities, this review showed a dearth of qualitative evidence on FCHVs' perception of their own role while delivering such services. Moreover, the actual work practices of FCHVs in relation to MHSs are largely missing in the literature. Therefore, there is a need to explore FCHVs' views on their everyday service provision and ways their services could be improved (Perry and Zulliger, 2012, p.43).

So far this chapter has focused on CHWs' involvement in MHS provision. The following section will present studies of their effectiveness.

3.5 Effectiveness of CHW Interventions

There is growing evidence on how maternal health outcomes can be improved among the rural poor population through effective mobilisation of CHWs. Brief information on effectiveness of FCHVs on child health is presented followed by evidence of the limited effectiveness of CHWs in maternal health, and the cost effectiveness of such programmes. Finally, I discuss the reasons we do not have adequate evidence on effectiveness of CHW interventions.

The roles of FCHVs in reducing neonatal and child deaths have been well documented in Nepal. For example, Curtale et al. (1995) found that FCHVs were able to diagnose and treat common childhood diseases such as diarrhoea, malnutrition and acute respiratory infections. Similarly, Pandey et al. (1991) showed the role of FCHVs in reducing child mortality through provision of oral antibiotics. They were also able to accurately classify low birth weight infants (Amano et al., 2014). Currently, they

provide misoprostol tablets to pregnant women to prevent haemorrhage after childbirth (Section 2.8.2.1).

Evidence is also available for their successful involvement in women's group activities (Section 3.4.1). However, there is not sufficient evidence available to draw conclusion on the effectiveness of CHWs in improving maternal health (Gilmore and McAuliffe, 2013; Viswanathan et al., 2012). According to a systematic review, the single intervention by CHWs found to affect maternal mortality so far has been training of birth attendants to conduct home visits during pregnancy and delivery (relative risk 0.70, 95% CI 0.51–0.96) (Lassi et al., 2010). CHWs, who were lay birth attendants, educated the community in awareness of maternal and neonatal care, minimizing unsafe delivery practices and referring if complications developed (Kidney et al., 2009). However, my study does not focus on traditional birth attendants as the WHO has phased out the training of these workers and inclusion of this group is outside the scope of this study.

In some settings, CHWs may present cost effective resources for health service delivery. This happens when they are assisted by skilled health professionals and mobilised within the setting of an adequately funded PHC system (Singh and Sachs, 2013). The same study shows the relatively minor cost of scaling up a CHW system estimating the cost at approximately US\$6.56 per head per year. However, even these costs can be beyond the reach of many poor countries. For example, a recent study in Nepal demonstrated US\$30111 spent over a two year period for successful mobilisation of FCHVs in a catchment area of 20,905 people (Schwarz et al., 2014). However, spending such a sum on small groups of FCHVs does not appear feasible for the Nepal Government without substantial donor support (Section 2.8.4). In addition, research studies measuring the maternal health outcomes of CHW interventions are limited.

The lack of conclusive evidence on the cost effectiveness of CHWs means that there are few evaluation studies in these areas. More importantly apart from financial aspects, there are areas that might be difficult to analyse adequately, such as the benefits of CHWs from a societal perspective, including non-health benefits associated with the programme (Lehmann and Sanders, 2007; Vaughan et al., 2015). The limited impact of this programme could be the result of a lack of support to CHWs from health professionals and health systems (Abbatt, 2005). For example, selection, training and supervision of CHWs (Section 3.6) might not have been considered by researchers, or funding might not have been available for evaluation. In addition, studies on the effectiveness of CHWs might be from small scale projects, which might not be feasible to implement on a large scale due to the fact that such programmes usually require substantial resources (Mangham-Jefferies et al., 2014). The same review highlighted the inappropriateness of the assessment of complex public health programmes through randomized controlled trial studies.

3.6 Factors that Support or Hinder MHS

A range of common factors were identified for the effective functioning of CHWs: political stewardship and adequate financing, selection, community ownership, training, access to supplies, supervision, incentives, referral systems, opportunities for professional advancement, and a supportive health system (Bernhart and Kamal, 1994; Bhutta et al., 2010; Glenton et al., 2013; Lehmann and Sanders, 2007; Naimoli et al., 2012; Shakir, 2010). However, a review reported that there is no consensus on the best practices and empirical data is lacking (Perry and Zulliger, 2012).

Here, I review the following key components for CHWs' functioning: selection, training or continuing education, financial or non-financial incentives, community recognition and health system support. The health system support to CHWs includes supervision, access to supplies, referral facilities, attitude of paid health workers, and NGOs' involvement in their mobilisation.

3.6.1 Selection of CHW

It is important that CHWs are selected from local communities and that the communities are involved in their selection (Bhutta et al., 2010; Prasad and Muraleedharan, 2007; Shakir, 2010). This is because the insider orientation of CHWs provides the opportunity to deliver cost effective and culturally acceptable health care services (WHO, 2013). However, selection practices of CHWs vary widely. In India, CHWs were often selected without consultation with local leaders and community members leading to CHWs who had either access to people in power or who did not have community support (Gopalan et al., 2012; Saprii et al., 2015; Scott and Ronsmans, 2009). As a result, when they worked they were perceived as link workers rather than advocates for change which was anticipated at the beginning of the programme (Saprii et al., 2015). Similarly, in Sri Lanka, CHWs were seen as an extension of health services rather than agents of change because their recruitment relied on health workers (Gilson et al., 1989). In Afghanistan, traditional healers influenced the selection of CHWs, which reduced support from other community members (Najafizada et al., 2014).

From the above, it is clear that a lack of community involvement in the selection of CHWs can cause low acceptance of them. On the other hand, if the decision regarding who volunteers is completely left to the community, then there is a possibility that more

educated women from a higher socio-economic group are more likely to volunteer (Sundar, 1996). This might mean that the population who receives the services are already better off and the neediest population might be deprived of access to healthcare. The service to the poor might be further worsened if people practise the caste system which is prevalent in most of South Asia (Mumtaz et al., 2014; Peterson et al., 2014). In Nepal, FCHVs are selected from their local community and this may be the reason for their acceptance in the villages (Glenton et al., 2010; Houston et al., 2012; Schwarz et al., 2014). However, studies also showed that local health workers selected FCHVs first and later formed mothers' groups to endorse the decision (Kc et al., 2011; New ERA et al., 2006).

3.6.1.1 Gender of CHWs

CHWs can be both male and female, but female CHWs are usually preferred for MHSs in South Asia (Table 4) because there is a common notion among policy makers that females can deliver more at community level (Prasad and Muraleedharan, 2007). Out of all the CHWs studied, 70% of them were female though their gender was reported in only 17 studies (Lehmann and Sanders, 2007). For example, there are both male and female CHWs in Afghanistan, but females are preferred over males as women service users are able to approach them easily and confide their problems (Najafizada et al., 2014). This could be due to cultural aspects where females feel more confident sharing their health problems with someone of the same gender.

However, sometimes it is not easy for female CHWs to serve. In most parts of Pakistan, movement of CHWs was restricted because of their traditional gender norms (Mumtaz et al., 2003). Not obeying the traditional norms means that the CHWs lose their social status. This could be one of the reasons that the recruitment of CHWs to serve

disadvantaged areas had been challenging with 35% of the posts vacant in some areas of Pakistan (Hafeez et al., 2011). In Nepal, however, the retention rate of volunteers is more than 95% on average though a few districts in remote mountains have low retention rates and a study is necessary to find the reasons for such outcomes (New ERA et al., 2007).

3.6.1.2 Education of CHWs

A literature review of CHWs suggested that often the CHWs have low levels of education:

Despite the wide range of tasks that CHWs can do, they cannot do everything - their limited educational background and training mean that they can simply be expected to perform a limited number of tasks that complement the work of health professionals (Abbatt, 2005, p.2).

Another systematic review found that illiteracy makes CHWs less effective in pursuing advocacy activities because they lack the necessary skills (Bhutta et al., 2010). In Nepal, more than 40% of FCHVs have never attended school (Table 2) (New ERA, 2008) and they often rely on their memory or assistance of their family members for reporting of health activities (DoHS, 2014; Schwarz et al., 2014). While the FCHVs' attempt to report is praiseworthy, reporting from memory might be inaccurate and the data produced might be misleading.

On the other hand, lay CHWs are more likely to obey and follow the instructions of health workers (Gilson et al., 1989). Illiteracy could be a reason for the commitment of volunteers in Nepal, as shown by their low attrition rate of less than 5% (Houston et al., 2012; New ERA, 2008). They were also able to work in similar ways to their educated counterparts, thus opening the option to use them in the absence of educated volunteers. Moreover, they were keen to take on any additional roles (New Era et al., 2007).

Most of the time, the education of CHWs is important in their service provision.

However, when educationally qualified people volunteer, they often do so because they are more interested in future job prospects, and this may lead to a high turnover (Prasad and Muraleedharan, 2007), which was the case in Sri Lanka (Walt et al., 1989a). In contrast, it should be noted that the benefit of educated CHWs far outweighs the disadvantages, as the educated ones can easily be trained to provide additional services, as seen in Pakistan (Haines et al., 2007) or in Nepal (Andersen et al., 2013) (Section 2.8.2.2).

3.6.2 Training and continuing education

With regular training and supervision, CHWs were able to deliver the intervention needed to a particular community (Lassi and Bhutta, 2015). The training duration, depth, content and methods varied across CHW programmes (Bhutta et al., 2010; Byrne et al., 2014; Lehmann and Sanders, 2007). Such variation in South Asia is presented in Table 4. For example, while the CHWs (LHWs) in Pakistan receive 18 months of training, FCHVs in Nepal receive merely 18 days, making it difficult to compare the two groups. However, there are similar volunteer CHWs in countries such as Bangladesh, India, Ethiopia, and Tanzania, who provide MCH services with limited training. These CHWs wanted more training to maintain their motivation at their work (Amare, 2009; Haile et al., 2014).

Continuing education and training of CHWs is important for the quality of their services. In Nepal, FCHVs are trained to provide MCH services in various areas, as described in Section 2.8.2.1. The FCHVs tended to show more knowledge and to be more active in areas where additional NGO and INGOs were working compared to those that were working under the government service alone (Andersen et al., 2013;

Bernklau, 2002; Curtale et al., 1995; Schwarz et al., 2014). When the FCHVs were trained and supported by a facilitator, they were able to share health messages among mothers (Manandhar et al., 2004; Morrison et al., 2010). Continuous training of FCHVs improved the provision of PHC services in a remote hill village. This was achieved through weekly community level FCHV meetings over 2 years with 18 FCHVs. These FCHVs were compensated for the training. However, the programme did not measure the health outcomes of individuals (Schwarz et al., 2014). In addition, the training cost was high which might not be feasible for programmes in Nepal which are mostly donor dependent (Section 2.8.4).

3.6.3 Financial or non-financial incentives

Financial or non-financial incentives in general are important to motivate CHWs.

Unlike Nepal's volunteers, in most countries CHWs are paid, though the amount of money varies from one country to another, mostly being a small amount (Table 4, p.44). For example, CHWs in Bangladesh received approximately £10-15 every month and made some additional money selling some medical commodities as a local NGO supported them with a loan if needed. In Pakistan, CHWs received about £40 per month. In India, CHWs received £6.4 every month with other smaller incentives based on their performances (Khan et al., 2010).

In Nepal, FCHVs do not get any regular incentives and even when they do so, the amount is inconsistent across the regions (Bernklau, 2002; DoHS, 2014). Some villages provide a small stipend (£1.33 per month) as an appreciation for their work and also give a similar amount during national campaigns, for example, vitamin A campaigns. In some villages, the government has created a FCHV fund of Rs 100, 000 (£667) to support them for their livelihood. FCHVs can borrow from the fund, but one-third of

them were unaware of the availability of such facilities (New ERA, 2008). Furthermore, in areas where specific health programmes such as community based neonatal care package programmes are implemented, they received incentives based on their performance. They received cash support of up to £2.66 for registering a pregnancy case, referring the woman for antenatal care and health facility delivery, accompanying her for delivery and providing post-partum follow up after delivery (Advancing Partners & Communities, 2014).

FCHVs also receive non-financial rewards such as uniforms and name plates, and are supported with an annual celebration of FCHV day. The name plate states that they are a FCHV and is hung on the wall outside their house. The celebration of FCHV day on October 1 provides nationwide recognition for the volunteers. Special programmes are arranged on this day at national, district and village level where some volunteers are honoured for their services. Such rewards and recognition also encourage the volunteers (Ministerial Leadership Organisation, 2010; Mishra, 2014). Occasionally, the importance of volunteers is further enhanced through radio and TV programmes that advertise their services. They also receive free health care facilities in government healthcare centres. Upon their retirement, they receive Rs 10,000 (£67) as an honorarium for their services and continue to receive free health care services (FHD, 2010). Similar kinds of non-financial incentives such as badges, voluntary identity cards, and celebration of their contributions were proposed to motivate volunteer CHWs in Ethiopia (Amare, 2009; Haile et al., 2014).

Apart from the incentives as mentioned above, there is no regular financial support to FCHVs, and the possibilities for remunerating them have been debated. While some researchers argue that the FCHVs should be remunerated (Baskota and Kamaraj, 2014; Maes et al., 2010; Schwarz et al., 2014) others argue that it is difficult to provide regular

funding to the volunteers (Glenton et al., 2010; Pollmann, 2011). The people who argued against the payment to volunteers were usually the policy makers and some health workers who mentioned the government's struggle to pay the salaries of existing health professionals (Glenton et al., 2010).

Further challenges exist, because Nepal relies heavily on external donors for its public health programmes (Section 2.8.4). To make it worse, the donors often try to sustain their interventions in local communities by relying on free labour of volunteers. FCHVs are already poor and asking them to provide their services for free is overburdening and would not be sustainable (Maes et al., 2010; Schwarz et al., 2014). The same holds true for a large number of CHWs in South Asia and Africa where an increasing volume of research shows that incentivising the CHWs is the most important factor if they are expected to provide regular and effective healthcare services (Alam et al., 2012b; Bhutta et al., 2010; Brunie et al., 2014; Condo et al., 2014; Glenton et al., 2013; Glenton et al., 2010; Greenspan et al., 2013; Khan et al., 2010; Rahman et al., 2010; Takasugi and Lee, 2012).

There are no specific studies that show whether a particular approach to incentivising CHWs would be more effective. A case study of CHWs from a number of countries (India, Bangladesh, Nepal, Iran and Ethiopia) revealed that both volunteer and paid CHWs could be effective; however, if CHWs are not paid adequately or on time, then they might lack motivation (Alam et al., 2012a; Khan et al., 2010; Singh and Sachs, 2013), or leave the job (Bhutta et al., 2010; Nkonki et al., 2011). However, attrition rate of FCHVs is as low as 5% (New ERA, 2008). It is important to explore from their perspective why they have such high levels of motivation for the services. In addition, studies are necessary to examine the most practical, affordable, and contextually

appropriate ways of providing support to CHWs so as to enhance their performance (Naimoli et al., 2012).

3.6.4 Community recognition

The support of community members who use services from CHWs are an important factor for the success of any CHW programme (Glenton et al., 2013; Gopalan and Durairaj, 2012; Jaskiewicz and Tulenko, 2012). A systematic review reported that mothers appreciated CHWs' skills and the similarities they saw between themselves and the CHWs (Glenton et al., 2013). In addition, the local presence of CHWs and their familiarity with neighbours positively influenced their acceptance and eliminated the possible effects of distance, travel time and cost (Zulu et al., 2014). Similarly, CHWs valued the relationship with their service users and felt responsible for them and enjoyed the social recognition that resulted from their services (Glenton et al., 2013; Gopalan et al., 2012).

In Nepal, FCHVs were found to enjoy an honourable and trusted position in the community because their contributions were recognised by the communities they serve (Glenton et al., 2010; Pollmann, 2011). Initially, it was the FCHVs' successes in managing childhood illnesses that made them well recognised in their communities (Curtale et al., 1995). As the FCHVs role developed, FCHVs were able to promote maternal health through provision of information to raise health awareness among mothers (Hodgins et al., 2010; McPherson et al., 2010). Almost 40% of pregnant women discussed their pregnancies with FCHVs and a quarter of postnatal women received visits from FCHVs in the districts where the Nepal Family Health Programme (NFHP) was implemented. Most of the women (88%) in the programme villages were aware that the FCHVs advise pregnant mothers (NFHP II and New ERA, 2010). In

addition, mothers reported that they were satisfied with the FCHVs' services during pregnancy and birth preparation, but this particular study did not state the number of focus groups and the participants in the groups, thus making it difficult to generalise the findings (Kc et al., 2011).

The broad acceptance of FCHVs' services was also tied to their proximity to the community. FCHVs were able to reach and serve the remote villages across the country according to a national level survey (New ERA, 2008). The FCHVs reported that many kinds of people visited them to get their services, though poorer families were more likely to visit than wealthier ones (Houston et al., 2012). In contrast, a majority of potential service users (67%) did not seek care from FCHVs in the remote three districts of Nepal (Miyaguchi et al., 2014). The same study highlighted factors such as lack of medicine and perceived incompetency of FCHVs as the reasons for low service use by women. However, on the whole, FCHVs enjoyed community recognition as a result of volunteering.

3.6.5 Health system support

In this subsection, the government health system and NGOs support to FCHVs are presented. Five key aspects of health system support are presented: a) supervision, b) access to supplies, c) referral facility or link to formal health service, d) attitude of paid health workers and e) effect of NGO involvement in mobilising FCHVs.

3.6.5.1 Supervision

The importance of regular and supportive supervision for a successful CHW programme is well known. For example, in Pakistan, providing CHWs with fortnightly supervision combined with monthly training, a supply package and a small salary has led to coverage of at least one monthly health visit for every household (Byrne et al., 2014). However, most countries lack the supervision component in their programme implementation which is mainly related to shortage of funds for CHW supervision (Bhutta et al., 2010; Jaskiewicz and Tulenko, 2012; Lehmann and Sanders, 2007). In Nepal and Sri Lanka, the health workers reported that they did not receive any incentives for supervising CHWs, and therefore, they did not do any supervision visits (DoHS, 2014; Gilson et al., 1989). Such lack of supervision may lower CHW morale as they may not be clear about their roles (Bhutta et al., 2010; Walt et al., 1989a).

Unlike the challenges experienced in the supervision of large scale CHW programmes, it is often possible to maintain regular supervision in small scale projects. For example, supervision and regular supplies of vitamin A capsules enhanced community acceptance of FCHVs in the intervention area (Curtale et al., 1995). Similar findings were reported in other areas where regular meetings and supervision enhanced the PHC service provision by FCHVs (Schwarz et al., 2014), but such projects required additional funding.

3.6.5.2 Access to supplies

Irregular supplies of medicine and equipment lower CHW morale and thereby recognition of CHWs within their communities (Walt et al., 1989a). For example, regular supplies of drugs enhanced community acceptance of FCHVs as mentioned in Section 3.4.3 (Curtale et al., 1995). Other studies in Nepal reported similar weaknesses

in the healthcare system (Bhattarai et al., 2007; Miyaguchi et al., 2014) as was the case in Bangladesh and India (Khan et al., 2010; Puett et al., 2013). A systematic review also reported that access to supplies as one of the major barriers in CHWs' work (Glenton et al., 2013).

3.6.5.3 Referral facility or link with formal healthcare service

CHWs act as a bridge between the community and health facilities as their main role is to refer pregnant women for health checks (Bhutta et al., 2010; Glenton et al., 2010; Naimoli et al., 2012). According to a systematic review, CHWs successfully referred cases of any complications during pregnancy to the health facility. However, the review did not find any significant impact on health care seeking for maternal morbidities (relative risk 1.46; 95% CI 0.76 to 2.81, P=0.004) (Lassi et al., 2010). Services of CHWs might not be productive if there is no link between them and the formal health care services (Glenton et al., 2013; Prasad and Muraleedharan, 2007; Shakir, 2010). This can be further worsened by a lack of transportation and financial support, which are often the issues in poor countries (Bhutta et al., 2010; Glenton et al., 2010; Naimoli et al., 2012) .

In addition, often the way in which CHWs relate with paid health workers is important in their service provision and this is further discussed below.

3.6.5.4 Attitude of paid health workers

Health workers often appreciated CHWs' input in reducing their workload (Glenton et al., 2013) and also praised them for their contribution to maternal health (Glenton et al., 2010). Such positive attitude of health workers towards CHWs is important if the latter

are to perform well (Bhutta et al., 2010; Glenton et al., 2013). Yet, sometimes health workers fail to show due respect to CHWs thus reducing their enthusiasm for their work. For example, in India, training of CHWs was opposed by health workers as they viewed CHWs as a threat to their professional work (Gopalan et al., 2012). Similarly, reviews from India, Pakistan, and Ethiopia showed that CHW programme integration within the existing health system was hindered because of resistance from other health workers (Zulu et al., 2014). In Pakistan, discrimination against CHWs based on social, gender and economic status hindered their service provision (Wazir et al., 2013; Zulu et al., 2014).

If the health workers do not give due respect to CHWs for their services, the link between the CHWs and referral centres might be weakened. This is because CHWs are less likely to refer and then women are less likely to visit the health centre (Bhutta et al., 2010; Glenton et al., 2010; Naimoli et al., 2012). A study in Nepal showed professional health workers lacked respect for FCHVs and occasionally showed little interest in working with the FCHVs (Schwarz et al., 2014). However, FCHVs were keen to provide services and were able to deliver assigned services (New ERA et al., 2007). This could be because many FCHVs were illiterate (40%) and therefore, they followed the orders they received from the health workers. Such an authoritarian approach can be helpful if the work has to be achieved by employing lay CHWs because they are more likely to obey and follow the instructions of health workers (Gilson et al., 1989). Further research is necessary to understand the relationship between support from government health systems and CHW performance (Naimoli et al., 2012).

3.6.5.5 Effect of NGO involvement in mobilisation of CHWs

NGOs mobilising CHWs to deliver their interventions may not always produce desirable effects. In particular, high workloads of CHWs coupled with poorly defined work and unrealistic expectations can cause problems, as is the case in Pakistan and Nepal, both of which have large-scale community programmes (Glenton et al., 2013; Jaskiewicz and Tulenko, 2012; Wazir et al., 2013). Apart from the government, FCHVs in Nepal are widely mobilised by local NGOs in MHS provision at community level (Section 2.8.3). While NGOs' role in increasing access to basic healthcare services are important in remote areas of Nepal, FCHVs reported that they often felt tired from additional activities beyond their existing roles (DoHS, 2014; Glenton et al., 2010). In addition, some FCHVs lacked the skills to perform adequately as was the case of illiterate FCHVs (Section 3.6.1.2). In such situations, being overoptimistic about their activities without adequate training and education by the government and NGOs can simply undermine their actual or potential contribution (Schwarz et al., 2014; Walt, 1990, p.169).

Another problem with NGO mobilisation of FCHVs is that these NGOs sometimes provide FCHVs with financial incentives. Some researchers argue that offering such rewards to the volunteer may be counterproductive because the benefits of volunteering are dependent on volunteers being intrinsically motivated (Glenton et al., 2010; Gneezy and Rustichini, 2000; Wilson and Musick, 1999). However, others argue that the FCHVs need to be financially supported in order to provide quality services if they are expected to take responsibilities from both the government and NGOs (Section 3.6.3).

In addition, NGOs in Nepal have been criticised for their lack of transparency in work, poor communication and inadequate coordination with governmental agencies (Dhakal, 2007b). According to Dhakal (2007b), Karkee and Comfort (2016), and Nunns (2011),

better coordination between government organisations and NGOs is necessary in order to strengthen the existing healthcare services, but the studies presenting these suggestions were not based on empirical evidence.

3.7 Key Gaps

There are very few studies that assess the role perception of CHWs and there are no studies that give ‘voice’ to FCHVs. Previous research has mainly focused on policy makers’ point of view (Glenton et al., 2010) or that of a group of FCHVs working for a specific NGO project (Schwarz et al., 2014) rather than FCHVs working for a public health programme run by the Government of Nepal. In addition, FCHVs’ motives for volunteering have been studied but only with small sample size and detailed explanations are not available.

3.8 Chapter Summary

This chapter has systematically explored the ways CHWs provide a wide range of MHSs in south Asia with a particular focus on Nepal. In addition, literature from African countries about CHW programmes to improve MHS was included. Some of the strategies used by CHWs to deliver services include monthly mothers’ group meetings and home visits. Sometimes, they also provide therapeutic services. The literature indicates that FCHVs have been praised for their contribution in increasing access to MHSs; however, empirical studies exploring the experiences of FCHVs in this area are missing.

I also reviewed the key components for CHWs' efficient functioning: selection of CHWs including their gender and education, training/continuing education, community recognition, available incentives and health system support. The health system support for CHWs further included: supervision, access to supplies, referral facility, the attitude of paid health workers, and effect of NGOs involvement in the mobilisation of CHWs.

The review demonstrated that there were no empirical studies exploring the perceptions of FCHVs of support available to them, and the challenges they experience while providing MHSs. In order to gain a balanced and comprehensive understanding of FCHVs' work, the views of their service users and the local health workers who supervise FCHVs remain vital. Therefore, this thesis explores the role of FCHVs in MHS provision from the perspectives of health workers, service users, and FCHVs themselves. In addition, the factors that promote or hinder the services of FCHVs are explored. Understanding of these issues is important to improve MHS provision by FCHVs who serve across the country.

Having discussed my literature within the current body of knowledge, in the following chapter I will present the details about the research methods used for this study.

Chapter Four

Methods

4.1 Introduction

This chapter provides an account of the research design employed in this PhD thesis. The chapter begins by restating the main aim of this research followed by a brief account of my epistemological position. Then the chapter provides rationale for selecting qualitative methods to answer the research questions. Next, I describe types of data collection methods used in this study: semi-structured interviews, Focus Group Discussion (FGDs) and field notes. Then, I discuss the process of data management, transcribing and translation of collected information. This is followed by the presentation of methods of data analysis, and the validity and reliability of the methods used. The chapter concludes with the presentation of my positionality and ethical considerations related to the research.

4.2 Restating the Research Aim

This research aimed to explore the perceptions of the role of FCHVs in improving access to MHSs in two regions (the hill and Terai) of Nepal. This was from the perspectives of paid health workers, service users (pregnant women or mothers) and FCHVs themselves. This study also assessed the factors that promote or hinder FCHVs in their service provision. Specific research objectives and research questions are presented in Section 1.6.

4.3 Research Method

This study used qualitative research methods. A brief account of my epistemological position and the status of my data are presented followed by the rationale for the use of qualitative research methods.

4.3.1 Epistemological Position

This research uses a social constructivism approach. It starts with the premise that the world is socially constructed and the researcher's focus is on understanding the social world through an examination of the interpretation of that world by its participants (Bryman, 2012). Different people have different interpretations and these interpretations are important in qualitative research to find out why people do what they do. While some researchers believe that there is one truth and research can be done for objectifiable truth, others believe that there are multiple realities which require interpretation of the social world. I am influenced by the latter stance, including the notion that validity of research knowledge is socially constructed (Snape and Spencer, 2003).

This research takes a broadly interpretivist standpoint and the objective of the thesis is to increase understanding rather than generate data to test any hypothesis (Snape and Spencer, 2003). Therefore, this thesis used an interpretative approach, which supported the interview methods –the main methods for this study (Mason, 2002). I interpreted qualitative data on the role of FCHVs in MHS provision including their motivations to volunteer as shown in Chapters 5 and 6.

4.3.2 Rationale for the Qualitative Research Method

Due to the exploratory nature of the research questions, with the focus on interpreting multiple perspectives and developing an understanding of what the participants said (Bryman, 2012, Creswell, 2014), a qualitative approach to this research was deemed appropriate. Qualitative research is typically concerned with understanding meanings, experiences and perceptions about “why?” or “how?” to capture real experiences in a natural setting (Denzin and Lincoln, 2003). The data collected in qualitative study provide real, rich and in-depth experiences on the topic of interest from the perspective of the people experiencing the process (Miles and Huberman, 1994) and allow detailed documentation of contextual information (Bryman, 2012; Keenan and van Teijlingen, 2004). Because the topic of this study - the role of FCHVs in MHS provision - has not been explored before, a qualitative approach is useful (Silverman, 2006).

It is important in qualitative research to go beyond the surface meaning of the data to make sense of them and tell the story of what the data mean (Holloway and Biley, 2011). My main aim was to gather an in-depth understanding of how FCHVs perceive their roles in MHS provision and why and how they provide these services. It is this importance of the experiences and meanings in the qualitative methods that made qualitative methods the appropriate choice for this research. The qualitative methods used were semi-structured interviews, FGDs and field notes. While the use of different methods strengthened the study quality (Mason, 2002) , interviews were the main method used in this study.

4.4 Semi-Structured Interviews

Semi-structured interviews (henceforth referred to as interviews) were used to collect the data in this study. I had a list of open questions, referred to as the topic guide (Appendix 2), which enabled the interviewee to respond with flexibility and the interviewer to explore new avenues as they opened up (Bryman, 2012). Interviewing was appropriate for this study, as asking individuals about their experiences and perceptions, by talking and listening to them, was the only technique to generate this information (Bowling, 2009; Mason, 2002). Using interviews, individual perceptions of FCHVs' role in MHS provision were explored.

The following section outlines the methods used in the interviews: study sites/setting, study population, sampling, data collection tools, pilot study and data collection procedure.

4.4.1 Study Sites /Settings

Villages (communities) from two different geographical regions of Nepal were chosen for this study: the hill (Dhading district) and the Terai - flat lands (Sarlahi district). The Himalayan region was not included in this study, because the region is most inaccessible with the lowest number of populations living (Section 2.2). Another reason was resource limitations. Therefore, only the hill and Terai regions were chosen for this study. Interviewing in these two different regions allowed me to assess whether there were any differences in FCHVs' work, because both places have the same programme implemented by the Government of Nepal (Section 2.8.2).

Villages were selected in the two regions and general information about the districts was obtained from meeting with FCHV programme directors and other key people in

Kathmandu. Documents such as FCHV strategy guidelines (FHD, 2010), annual health reports (DoHS, 2014) and FCHV programme analysis (New ERA, 2008; New ERA et al., 2006) including the district websites were assessed to examine the FCHVs' work. I decided to include villages from rural and town centre settings.

4.4.1.1 Hill region (Dhading District)

Dhading district was selected in the hill region due to the government's successful public health programme in this area, as highlighted by FCHV programme managers (Section 4.4.6) and an annual report (DoH, 2014). Within this district, I selected study villages that I was familiar with. I mainly included interviewees from one village, but I also included some from adjacent villages in order to assess whether there were any differences in FCHVs' work patterns within the same geographical region.

It is difficult to access the villages in the hill region, as there are few roads, only tracks. There are some newly opened roads, which become inaccessible in the rainy season. Bus services are rare. Even if they are available, they are often privately owned and fares are beyond the reach of local people. One of my study villages is on a major highway on which the PHC centres and private hospitals are located. Therefore, many interviews were undertaken in the PHC centres at times when FCHVs visited these centres for training or reporting.

4.4.1.2 Terai (Sarlahi District)

Villages from Sarlahi district were selected in the Terai, the southern plains of the country, because the district has people from different ethnic groups living close to each other. As the region is flatland, access to transportation as well as health centre facilities

is relatively easier than in the hill region even if there is no public transport to the villages. When there are roads, they are unsurfaced roads and are either slippery or dry and dusty.

Sarlahi district is about 192 kilometres from Kathmandu, a day's journey on the bus. Most of the public and private health centres are located on the East-West highway. Service users often visit the government health centres and family planning centres where free health care services are available. As in the hill region, data were collected from surrounding villages, which were adjacent to each other, to get a broader understanding of FCHVs' work.

4.4.2 Study population

The main study population for the interviews were FCHVs who were volunteering in every ward – the smallest unit of the village. Interviews were also conducted with service users (pregnant women or mothers of children aged less than 2 years), and local health workers who were supervising FCHVs or helping them with their work. Understanding the views of service users and local health workers was core to understanding the volunteers' work and was necessary to complement the views of FCHVs. As suggested by Mason (2002), I compared similarities and differences between the data produced from different sources, which helped me to develop an overall picture of FCHVs' service provision.

4.4.3 Sampling and size

A combination of purposive and snowball sampling (Ritchie et al., 2003) was used to select villages, and the study participants – health workers, women, and FCHVs.

FCHVs were dispersed, with every village containing 8 or 9 FCHVs, and therefore, respondents were recruited through purposive sampling. This sampling provided me with a rich data set reflecting differing views and experiences (Marshall and Rossman, 2011; Mason, 2002; Ritchie et al., 2003). A majority of FCHVs from one particular community were selected followed by the volunteers from adjoining villages.

Participants were from diverse caste and ethnic groups (Section 5.2.1) and also differed in terms of their age, education, and work experience. Inclusion of such groups captured a wide range of perspectives on the FCHVs' roles in MHS provision.

I explored the FCHVs' services in-depth with a small number of participants, unlike quantitative studies that usually require a large number of participants to reach statistical significance (Miles and Huberman, 1994). All FCHVs invited to participate in this study responded and some recommended another person who they thought suitable for the study. This snowballing technique (Bryman, 2012) helped me to reach other FCHVs in the remote villages of the hill and the Terai regions.

I was primarily interested in FCHVs, so I conducted 20 individual interviews with them and 4 FGDs involving 19 of them as described in Section 4.5. As I went on collecting the data, I listened to the audio records and manually noted some emerging preliminary themes based on research questions. Following this, I explored new information in further detail. For example, I found that NGOs were involved in mobilisation of FCHVs in communities; therefore I interviewed NGO workers to bring their perspectives on FCHVs services.

Interviews with service users

Purposive sampling was used to identify service users (pregnant women or mothers). They were chosen to represent their pregnancy status, age and education and were selected from the areas where FCHVs were interviewed.

Interviews with health workers

I interviewed FCHVs' supervisors from public health centres. Initially, there were no plans to include the health workers from NGOs, but as the study progressed, I found FCHVs were trained, incentivised and mobilised to deliver MHS by NGOs. Therefore, some NGO workers were also interviewed to capture a range of perceptions on FCHVs' work.

4.4.4 Data collection tools

A topic guide with an informal grouping of subject matter and questions (Arthur and Nazroo, 2003; Taylor and Lindlof, 2010) was developed following the literature review (Chapter Three) and through consultation with supervisors. The topic guide (Appendix 2) included a number of key questions, including potential probes to allow individuals to discuss their personal experiences in FCHV's role in MHS provision. The topic guide was further amended during the pilot study (Section 4.4.5).

The individual topic guide for interviews covered the following topics:

- FCHVs' perceptions: interviews with FCHVs included the description of MHS provided, the strategies used and the factors that promoted or hindered their services.

- Service users' perceptions: interviews with service users (pregnant women or mothers) included their awareness of the presence of FCHVs in the village, whether they received any services from FCHVs and if so, then how they felt about the services.
- Health workers' perceptions: interviews with health workers included their perception of FCHVs' role in MHS, including the supports available to the FCHVs, and the challenges they faced.

4.4.5 Pilot study

A pilot study was conducted to pre-test the topic guide for interviews with four FCHVs in Chhaimale village, located one and half hour's journey by bus from central Kathmandu. The test was useful to clarify the topic guide in case any question was not clear (Appendix 2) (van Teijlingen and Hundley, 2001, 2005). For example, participants were asked for clarifications when they used idiosyncrasies and metaphors. The results from this pilot study were used as guidance for interviews and were not included in the final analysis.

4.4.6 Preparation for field visit

In the preparation for my field visit, I initially met with FCHV programme planners in the MoHP, Kathmandu. They provided information as well as the strategy document and other documents on the FCHV programme. I also visited the public health centres in the data collection sites and met with local health workers. They informed me about local health services and the available training dates for FCHVs. The health workers

also allowed me to use the venues for some interviews and for a FGD. I set the interview dates with them and planned my village visits.

4.4.7 Interview procedure

From early May to September 2014, data were collected from two places: the hill and Terai regions. Data were obtained through multiple visits to the study sites, first in the hill region and then in the Terai. Interviews and FGDs were conducted by me in person in Nepali, as all the interviewees could understand and speak it.

In data collection sites, local guides accompanied me to places which were not familiar to me. They sometimes introduced me to the villagers, which facilitated the building of rapport with the interviewees and eased the beginning of the interview. The approach used in the interviews is described in the section of ethical consideration (Section 4.12). I interviewed at a time and a place convenient for the interviewees, mainly at homes or health centres, but also at paddy field or cafes. As described by Mason (2002, p.7) qualitative research is “strategically conducted, yet flexible and contextual.” This flexibility in the method was important to gain information from the interviewees.

4.5 Focus Group Discussions

The next method employed in this study was FGD. The aim of the FGD was to capture the breadth of perception and experiences of FCHVs through group interaction, rather than to develop consensus (Finch and Lewis, 2003; van Teijlingen and Pitchforth, 2006). The deliberations in the group encouraged participants to generate information within that social context thus enabling me to capture ideas from them (Kitzinger and

Barbour, 1999). The FGDs explored the volunteers' roles in MHS provision using the topic guide prepared from the literature (Appendix 2). The discussion had the flexibility to explore any unexpected problems and participants were allowed to talk on key issues that emerged (van Teijlingen and Pitchforth, 2006). This complemented my interviews by generating some powerful insights into the topic which are presented in Chapters Five and Six.

In addition, the obvious group processes in the FGDs may have had a substantial impact on the agreed opinion in the group, which may not represent the individual participants' perceptions (Stokes and Bergin, 2006). However, most of the research participants contributed to the group discussion and expressed similar views which are discussed in Chapter Five and Chapter Six.

FGDs covered the following topics:

- Kinds of MHSs provided by FCHVs
- The way MHSs are delivered in the village
- Factors that promote or hinder their MHS provision

The following section outlines the methods for conducting FGDs. This provides information on FGD sites, study population, sampling and size and data collection.

4.5.1 Study sites

Like the interviews, FGDs were held in the hill and the Terai regions. Study regions are indicated by black arrows in Figure 1 (p.18). I was interested to see how the participants would respond in the two regions, whether they would provide similar or contrasting views. Other reasons for the selection of areas are similar to those relating to interviews and are discussed in Section 4.4.1.

4.5.2 Study population

Study population was FCHVs working in Dhading and Sarlahi districts of Nepal.

4.5.3 Sampling and size

Purposive sampling was used to locate participants for FGDs, as for the interviews (Section 4.4.3). This method made it easier from a logistical point of view too. In the Terai regions, two FGDs were conducted with both experienced and inexperienced FCHVs to see if there were any differences in the MHSs offered. The number of participants for a FGD varied from four to six. This is in line with guidance suggesting five or six and sometimes even as few as three participants (Kitzinger and Barbour, 2001, p.8).

4.5.4 Data collection

I conducted one FGD in Dhading and two FGDs in Sarlahi. Unexpectedly, one FGD was held in Kathmandu with FCHV activists, which was not planned initially. On one occasion, I went to get information about FCHVs from an FCHV association. I met with four FCHVs activists wanting to share their experience with me. I used this opportunity to run an extra FGD which provided me with a broader picture of FCHVs' needs, concerns and expectations.

Like the interviews, FGDs were conducted in a location convenient for the FCHVs. Three of the four FGDs were conducted with FCHVs who were gathered for training in the health centres, thus avoiding the necessity to reconvene them outside of their set

schedule. The last FGD was scheduled specifically for the purpose of this study. Data were digitally recorded after taking consent from the participants. Wherever possible, participants were provided with refreshments (tea, cold drinks, biscuits or noodles) after the FGDs in appreciation of their valuable time contribution.

This research used interviews as its main study method, followed by FGDs, but field notes were also used. These are discussed below.

4.6 Field Notes

Field notes were written during or immediately after the interviews (or FGDs) in the notebook to remind me of any important points that could be useful for interpretation or analysis (Arthur and Nazroo, 2003; van Teijlingen and Forrest, 2004). Although active listening and noting particular moments sometimes might act as selective filters thus leading to a selection bias (Kvale and Brinkmann, 2008), the process helped me to note any relevant issues within that context and enriched the primary data.

The use of field notes also aided the process of reflection. I noted any issues that came up during the discussions or interviews, which were not openly talked about, but were important to clarify the topic of interest. For example, I was able to achieve a clearer view of the relationship between FCHVs and health workers, and FCHVs and service users after observing the interaction between the groups in both study regions.

4.7 Data Management

At first, demographic information and other pertinent notes taken during the interviews and FGDs were gathered and labelled according to the type of study participants. Then

details of the participants were entered on an Excel spreadsheet. Next, audio records of interviews and FGDs were transferred to the computer and copies were made for data safety. The audio records were then listened to, to ensure the information was recorded properly.

4.8 Transcribing the Data and Translation

Data transcribing and translation processes are described here. All the audio records were in Nepali so the data were transcribed verbatim in Nepali using a pen and papers. After transcribing six interviews, I realised I would not be able to complete my work on time, if I were not supported in transcribing the work. For example, one hour of recording took almost seven to eight hours to transcribe as reported in studies (Bowling, 2009, p. 417; Marshall and Rossman, 2011) and a similar amount of time was spent on translation - it required about half an hour for translation of one A4 page of Nepali to English. Therefore, I hired a research assistant to transcribe verbatim in Nepali. After each transcribing session, I listened to the audio record to prevent any inaccuracies in transcription that might possibly lead to misreporting.

I translated all Nepali transcriptions into English. While doing so, I found it difficult to translate some idioms and phrases from Nepali to English. To ensure that there would be no loss of meaning in the translated information; those words were left in their original form until the later stage of analysis. In addition, I found that people did not speak in an accurate manner, for example, they skipped words or used short-cuts. I added words within verbatim quotes to ease the understanding of the contents (van Teijlingen et al., 2011). Translation of all the interviews and FGDs took more than three months, a substantially greater time than I initially expected.

Some subsets (four interviews and one FGD) of translated data were crosschecked with one supervisor (PS) who was fluent in both English and Nepali. He helped me to explain the idiosyncrasies and metaphors from Nepali in English without losing their original meaning. Comparisons were made with the original transcripts to ensure that the meaning of the content was similar (van Teijlingen and Pitchforth, 2006).

After completing the handwritten data transcription, I asked someone to type it in a Microsoft Word document for a safe record of transcription, because I do not know how to use the software to type in Nepali.

4.9 Methods for Analysis

Data analysis was undertaken only after all data was collected. While the data collection was held in Nepal, data analysis was undertaken in the UK using NVivo 10 software. Data were analysed using thematic analysis. The following is a brief description of thematic analysis and a more detailed account of the steps used in the data analysis.

4.9.1 Introduction to thematic analysis

Thematic analysis was used to interpret the data. Thematic analysis is a method for identifying, analysing, and reporting patterns or themes (Braun and Clarke, 2006). This method is often used in qualitative data analysis and requires coding to categorise the data (Bowling and Ebrahim, 2005, p.524). The essence of thematic method is its ability to identify and recognise the underlying themes as well as the visible ones in the data. Often the analysis is nonlinear involving both inductive and deductive approaches

(Section 4.9.2.1) (Vaismoradi et al., 2013). Thematic analysis allowed me to identify and analyse the themes within the context of data collected (Joffe and Yardley, 2003).

4.9.2 Steps in analysis

All data were collected in Nepal before main analysis. The data analysis consisted of the following steps: a) preliminary analysis- generating initial codes, b) use of a data management tool, c) generating codes, d) generating themes and e) selecting themes.

4.9.2.1 Preliminary analysis- generating initial codes

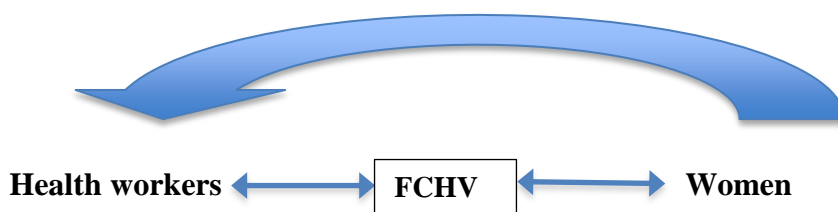


Figure 5 Interrelationship among health workers, FCHVs and women

The focus of the study was to obtain detailed accounts (Snape and Spencer, 2003) of the FCHVs' functioning in MHSs from the multiple perspectives of FCHVs, their potential users and paid health workers. Therefore, thorough and careful reading and re-reading of the transcripts was conducted in a systematic way to recognize recurring themes (Pope et al., 2006) or to locate certain patterns in the data according to the research questions (Joffe and Yardley, 2003). In the beginning, an inductive approach to analysis

was used where all the data were coded. This is also the most fundamental method of developing a code and themes (Keenan et al., 2005). An attempt was made to stay connected with the research questions while allowing new themes to emerge throughout the analysis.

At the beginning of the analysis, coding was carried out in a Word document without trying to fit the data into a pre-existing frame. After the first few interviews had been coded, one of my supervisors (EvT) independently coded them. This helped me to clarify the emerging sub-themes across the data set and agreements were reached during the supervision meetings. This was done in order to include an element of inter-rater reliability (Section 4.10.3). Data coding was iterative throughout the data collection. Moreover, keeping personal memos and a journal about the coding process helped to ensure reliability of the findings.

4.9.2.2 Use of a data management tool

Data were managed using the NVivo 10 Software package (QSR International, 2015). For the use of the NVivo software, basic and advanced training was obtained from the University of Sheffield. I also used YouTube videos to gain additional information and the learning took upwards of 40 hours. Using NVivo allowed more transparent ways of data analysis and helped to quantify emerging themes from the textual data (Welsh, 2002), but the software is often criticised for the fragmentation of the text. This is because the coding of the data may sometimes cause loss of context, which is especially important for data from FGDs where the interaction between the participants might be lost (Richards, 1999). However, my familiarity with the study context and my involvement throughout the data collection, translation and analysis enabled me to have thorough understanding of the data.

4.9.2.3 Generating codes

The second step in thematic analysis involved systematically producing lists of codes from the data set (identification of nodes in NVivo) that have a repetitive pattern in the Nvivo software. Overarching points were noted first, which helped the coding - a “process whereby data are broken down into component parts, which are given names” (Bryman, 2012, p.710). The transcripts were coded using open coding and the preliminary codes were named using terminology used by the participants themselves. After coding of the five interviews, the codes were arranged according to the research questions (Appendix 2) and any new codes emerging from the dataset were also assimilated.

In my reflective journal, I maintained a record of the emerging codes and the new codes. This record was a reference point for me while I was interviewing and also helped me in the data analysis prompting me to understand how the codes would be incorporated into the final analysis. Each data item was carefully coded in order to identify any overlooked repeated patterns. At first, the data from women and health workers were coded in separate NVivo files, whilst the codes from FGDs were combined with codes from interviews of FCHVs, because they were both volunteers and themes emerging from the data sets were similar. Then, the coded data for health workers and women were merged together with the data for FCHVs, because the overall aim of the study was to explore the role of FCHVs in MHS provision.

The coding process was undertaken repetitively to refine the codes by adding, removing, merging or splitting potential codes. Coding for as many themes as possible and coding individual aspects of the data was cumbersome but the process was useful to find themes. The codes were then discussed with my supervisors in order to generate

themes as follows.

4.9.2.4 Generating themes

Themes were generated by reading and rereading the coded empirical materials, and combining and splitting initial codes according to the meaning of the content in the text. The coding process was not a linear process, but a cyclical one in which codes emerged throughout the data analysis. This cyclical process involved going back and forth between the steps of data analysis until final themes were decided (Ritchie and Lewis, 2003). Themes and subthemes were allowed to emerge from the textual data so that any new ideas could be identified within the data (Bryman, 2012). Subthemes were combined to form the major themes. By repeated readings of the subthemes, themes were identified thus drawing an overall picture for this thesis (Perakyla, 2013).

4.9.2.5 Theme selection

Themes were chosen in order to provide more understanding of the research questions in this study. Once the themes were defined, connections amongst themes were established in the final thesis in order to assist the reader to understand how decisions were made regarding the themes' selection. Sometimes, aspects of meaning appearing few times in the text were of a higher priority than those appearing more often (Kracauer 1952 cited in Schreier, 2012 , p.13). For example, FCHVs provided different types of medicines or assisted in deliveries in remote places, which was reported merely a few times, but were of high importance due to its direct health implications (Section 5.4.2). Therefore those themes were highlighted in the study.

4.9.2.6 Data integration and triangulation

Data were integrated in the data analysis step known as “technical integration” (Mason, 2002, p.35). Similar themes emerging from the different data sets were put together and comparisons were made among different groups. Views of service users and paid health workers were compared with those of FCHVs. While keeping FCHVs’ perspectives at the centre, findings are presented according to themes (Chapter Five and Six). To understand the theme within the context and to convey the meaning of the particular themes I used quotes (Ritchie and Lewis, 2003).

4.10 Validity and Reliability of Study

There are no easy options to decrease the likelihood of errors when using qualitative methods; however, there are a number of ways to increase the soundness of qualitative research (Malterud, 2001). Appropriate sampling, reliability of data collection, interpretative rigour, triangulations, and reflexivity are some of the ways to ensure the quality of qualitative studies (Mays and Pope, 1995). Instead of thinking of these processes as quick fixes to improve the qualitative study, they were carefully applied in the research design and data analysis thus strengthening the rigour of the methods (Barbour, 2001), and are discussed below.

4.10.1 Sampling

Careful attention was paid to the selection of suitable participants for the study to ensure that participants were recruited based on their experiences associated with the research question (Mays and Pope, 1995). Moreover, attention was given to explore multiple

perspectives on FCHVs' role in MHS provision by including a wide range of voices of FCHVs, their service users and the local health workers who helped the volunteers.

4.10.2 Data collection

Many steps were taken to improve the study quality. Firstly, the pilot study conducted in a rural village provided useful information to refine my interview guide (4.2.1.5). Next, the analytical process involved in qualitative research from the time of data collection allowed me to go back and refine questions and pursue emerging evidence in further depth (Pope et al., 2000). The interaction between the researcher and the interviewee/participant was also a vital element for the analysis (van Teijlingen et al., 2011). All interviews and FGDs were audio recorded using a digital recorder. The recordings were transcribed and checked. Finally, being a native Nepali speaker, my own involvement in all the steps of data collection, translation and interpretation helped to understand the data thoroughly without losing sight of the study context.

4.10.3 Multiple coding or interpretative rigour

Multiple coding - comparable to "inter-rater reliability" in quantitative methods - was applied in the study. Multiple coding of the entire data set was impossible, as it was an independent PhD project. However, a selection of the early transcripts in English was coded independently by a supervisor. Having a supervisor to code part of the data ensured the data was coded and interpreted appropriately (Barbour, 2001) thus assuring the data quality. The emerging themes were compared with mine and any discrepancies were discussed. This process added reliability through inter-rater reliability (Barbour, 2001; Pope et al., 2000) and informed and guided further analysis.

4.10.4 Triangulations

This study used a triangulation technique to merge data from different data sources, thus developing common themes across the data set. By using more than one method of data collection, triangulation ensures the internal validity of the study, but triangulation is not without controversy as this presumes any weakness in one method could be reduced by the strength of the other method (Barbour, 2001). However, the aim of the triangulation in this study was to make the data analysis more comprehensive (Mays and Pope, 2000), thus providing a broader understanding of the roles of FCHVs in MHS provision. The themes presented in this research were triangulated in three different ways: a) groups of interviewees (FCHVs, their potential services users, and the local health workers), b) research methods (interviews, FGDs and field notes) and c) study sites (the hill and Terai regions). If themes converged from different perspectives of participants, this was expected to enhance the validity of the research (Lambert and Loiselle, 2008). However, divergent views were also included in the study, as I wanted to understand the range of responses on issues under discussion.

4.10.5 Reflexivity

Reflexivity is a process of expressing the researcher's preconceived ideas and perspectives in every step of the research (Malterud, 2001). Reflecting on my own position and assumptions throughout the research process was one important step to increase rigour in this qualitative study (Byrne, 2004; Malterud, 2001). I maintained a reflective journal where I wrote about my involvement with the research participants and any interactions that influenced the research process. These reflexive notes helped

me to recognise the fact that knowledge is situated within the given context. Being reflective helped me to be more objective while considering my position, which is discussed below.

4.11 Researcher's Positionality

It is important to consider positionality, reflexivity and the power relations that are inherent in research processes in order to undertake qualitative research. I will be reflecting (Section 7.7.1) on my own beliefs and values and how these influenced both interactions and interpretations in research settings (Mays and Pope, 2000). In qualitative research, questions arise as to what extent interpretations are guided by the researcher's own values (Mason, 2002), and how it is possible to understand the values of others when they are not one's own. Therefore, in order to show the possibility of my influence on the study, my preconceived ideas (Malterud, 2001), including my personal information such as gender, social status and professional status (Mays and Pope, 2000) are briefly presented.

During the data collection, I tried to ensure that my position as a female from an upper Hindu caste family with a high level of education would not have an impact on the participants' complete disclosure of events. This is because generally the women in Nepal experience restrictions based on their gender, age, ethnicity, education etc. (Bennett et al., 2008). I believe that my gender as a female and background as a nurse might have given participants a feeling of being at ease, because women in general prefer to share their issues with female health workers. For example, interviewees described some challenging situations at work as they assumed that I, as a fellow health professional, would understand their concerns. Whilst some FCHVs complained that sometimes government health workers talked to them rudely, a health worker confessed

that sometimes the government workers did not pay the right amount of incentives to the FCHVs (Section 6.8.2). Such revelations were possible because the participants could have felt that I could understand their issues and feel empathy for them, thus enabling them to share their experiences.

I also tried to ensure that my position as a researcher from the UK would not inhibit the responses from any participants, which otherwise might introduce bias. This is because it is known that the social class of the interviewer can influence the subject's answers (Orenstein and Phillips, 1978). My familiarity with the study environment also helped me to understand study participants and approach them in a friendly manner. I was born in the hill region and grew up in the Terai. Therefore, I am aware of both regions and I recognise the local values, customs and share the same language as most of my participants. More examples of the study strengths are discussed in Section 7.7.1.

Furthermore, my professional work experience as a public health officer in the remote regions of Nepal was useful to understand the diverse needs of women, including the geographical and cultural differences that exist in the country. I have served one of the most marginalised communities of Nepal while walking up to four days on foot to reach the target village. It was this time when I saw some FCHVs getting training to improve maternal health, but I also saw a number of maternal morbidities and mortalities leaving their devastating effect on the families and communities. This deeply affected me and forced me to think how I could contribute to maternal health issues in the remote villages.

For almost all maternal healthcare activities at the community level, I noticed that FCHVs are trained and mobilised, but the voices of these women were seldom heard in the literature. So, I decided to undertake this study.

4.12 Ethical Considerations

I received ethical approval for this study from the Nepal Health Research Council (NHRC) (Appendix 3). The NHRC is recognised by The University of Sheffield's Research Ethics Committee, as having in place sufficiently robust ethics review procedures and therefore, it did not require additional ethics approval. I also confirmed this with the Chair of Research Ethics in the School of Health and Related Research.

I received a letter from the University stating that I am a student from the University of Sheffield and doing this specific research in Nepal (Appendix 4). I showed this letter to health centres and interviewees to introduce myself, because usually organisations in Nepal demand such letter before they provide any information. This letter along with the "participant information sheet" (Appendix 5) and "written consent" (Appendix 6) was shown to everyone involved in the interviews and group discussions.

Verbally informed consent was important in this study, as a number of study participants were illiterate. I approached them, explained the purpose of the research and the likely duration of the interview. I told them that their participation was voluntary and that it was their voluntary choice of whether to take part or not, and emphasized that their participation was highly appreciated. I also informed them that the interviews would be recorded using a digital audio recorder and they were not required to identify themselves and they would not be identifiable once the interviews were transcribed. Once they were ready to participate, written permission was sought. In case of illiterate interviewees, the consent paper was read aloud for them. Some of them could sign their name, while others used fingerprints or asked their relatives to sign on their behalf.

Like interviews, consent for FGD involved acknowledgement that the interviews would be recorded and translated and that verbatim quotes would be used in the study report. In the FGDs, unlike individual interviews, the participants would know each other, so

they were advised that they were not obliged to answer if they would not feel comfortable doing so. Additionally, in the event of sensitive information raised within the FGDs, the participants were advised at the initiation of the session that what was discussed within the group was not to be shared outside of the group, and this was the shared responsibility of all participants in the groups.

Everybody approached, who met the study criteria, agreed to take part in this research. Confidentiality of participants was ensured through anonymising details of interviewees and group discussion participants throughout the research. Data recorded will be destroyed after the publication of academic papers based on this PhD.

4.13 Chapter Summary

This chapter described the qualitative data collection methods - semi-structured interviews, FGDs and field notes. In this regard, I discussed the rationale for the use of qualitative methods including my reflection on the use of these methods. Because the study was conducted in two regions, details of study settings were presented, followed by detailed methods for data analysis. Then, validity and reliability of the study were presented. Next, the researcher's positionality was considered. The chapter concluded with ethical considerations for this study. This chapter provided background for the subsequent discussion of findings in the empirical Chapters (Five and Six) and in the discussion (Chapter Seven).

Chapter Five

FCHV Services in Maternal Health

5.1 Introduction

This chapter presents the findings from the data analysis, which aimed to explore the role of FCHVs in MHS provision in two regions (the hill and Terai), from the perspectives of local health workers, service users, and FCHVs themselves. The data analysis showed that FCHVs were involved in a wide range of activities, including family planning and child health, which have an impact on women's health. This thesis, however, particularly focuses on MHSs provided by FCHVs.

The chapter starts by introducing socio-demographic information on the interviewees and FGD participants. Data analysis of the FCHVs' role in MHS provision showed four broad themes: (a) access to MHS in rural villages, (b) maternal health promotion through informal routes, (c) maternal health promotion through formal routes, and (d) additional healthcare activities - taking the role of formal health care providers.

Wherever possible, the findings are compared between the two study regions.

5.2 Socio-demographic Characteristics of the Participants

Table 5 summarises the information on the data collection methods, types of study participants, and number of participants by location. Of the 76 participants who took part in this study, 57 were interviewed using the semi-structured topic guide (Appendix 2). The remaining 19 FCHVs took part in FGDs. The 57 interviewees comprised of 20

FCHVs, 26 potential service users (pregnant women or mothers), and 11 health workers (from government health centres and NGOs). The vast majority (almost 95%) were from rural hill and Terai villages. The remainder (one FGD with four individuals) was based in Kathmandu (Table 7, p.96). Although the focus of the study was in rural areas, the data on Kathmandu was retained because the FCHVs were activists who were advocating for the rights of the volunteers. This had the added benefit of providing a greater understanding of the common issues or concern of volunteers (Section 4.5.4).

The total numbers of participants from the hill and Terai regions were 32 and 40 respectively. The majority of interviewees were interviewed from one particular village in each region, but also included a few interviewees from surrounding villages. This helped to capture a wider view of FCHVs (Section 4.4.1.2). The total number of FCHVs in FGDs in the Terai was higher (n= 11) as compared to the hill region (n= 4), as I found a group of newly appointed FCHVs (n=6) and held a FGD with them to examine any differences in their work pattern compared to the experienced FCHVs. The number of women interviewed from the hill and Terai regions was fairly equal: 14 and 12 respectively.

Table 5 Participants involved in interviews and focus group discussions

Study methods	Types of study participants	Number of participants by location			Total
		Hill (Dhading)	Terai (Sarlahi)	Kathmandu	
Interviews	FCHVs	8	12	-	20
	Pregnant women/mothers	14	12	-	26
	health workers (public)	4	3	-	7
	health workers (private)	2	2	-	4
Focus Group Discussions	FCHVs	4	11	4	19
Total		32	40	4	76

A summary of biographic information on each participant is given below.

Table 6 Socio-demographic characteristics of FCHV

Respondents	Place	Age	Caste/ethnicity	Education (year)	Work Experience (years)	Religion	Husband's occupation	Number of houses covered	Distance from health centres (walk)
FCHVD1	Dhading	45-59	Brahmin	Adult education	15	Christian	Agriculture	245	1hr
FCHVD2	“	≥60	“	“	“	Hindu	“	65	2hrs
FCHVD3	“	45-59	“	“	“	“	No husband	750	20 min
FCHVD4	“	≥60	Tamang	Illiterate	“	Buddhist	“	175	5-6 hr
FCHVD5	“	45-59	Brahmin	Primary (2)	16	“	No work- paralysed	55	1hr
FCHVD6	“	“	Chhetri	Adult education	24	Hindu	Security guard	150	2 min
FCHVD7	“	30-44	Bhujel	“	24	“	Working abroad (Gulf)	120	30min
FCHVD8	“	“	Brahmin	Sec (10)	7	“	Retired teacher	225	15min by bus
FCHVS9	Sarlahi	“	Tamang	Primary (5)	10	Buddhist	Agriculture	170	30-45min
FCHVS10	“	“	“	Illiterate	“	“	“	160	1hr
FCHVS11	“	“	“	“	19	“	Business (hotel)	92	“
FCHVS12	“	≥60	“	“	25	“	Widowed	63	15min
FCHVS13	“	45-59	Madhesi	“	19	Hindu	Bachelor homeopathy	200	10min
FCHVS14	“	45-59	Gurung	Adult education	19	Buddhist	Widowed	450	25 min
FCHVS15	“	30-44	Chhetri	Sec (8)	“	Hindu	Business, shop	52	1 hr
FCHVS16	“	45-59	Brahmin	Sec (10)	“	“	Agriculture	300	20 min
FCHVS17	“	≤30	“	Sec (9)	3	“	“	80	1hr, by cycle
FCHVS18	“	45-59	Lama	Primary (4)	21	Buddhist	“	209	25 min
FCHVS19	“	“	Magar	Illiterate	19	Hindu	Widowed	200	1 hr
FCHVS20	“	“	Madhesi	Sec (10)	26	“	“	250	15 min

Sec= Secondary education (year six to year 10 class), Adult education- learnt to read and write Nepali after the age of fifteen.

Table 6 shows the biographic characteristics of FCHV interviewees. The majority of FCHVs (n=11) interviewed were aged 45-59 years (six were 30-44 and three 60 or 60+). Six volunteers were illiterate, while six others had received some adult education, which means that they could read and write Nepali. Another three volunteers had received primary education, and five had received secondary education.

Most of the FCHVs interviewed were experienced, most of them (16 of the 20) had been working for more than 10 years, two of them had worked for ten years and the other two had less than ten years' experience.

The number of houses served by each FCHV varied from as low as 52 to as high as 750. Six FCHVs served fewer than 100 houses each, seven served 100-200 and the rest served more than 200.

The walking distance to health centres varied from two minutes to six hours, the commonest distance being half an hour to an hour.

Table 7 Demographic characteristics of FCHV in focus group discussions

Serial Number	Place	Participants	Age (year)	Caste/ethnicity	Religion	Marital Status	Education in years	Work Experience	Houses covered	Distance to health centre
FGD1	Kathmandu	1	45-59	Thing	Buddhist	Married	10	18	-	-
		2	45-59	Rai	Kirat	“	“	13	-	-
		3	45-59	Kshatri	Hindu	“	7	26	-	-
		4	“	Hamal	“	“	9	26	-	-
FGD2	Dhading, Gajuri	1	≤30	Lama	Buddhist	“	“	4	-	1.5 hrs
		2	≤30	Brahmin	Hindu	“	Intermediate	6	-	30 min
		3	45-59	Chepang	Natural	“	Illiterate	16	-	2 hrs
		4	“	Brahmin	Christian	“	Adult education	15	-	1 hr
FGD3	Sarlahi, Harion	1	30-44	“	Hindu	“	10	19	242	20 min
		2	45-59	“	“	Widow	Illiterate	“	250	10 min
		3	30-44	“	“	Married	10	“	250	15 min
		4	45-59	“	“	“	8	“	200	30 min
		5	30-44	“	“	“	10	“	140	“
FGD4	Sarlahi- Lalbandi	1	≤30	“	“	“	12	3		20 min
		2	30-44	Gole	Buddhist	“	10	7	400	“
		3	45-59	Lama	“	“	“	2	145	30 min
		4	≤30	Brahmin	Hindu	“	“	1	125	20min
		5	≤30	“	“	“	12	“	120	2 hrs
		6	30-44	Chhetri	“	“	10	“	40	10 min

< less than, ≤ less than or equal to

The 19 FCHVs involved in FGDs came from different ethnic backgrounds and were different in terms of their work experience and the levels of education. The majority (9) were in the 45-59 age group, while five of them were less than 30 years old. Generally, the younger the volunteers, the better education they had received. Only two participants reported themselves as illiterate, one each from the hill and Terai regions.

While the FCHVs in two groups (FGD1 and FGD3) were more experienced, with an average of 15 years work experience, one group (FGD2) was more mixed with their experience ranging from 4 to 15 years. The final group of FCHVs was composed mostly of newly recruited volunteers having 1 or 2 years of work experience.

The number of houses covered varied from 42 to 400 with a majority of FCHVs covering 100-200. The walking distance to a health care centre ranged from 10 minutes to 2 hours with an average of 10 to 20 minutes. This distance was the main problem in the hill region although one FCHV in the Terai reported that her walk to the health centre took 2 hours.

Table 8 Demographic characteristics of service users (pregnant women or mothers)

Respondents	Place	Age	Ethnicity	Religion	Education	Age married	Working status	Husband's occupation	Distance from health centres (walk)	Number of children	Recent place of delivery
Woman1	Dhading	15-20	Dalit	Christian	2	16	Agriculture	Abroad	1 hour	0	Home
Woman2	“	>35	Tamang	Buddhist	0	22	Housewife	Faith Healer	“	6	Home
Woman3	“	25-30	Chepang	Natural	0	14	“	Farmer	“	3	Heath centre
Women4	“	“	“	“	0	13	Agriculture	Faith Healer	“	6	Home
Woman5	“	20-25	“	Christian	0	15	“	Agriculture	“	3	“
Woman6	“	15-20	Dalit	Hindu	4	18	Housewife	“	45 min	Pregnant	-
Woman7	“	20-25	“	Christian	6	17	“	“	40 min	2	Heath centre
Woman8	“	“	“	“	0	20	Agriculture	Abroad	“	0	-
Woman9	“	30-35	Brahmin	Hindu	12	“	Teacher	Business	50 min	2	Home
Woman10	“	“	Tamang	Buddhist	0	15	Housewife	Faith Healer	45 min	5	“
Woman11	“	25-30	Brahmin	Natural	6	14	Agriculture	Agriculture	1 hour	4	Health centre
Woman12	“	20-25	“	Hindu	12	16	Housewife	Contractor	5 min	2	Heath centre
Woman13	“	“	“	“	10	19	“	Salesperson	10 min (bus)	1	Health centre
Woman14	“	25-30	Dalit	“	12	21	“	Driver	15 min (bus)	2	“
Woman15	Sarlahi	15-20	Lama	Buddhist	7	17	“	Abroad	30 min	1	Heath centre
Woman16	“	30-35	Muslim	Islam	0	13	“	Salesperson	1 hour	4	Home
Woman17	“	20-25	Brahmin	Hindu	12	17	“	Driver	15 min	2	Heath centre
Woman18	“	“	Tamang	“	10	21	Agriculture	Agriculture	5 min	1	“
Woman19	“	25-30	“	Buddhist	0	26	Housewife	Carpenter	30min	2	“
Woman20	“	20-25	Brahmin	Hindu	12	22	“	“	“	Pregnant	
Woman21	“	25-30	Dalit	“	8	19	“	Electrician	“	3	“
Woman22	“	20-25	Chhetri	“	12	“	“	Accountant	“	1	“
Woman23	“	“	Newar	“	“	14	“	Abroad	20min	“	“
Woman24	“	“	Ale	“	“	23	“	Agriculture	20 min	Pregnant	-
Woman25	“	15-20	Madhise	“	0	14	“	Labour	30 min	2	Heath centre
Woman26	“	20-25	Magar	“	10	22	“	Abroad	“	1	“

Both Tables 6 and 7 show the diversity of study participants in terms of their ethnic groups, and available health care services. Regarding caste/ethnicity, in the hill region, some of the interviewees belonged to the indigenous community groups which were categorised as either highly marginalised (Chepang) or marginalised (Tamang, Bhujel). In the Terai, the study population was comprised of members of either the upper caste (Bramhan, Kshatri) or minority groups (Madhesi and Muslim). Many FCHVs and women from the minority or indigenous groups (Tamang and Muslim) were illiterate, due to the social and cultural preferences of these groups as well as the weaknesses of the Nepal Government.

Table 8 indicates that most of the women (19 out of 26) were married by the age of 20. There were eight women who were married by the age of 15 or younger. All women except one had delivered in health centres in the Terai. In the hill region, many women (six) delivered at home. This table also shows a mix of women from different ethnic and religious backgrounds. In both regions, most of the illiterate women were from minority caste group.

Access to public healthcare services was easy in the Terai – mostly about 30 minutes on foot, compared to the hill region where the walking distance to the nearest health centre was from 40 minutes to an hour.

Table 9 Demographic characteristics of health workers

Respondents	Place	Address	Age	Education	Position Held	Government or NGO workers	Work Experience (yrs.)	Caste/ethnicity
HW1	Dhading	Gajuri PHC	44	Staff nurse	Staff nurse	Government	13	Brahmin
HW2	“	Mahadevsthan SHP	44	ANM	ANM	“	22	“
HW3	“	“	56	AHW	AHW	“	35	“
HW4	“	Dhading Besi	54	MPH	DPHO	“	31	Muslim
HW5	“	Mahadevsthan-4	28	12	ANM	NGO	6	Indigenous
HW6	“	Gajuri VDC 1	33	Masters	Field Coordinator	“	8	“
HW7	Sarlahi	Ghurkauli VDC 7	42	“	Senior AHW	Government	42	Madhesi
HW8	“	Malangwa DPHO, Sarlahi	34	“	FCHV district supervisor	“	8	“
HW9	“	Harion Sub Health Post	55	CMA	AHW	“	30	“
HW10	“	Ghurkauli VDC 2	24	ANM	ANM	NGO	4	Indigenous
HW11	“	Harion VDC 9	48	Undergraduate	Field Coordinator	“	25	Brahmin

HW: Health Workers, PHC: Primary Health Care, SHP: Sub Health Post, ANM: Auxiliary Nurse Midwife, AHW: Auxiliary Health Worker, FCHV: Female Community Health Worker, DPHO: District Public Health Officer, CMA: Community Medicine Auxiliary, NGO: Non-Governmental Organisations, VDC: Village Development Committee,

Table 9 indicates the demographic characteristics of the interviewed health workers who either supervised FCHVs or worked with them. Out of the total 11 health workers interviewed seven were from public health centres and the remainder were from NGOs (Section 4.4.3).

In the following section, I present the accessibility of FCHVs in the study regions which will show FCHVs as important health resources for MHSs in rural Nepal. Then, I look at various maternal health activities of FCHVs according to the main emerging themes from the analysis. Quotes from the interviews or FGDs have been incorporated into the findings to support the interpretation of data.

5.3 Access to MHS in Villages

The volunteers' easy accessibility and their readiness to support mothers and children in the communities mean that the service users could approach them at any time. A FCHV provided services to pregnant women and mothers in her own village and due to this the women often trusted her. The FCHV also provided services in a way that was acceptable to the users because she had a good understanding of the local context and her gender also facilitated her service provision. Besides this, the volunteers' services were free. Some examples are illustrated.

The FCHVs were often the first source of contact in the remote hill villages and often provided services when the service users needed them, as one of them commented:

“If women call at night, I go even if they don't offer anything. In the last 2-3 deliveries I attended, I did not get home from the regional hospital until 1am. One day I was wearing only my petticoat, when I was suddenly called to attend

a woman ...While there, the woman began to bleed and shortly thereafter she went into labour. I was half-dressed right throughout the night.” FCHVD8.

Many FCHVs’ often raised health awareness among pregnant women or mothers whenever they met, be it at home or at work. A volunteer commented how the information she shared could benefit a number of individuals:

“If for example, there is a water source and if I go to get water, we provide information on health awareness that is important to them. Instead of one person, five-six people could be listening which is nice. Whenever we meet other women, if it is suitable, we can give information in this way.” FCHVS15.

This was confirmed by a woman who mentioned how the access to FCHVs in the community helped her to receive MHSs:

“She lives nearby. She provides all the information... Some people tend to behave rudely, and want to leave the work if it is difficult, but she does not have that attitude. If she cannot finish her work in one day, she will do it another day. She does not get any money for her work.” WomanS22.

As the FCHVs understand the local culture, they deliver their services according to the needs of the service users. This is evident from a FCHV reporting her ability to provide confidential services to women:

“If women have confidential things to talk about, they come and talk to me secretly. They ask me for advice if their menstruation has stopped. May be this is the reason they like me.” FCHVS17.

This coincides with a view of a health worker who highlighted the importance of women volunteers with whom other women feel comfortable. He stated:

“In many instances, villagers do not go to health centres for check-ups. They don’t have time and they don’t get support from home. FCHVs are the ones who visit pregnant women or mothers first to ask about their health. It is easier for

women to discuss their problems, as the FCHVs are also women. Therefore, women feel closer to FCHVs.” HW11.

Some service users also commented on this:

“She (the FCHV) told me to go to hospital. Then I went for check-up though there were only two people at home. I managed to go on my own as she recommended.” WomanD11.

In the distant hill villages, the service users often relied on the FCHVs’ services in the absence of immediate access to other healthcare resources. Some examples are given below.

5.3.1 Access to MHS for the poor population

Many FCHVs reported that they often served the poorer section of the population and referred them to local health centres. During my field visits, I also noticed that the FCHVs from the remote villages were usually the ones who were working harder and seemed to complain less. Some examples of how FCHVs assisted the less privileged are illustrated below.

When I met a FCHV from the hill region, she was carrying stones and sandbags to build an outreach clinic in her village. She looked pleased to be able to contribute to the building despite the high summer heat. She told me:

“This building would provide a venue for mothers’ group meetings and an outreach clinic which otherwise would have taken place in an open yard” (FCHVD3).

Another FCHV showed me a recently built outreach clinic in her village, which was built by the communal work of women. They were able to accomplish even the most tiresome of work through the group effort (Field Note on 3rd June 2014,

FCHVD7).

FCHVs were not only physically contributing to the health workers but were also obedient to them. One health worker commented:

“It would be better if the health centres would keep the poorer volunteers, because they would obey our instructions.” HW9.

Interestingly, there was no FCHV from the Dalit community, but they were being served by a FCHV who provided services irrespective of the caste or ethnicity.

I attended monthly mothers groups meeting in the village. The majority of women attendants were either Dalit or from a minority caste. The FCHV, who facilitated the session, was from upper caste family, but she had been converted to Christianity and was providing services to everyone irrespective of their caste [Field notes - 17th June 2014].

When asked why there was no Dalit FCHV, then one of them commented:

“A Dalit woman could not be a FCHV because she was regarded as an untouchable and could not enter the house of an upper caste people if the service was needed by them.” [FCHVD3].

However, the FCHVs assisted the Dalit or poor women with the means available to them:

“She was a BiKa (a Dalit -low caste- woman) and was very poor. I saw her on my way home. I thought that she might deliver by night and this proved to be the case. But, there was nothing: no food, no clothes in her house. The next morning, I sent her a petticoat, saree, blouse, rice, and vegetables to support her.” FCHVS20.

Access to healthcare services in the villages is improving. One FCHV summarised the services available to pregnant women and mothers:

“In the past, there was no health post and there were no places to go. Now we have a health post, and an outreach clinic that runs on the 12th of every month.

We also have mothers' group meetings in which we discuss everything from food and pregnancy check-ups to advice on taking iron tablets." FCHVD7.

A health worker highlighted how the presence of FCHVs and access to healthcare services within the village has increased the number of mothers delivering in the health centre:

"There was a birthing centre but they had only 2 deliveries in that year... Since I came, we kept a midwife temporarily and asked her to conduct regular mothers' group meetings along with FCHVs to raise health awareness among mothers. That year we had 46 deliveries in the health centre. It was possible due to mothers' group meetings and mobilisation of FCHVs." HW3.

Some FCHVs admitted that the local health services are for the poor, as the richer people bypassed their services and directly accessed services from higher level health centres:

"Rich people go to Kathmandu. Usually poor people go to xxx (PHC) and the ones who are ultra-poor, they visit xxx (health post)." FCHVD8.

Some volunteers also reported that they would refer the pregnant women directly to the hospitals in Kathmandu thus bypassing the local health services. This can be important in serious conditions:

"Sometime there are some pregnant women who develop some issues. If the baby is not delivered by the expected date, it is said that the child eats its own faeces⁴, so I ask them to go to Kathmandu." FCHVD3.

In the absence of skilled healthcare providers in the remote village, FCHVs' referral services and information on the availability of free healthcare services and incentives for pregnant women and mothers attending the government healthcare centres were important to prevent any potential complications:

⁴ If the labour is delayed then an unborn baby might pass stool in the womb causing breathing difficulties which might cause the death of the baby.

“We have encouraged them saying ‘if you deliver at hospital, you get NRs 1000 (£6.7); if you go for four antenatal check-ups, you are paid NRs 400 (£2.7).’ Though incentives were available only half of the pregnant women went for check-ups and many did not go for health check-ups.” FCHVD3.

As mentioned by volunteers and also seen in Table 8, many women delivered at home in the hill villages. This is because not only were the health care services inaccessible, but they were also costly to the family. Though the delivery service was technically free in the public health centre, a substantial amount of money for transportation costs was required if the pregnant woman was to be carried to the health centre. The Nepal Government offered a fixed amount of travel money for women delivering a baby in government health centres, but the payment was often delayed and was less than the actual cost incurred by the family. A health worker explained:

“During the delivery, NRs 1,000 (£6.66) is available in the hill communities, but if someone visits from ward number 9, then it costs at least NRs 8,000 (£53.33) to NRs 9,000 (£60). The patient needs to be carried up and down steep hills for anywhere from 10 to 12 hours. During this time, a patient may be required to buy food which may bring the total to as much as NRs 10 to 12,000 (£80). If there were a health centre at ward number 9, then it would be easier for them. That is a challenging issue. Not all people can afford this.” HW4.

Certain remote hill villages lacked access to healthcare services. A service user commented:

“We used to live in the upper village, Fapang. Health workers only used to go up to middle of the village. So, my first two children were not vaccinated, but this one [indicates her youngest son] got four injections.” WomanD10.

The rainy season also made reaching villages across the river difficult:

“During the rainy season, it is very difficult to cross the river in ward no 6, 7, 8 and 9. There are rivers and jungles and it is difficult to reach the villagers, as

we can't cross the river. So we can't reach the monthly target for health check-up even if we want to." HW3.

In both regions, FCHVs were supportive to poor women. Their services were more important in the hill regions where access to skilled healthcare services was limited. However, some pregnant women or mothers could not access the services due to seasonal variation or the inability to afford the cost of travelling and healthcare. In the following section, I will describe the maternal health promotion activities of the FCHVs.

5.4 Maternal Health Promotion through Informal Routes

The data analysis shows that the FCHVs provide a wide range of healthcare services to pregnant women and mothers often through informal routes. Figure 6 provides a summary of MHS provided by FCHVs and are summed up under five main subthemes: (a) referring pregnant women for health check-ups, (b) advising on diet using locally available food, (c) preparing for childbirth, (d) accompanying women during delivery at health centre or home and (e) visiting recently delivered mothers. Each of them is illustrated below.

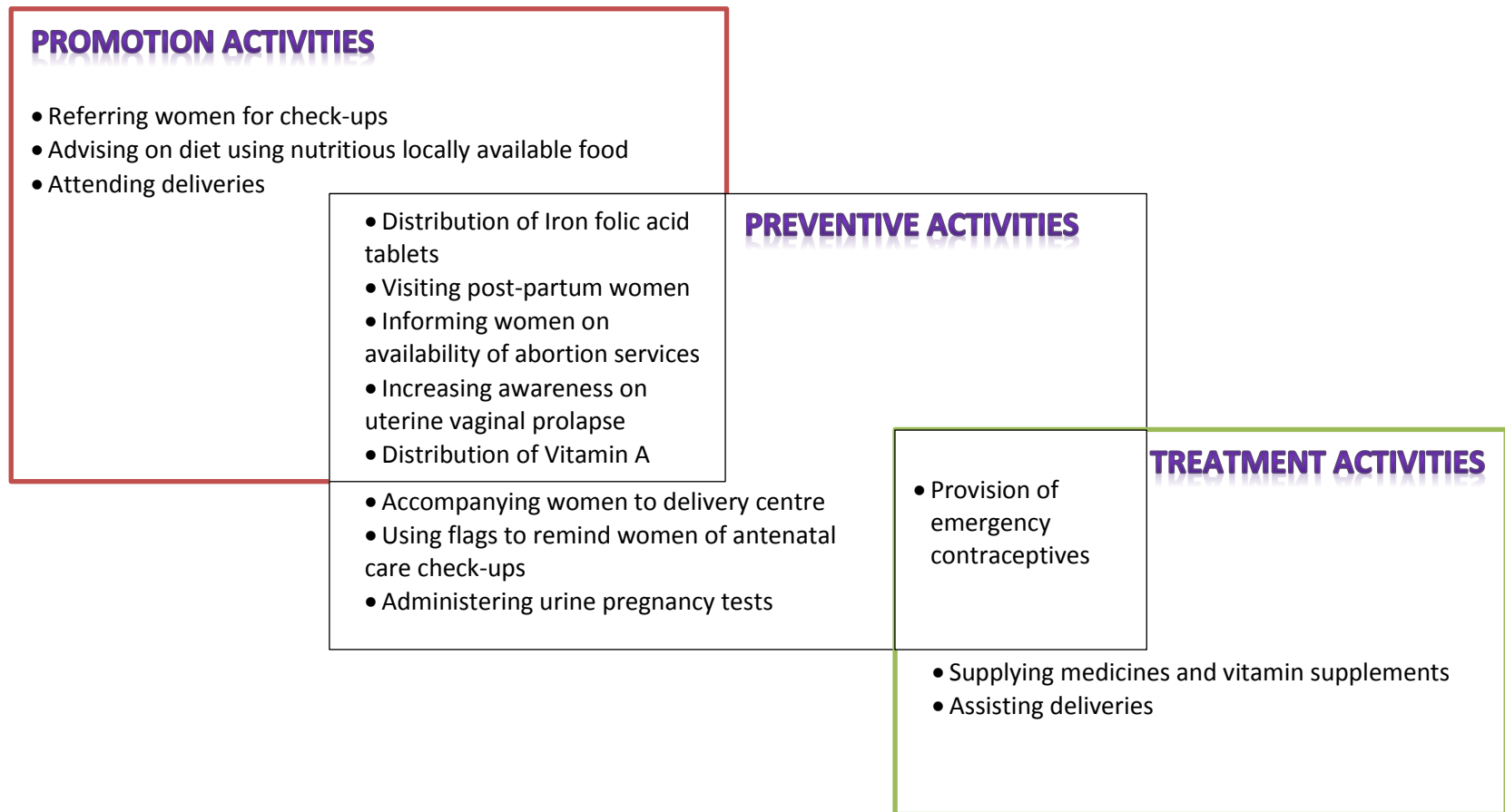


Figure 6 Summaries of maternal health service provided by female community health volunteers

5.4.1 Referring pregnant women for health check-ups

One of the main activities of FCHVs was to refer pregnant women for health check-ups. FCHVs advised pregnant women or mothers on various health topics as shown in Figure 6. They distributed iron tablets to them, referred them for at least four antenatal visits to the health centre and asked them to seek immediate help if they developed any dangerous symptoms, for example, fever, bleeding, swelling of limbs or convulsions. The FCHVs also advised the families of pregnant women so that they could support them. In the hill villages, they shared maternal health information through local songs and put a flag in the pregnant woman's house to remind her of necessary antenatal check-ups.

In the interviews and FGDs, I found that most FCHVs explained the importance of iron tablets and highlighted the mandatory health check-ups. One of them commented:

“If iron tablets are not taken, anaemia occurs and that may lead to maternal death. There might be vertigo and women may tremble or become unconscious. Swelling of the legs or hands is also dangerous. Babies might be situated in the right or wrong position. These conditions can be identified in the health centres. So, we refer pregnant women and tell them that health check-ups are compulsory.” FCHVD8.

The FCHVs informed women of available free healthcare services. A mother expressed of her gratitude for a FCHV's services:

“She told me to go for a check-up and informed me of the place which was free. She asked me to go to the health centres four times so that I could get the (government) money. She told me all that.” WomanS23.

Some FCHVs were concerned when pregnant women or mothers could not rest properly. One FCHV shared a case of a miscarriage possibly caused by heavy work during pregnancy:

“There was a young lady, who got pregnant. She was working hard all the time and drew water from the well. I had told her not to do heavy work and not to draw water from the well as it may cause the loss of the baby, but she did not follow my advice. Later, I found that she had a miscarriage.” FCHVS17.

A few FCHVs needed to convince mothers-in-law to support their pregnant daughters.

One of them stated:

“The government tells us ‘new mothers should take rest for a month, do not wash clothes.’ We say the same thing in the village. However, some say, ‘this woman (FCHV) has come as an advocate to provoke our daughters-in-law so that they will not work.’” FCHVD3.

Health workers also illustrated the importance of FCHVs in referring women for health centre visits. One of them commented:

“Usually village people trust the FCHVs. They have contributed to the improvement of women’s health. People come here [to the health centre] referred by the volunteers. They also accompany pregnant women to health centres.” HW1.

In the hill villages, FCHVs used various approaches to inform mothers for health check-ups. Some FCHVs reported that they were also involved in activities such as putting flags in the pregnant women’s houses to remind them of necessary antenatal check-ups:

“A flag is kept in each pregnant woman’s house. If the flag is hanging in the pregnant woman’s house, the woman will be asked whether she has gone four times to her antenatal check-up. An NGO has provided flags. The flags are flying in every pregnant women’s house.” FCHVD3.

Some FCHVs shared important maternal and new-born health messages through local folk songs in festivals or gatherings to inform women:

“We ask pregnant women to go for four pregnancy check-ups as well as to get the tetanus immunisation. We have songs containing information on these matters and ask them (women) to visit the district (hospital).” FCHVD4.

In a FGD, the volunteers sang the songs that conveyed health messages on antenatal care visits, and recognition of danger signs during pregnancy - bleeding, body swelling, and fever. The songs also contained information on incentives available from the healthcare centre and the importance of check-ups after childbirth. They had memorised the songs and sung in a folk rhythm at celebrations or women’s gatherings. (Field Note- FGD2, 31st May 2014).

FCHVs’ services were important in both regions, but their services were more important in the hill villages because they were often the only available source of healthcare to women in need. Another important function of FCHVs was to advise women on nutritious food, which is presented next.

5.4.2 Advising on diet using locally available food

Another important function of FCHVs was to give information about the importance of locally produced food during pregnancy and childbirth. However, the suggested foods were not necessarily healthy for them. Some examples are presented below.

One volunteer reported the importance of local food:

“We have papaya and other vegetables in our fields. During pregnancy, instead of eating once or twice a day, we should eat at least three to four times, shouldn't we?” FCHVS13.

Some volunteers showed how their attitude to food varieties evolved over the years. The following quote illustrates nicely the prejudice of one FCHV towards “gundruk” (a vegetable similar to spinach):

“Similarly iron is available in sour things, the gold lemon being the highest source. I have received nutrition training for the last five years. This iron is available in radishes, yellow fruits, and gundruk. In the past, I used to make a lot of gundruk, but I never ate it, thinking that the gundruk is garbage.” FCHVD1.

Another interviewee spoke about the importance of colostrum and early breastfeeding.

“I ask mother to keep the baby warm at her chest and breastfeed within the first hour after giving birth. I ask her not to throw away the colostrum milk as it contains vitamins. We knew it from training.” FCHVD6.

Sometimes the food suggestions were linked to the FCHVs' culture and were not healthy food choices. For example, after assisting a delivery, this FCHV advised the mother to drink alcohol and rest, as drinking alcohol was common among this ethnic group:

“I asked her to sleep, eat rice, drink homemade alcohol, and eat whatever she desired.” FCHVD4.

Another important role of FCHVs is to prepare mothers for childbirth, which is presented next.

5.4.3 Preparing for childbirth

Many FCHVs reported that they advise women to give birth in health centres for the safety of mothers and babies. This is more important in the remote hill villages, as there is no skilled birth assistance available for home deliveries. Some FCHVs suggested that the families save money for transport and to meet the cost incurred if there were to be any health complications. Some FCHVs also reported that if the women encountered any problem during pregnancy, then they were more likely to attend healthcare centres. Some service users also highlighted the importance of FCHVs' advice on childbirth.

A few FCHVs reported the importance of preparing money and arranging transport before childbirth:

“Preparation for delivery is needed, as anything can happen during pregnancy or childbirth. They need money to arrange transport to health centres or to cover the cost of arranging blood donors in case of emergency. Some families are economically well-off, but many women come from poor families and do not have the money to meet the cost of childbirth in health centres.” FCHVS15.

Some FCHVs perceived that the family would seek healthcare services if there was any problem during pregnancy or delivery, as one of them commented:

“Currently, if a woman delivers at home and if the placenta is retained, or if there is excessive bleeding, the family would immediately bring her to a health centre. Therefore, mothers rarely die of childbirths these days in the villages.” FCHVD5.

This was consistent with a reporting of a woman:

“A FCHV sister told me that heavy bleeding might occur during delivery so we moved downhill here for the delivery. In the village, the baby after delivery was kept in the lap of mother and a sickle was used to cut the umbilical cord. A thread was not used to tie it.” WomanD10.

The above findings show the importance of FCHVs for preparing women for health centre delivery.

5.4.4 Accompanying women to a delivery at health centre or home

Another main role of FCHVs was to promote deliveries at health centres. Some FCHVs from both study regions reported that they accompanied pregnant women for delivery in health centre. In order to promote health facility delivery in the hill region, FCHVs were given cash incentives (NRs 100 or £0.66) for referring a woman for health check-ups, or (NRs 200 or £1.33) for accompanying her to a health centre for delivery. Interestingly, most of the women who were accompanied also happened to be relatives of FCHVs. Nonetheless, this was important in the hill region because there were high number of home births (as shown in Table 8) and there were no skilled birth attendants available in case of birth complications.

Some FCHVs who attended the births of these women alleviated their shyness and anxiety of childbirth. One of them remarked:

“We support them to reach the health post. If there is no one with her, then we stay there. Usually women are shy and they hesitate to communicate so we talk to the health personnel on their behalf. They (health workers) ask me to stay with the women. I have taken 8-9 pregnant women for deliveries, sometimes at night and sometimes in the daytime.” FCHVD7.

Another FCHV reported that how she made a woman feel that she was being cared for:

“Whoever goes into labour, they call me and then I go and stay with them during delivery and hold their hands.” FCHVD3.

In both regions, some FCHVs and service users reported that the FCHVs accompanied pregnant women or mothers for health checks. One woman commented how FCHVs encouraged her to visit the health centre:

“She reassured me whenever I had any difficulties. She used to ask me to go for health check-ups. She is my relative and she used to repeatedly tell me about health visits and their importance.” WomanS15.

This was consistent with a health worker’s comment on the role of FCHVs in accompanying pregnant women:

“Through FCHVs, people come here (health centre)....She also takes pregnant women to hospital if they go into labour” HW1.

The views of FCHVs were consistent with comments by their service users and health workers who also acknowledged the importance of volunteers in accompanying pregnant women/mothers to health centres.

5.4.5 Visiting new mothers

Some FCHVs in both study regions reported that they made home visits to see new mothers and babies. In the Terai, FCHVs were trained to examine new-borns for their breathing patterns to identify asphyxia or respiratory difficulties – a major cause of new-born deaths in Nepal (Section 2.8.2.1). However, the house visit also provided the opportunity to look for any health issues that the mother may have.

Some FCHVs were trained to perform resuscitation on the new-born in case of birth asphyxia:

“Now we need to see whether the home delivered babies have breathing problems or not. They have provided us with bags, masks, and Dili suction.” FCHVS9.

In the hill region, the FCHVs were involved in a scheme to provide a healthy food hamper to new mothers who were poor. The food hamper was made possible by a contribution from each member of a mothers' group (Section 5.5). The visit to the mother was also an opportunity for a FCHV to inquire about postnatal health of a mother and baby. A service user commented:

“In our mother’s group, there is also a programme of visiting a new mother. We visit her with a mana (around half kilogramme (kg) of ghee or oil, and three pathi of rice (one pathi ~3.5 kg, 10.5 kg).” WomanD11.

Above, I presented various MHSs offered by FCHVs, which are often provided on an informal way – as per the need of the service users. The FCHVs also share maternal health information through regularly organised mothers' group meetings and outreach clinics, which are presented below.

5.5 Maternal Health Promotion through Formal Routes

This section will begin with findings on mothers' group meetings in the villages. Then, it describes the ways health information is shared and the issues the FCHVs faced within the group. Most of the mothers' groups operated savings and credit activities and challenges related to these activities are presented.

In both regions, each FCHV facilitated the mothers' group meetings made up of the women of reproductive age in the village. The FCHVs shared MCH issues with the group members, who were then expected to share what they had learnt with other pregnant women and mothers in the village to promote maternal health.

In the hill villages, each mothers' group was also supported by an NGO. They provided some financial (NRs 3000 or £20) and technical support that included training and supervision of the volunteers to help them to run the mothers' group.

A service user reported the role of FCHVs in the mothers' group meeting:

“We have a mothers' group in our village. In that group, we are often given training. There is a FCHV who shares information on the importance of going to the health centre for childbirth. All the sisters currently do not stay at home, but they go to health centres for check-ups, and give birth at hospital.”
WomanD11.

Although mothers' group meetings were organised each month, the FCHVs were able to be flexible:

“I have to run the mothers' group meeting once a month, but instead sometimes I run once in two months or twice in the same month. If I cannot arrange a meeting this month, then I will have two meetings next month.” FCHVS16.

In both study regions, it was often difficult for FCHVs to find a venue for group meetings and this was a particular challenge in the rainy season. One of them complained:

“The mothers' group meeting is held in open ground of school. There is no sitting place.” FCHVD3.

I attended a mothers' group meeting in a hill village. The construction of the outreach clinic was not complete. So, the meeting was held in a damp room because we had to clean up the mud and water left by the heavy rain. [Field notes - 17th June 2014].

In the Terai, the women had to run for cover because of a heavy shower in the middle of the meeting held in an open yard. There was nowhere else to hold a meeting in that village. [Field notes - 19th July 2014].

Some FCHVs frequently highlighted the expenses incurred while volunteering to run the groups, as one of them admitted:

“The main thing is that there is no money for us. I went to a village for the whole day and came back. There is nothing for us, not even a snack. I now have a zero balance on my mobile due to the arrangement of mothers' group meetings [shows her mobile].” FCHVD8.

Some FCHVs expressed reduced enthusiasm to run the meeting, as both the volunteer and women felt bored talking repeatedly about the same health topics. Therefore, women were no longer interested in attending meetings:

“Mothers often do not attend the meeting. They say, ‘Why to attend it? The topic of a talk is the same every time.’ The women are bored.” FGD3-Participant2.

To reduce the boredom and to maintain a regular participation of women in the mothers' group, the majority of them also operated a microcredit scheme. This involved group members saving a fixed amount of money every month. One FCHV commented:

“We have started to save money, as money is an important thing. If we collect money in the meeting then everybody will attend it. Otherwise, nobody comes to listen to me, do they?” FCHVD5.

Savings also supported the group members in case of financial emergencies, as the group member could take out a loan at a low interest rate.

“We do have saving as well, we save NRs50 (£0.33) every month. It is saved for emergency situations. If someone needs money immediately, then she could have it. This way we don't need to stretch our hands in front of others (to beg for money).” FCHVS15.

The saving activity enhanced the confidence of some FCHVs:

“We save money, share knowledge and learn from each other in the mothers' group. We save NRs100 (£0.66) each month. Until now, we have collected NRs

66,000 (£440). This money can be loaned for anything, for example treatment of illnesses.” FCHVD3.

However, saving money was not without challenges. One FCHV commented that some women were more concerned about the money than the health matters:

“We talk about Sahakari [savings credit group]. We talk about money. The group members say that they lost such and such amount of money.’ Disease issues are rarely discussed.” FCHVD1.

In a mothers’ group meeting in the hill village, I saw that women spent considerable amount of time discussing around budgeting and finance. The group members collected the deposits and maintained its records, but paid less attention to the topic of nutrition presented by the FCHV. [Field Note -17th June 2014].

The reduced interest on health related discussion could be associated with the boredom from the talk around the same health topics as discussed above, or this could also be because the group members prioritized saving credit activity over the health talks.

Another challenge with the saving credit activity was the security of money collected from the group members. In one isolated but important case, one volunteer complained that she was betrayed by a member of her own mothers’ group, while running the savings credit:

“I was operating the mothers’ group as well. Then, I don’t want to name her, but one woman from the group took all the money. I was offended for it, because I was the group facilitator and was also the group secretary. I felt so ashamed. Everyone in the area knows it.” FGD3 Participant2.

The FCHV was illiterate. Had she been educated, she could have produced a written record of who had borrowed the money thus possibly preventing the shame. Issues related to education are described in Section 6.3.

Apart from the regular facilitation of mothers' group meetings, a few FCHVs reported that they attended outreach clinics to assist pregnant women or mothers to access healthcare services in their own villages. Some examples are discussed in 5.3.1.

A health worker also commented on the limited attendance of FCHVs in the outreach clinics.

“In the outreach clinics, we don't get the opportunity to ask FCHVs for help. Some FCHVs attend the clinic and some don't. Sometimes they leave the place within 10 minutes. They are crafty.” HW9.

In this section, I presented the regularly organised mothers' group meetings led by FCHVs and its challenges. The major challenge was that sometimes the saving activities overshadowed the discussion of health topics. The illiteracy of FCHVs was also an issue. Some volunteers were also involved in outreach clinics, but they hardly spoke about it. However, many spoke about their role in additional healthcare activities, which are shown below.

5.6 Taking on the Role of Formal Healthcare Providers

This section focuses on activities that have implications for maternal health, but go beyond the FCHVs' usual functions. Four subthemes are developed from the data: (a) distributing medicines, vitamins and supplements, (b) attending childbirth, (c) being involved in activities with potential impact on maternal health, and (d) recording and reporting of health activities.

5.6.1 Distributing medicine, vitamins and supplements

In the absence of immediate access to healthcare services in the remote villages, FCHVs distributed medicines, vitamins and supplements. FCHVs usually had a limited selection of drugs available to distribute in their communities. They provided deworming tablets to pregnant women. They also provided vitamin A, and iron and folic acid tablets to pregnant women and new mothers. However, the volunteers reported that they distributed various drugs such as antacids and metronidazole to treat gastric pain and paracetamol for fever and headache.

One FCHV commented:

“I have metro [metronidazole]. I give that to treat stomach ache as it cleans our stomach. I bring the medicine from the health centre and give it to the people who need it. Metro is given for diarrhoea, cetamol [paracetamol] is for fever, and vitamins [vitamin B complex] is for weak people.” FCHVD1.

Some women come to FCHVs expecting medicine from them, as one FCHV explained:

“Women come to ask for medicine if they have any cut or injury to their hands and legs and they ask me to put cream on the wound and bandage it. They also ask for medicine for fever, influenza, and diarrhoea.” FCHVS10.

The health workers also provided FCHVs with some basic medicine to treat simple illnesses. One of them commented:

“FCHVs provide some medicines although they are not authorised to do so. We offer medicines to the FCHVs who live in remote villages so that they can serve the needy population.” HW8.

As the volunteers provided medicines to the villagers, they sometimes described themselves as ‘small doctors’ and felt happy about this. One of them commented:

“Although we were not able to study to become doctors, we are considered as small doctors by villagers. Because of that we feel happy. Money is nothing to us. We feel happy serving them.” FGD3 Participant5.

Sometimes, FCHVs reported activities that they were not authorised to do so. For example, it is rare for FCHVs to give injections to people apart from especially trained cases. However, a FCHV from the Terai reported that she gave tetanus toxoid injections to people. She learnt the skills from her husband who was a paramedic and owned a pharmacy:

“I have a small shop at my home. I sell medicine. Some children even receive injections. If someone comes with a cut, I give some medicine and bandage...I give TT [Tetanus Toxoid] injection – an injection for cut injuries. I give all the injections. One thing, I don’t do is inject on the nerves [She indicates the place on her upper arm as an injection site].”

One woman perceived the FCHV’s role as a mere medicine provider and thought that the volunteers were simply interested in providing medicine:

“Whether it is in this village or in my mother’s place; volunteers work during the time of medicine distribution only. That is the only thing they do. For other work, they don’t care that much.” Woman17.

A health worker also stated that FCHVs were more interested in drug distribution:

“FCHVs do not give much concern to the regular work, they are only concerned about national programmes, for example, vitamin A and polio drops distribution.” HW7.

The FCHVs from the hill region gave some medicines to people, but they could not do so in the Terai because the health centre lacked the essential medical supplies. For example, they could not give iron and folic acid tablets to the pregnant women or mothers. This not only threatened the trust between the community people and FCHVs,

but also the FCHVs perceived that they were neglected by the government. This was illustrated by one FCHV:

“There are no iron tablets [to give to pregnant women]. Health workers ask me to bring the record of pregnant women. We need to find them in the village. If I don’t have iron tablets with me, how can I visit them? At least, after recording her pregnancy details, I could have given her some iron tablets and asked her to visit a health centre. We have 6-7 pregnant women in the village and I have not been able to visit them.” FCHVS20.

Having discussed the role of FCHVs in medicine distribution and its challenges, I now move on to discuss their role in assisting women in childbirth.

5.6.2 Attending childbirth and managing complications

In both the hill and Terai regions, many FCHVs reported that they visited pregnant women and new mothers at their homes, but a few also reported their involvement in childbirth. In the hill villages, two FCHVs were assisting childbirths during the time of interviews. They had to do so because there were no skilled healthcare providers and the transport cost to the nearest health centre was too high. In such situations, some FCHVs had no choice but to assist in deliveries. One of them commented:

“Transportation has often been a major challenge in the village. It is difficult to carry a pregnant woman to the health centre for delivery due to difficult geography.” FCHVD6.

The same FCHV reported that she accompanied a newly recruited midwife whose role was to conduct delivery, but lacked the confidence to do so on her own. So, the experienced FCHV, who was also a traditional birth attendant, accompanied the

midwife to assist deliveries. This FCHV reflected on the value of experience over raw theoretical knowledge:

“There is a 24 hour facility for delivery in the health centre. There is a midwife, but if she has any difficulty, then she asks me to come with her. Many things are learnt from theoretical study, however, study alone is not enough; experience is also needed. I have experience and they have only theoretical knowledge.”
FCHVD6.

In one isolated case, a FCHV lived six hours walk from the nearest health centre, so she did not have any other option but to treat people, as her community needed her:

“It is better to become insane rather than die. We needed to treat in whatever way we could. I cannot say I am feeling sleepy, feeling hungry, or feeling thirsty. If there is a delivery, my husband also asks me to attend the delivery immediately.” FCHVD4.

She described a situation when she had to face one pregnant woman with complications:

“There was frothy discharge at the woman’s mouth. She was asleep; her eyes were pale like paper [indicates white paper on the table]. I scolded the woman’s husband saying ‘I told you to go for health check-ups from 3-4 months, but you didn’t listen. If I had not been there, your wife would have died.’” FCHVD4.

She continued reporting that she had to do everything possible to save the life of the mother whose uterus had prolapsed:

“I went to her. I tried to make her cool with a hand fan, and gave her some liquid food. I found that the placenta had not come out. I felt that the placenta had been retained inside. Then I moved the placenta slowly and took it out from her body. Her cervix was completely damaged. I told her, ‘You had 10 babies, that’s why your uterus protruded out.’ I asked her to sleep and not to stand for some days and eat lying down without feeling shy. I saved her life.” FCHVD4.

A FCHV was involved in delivery in the Terai too, she reported:

“There was no traditional birth attendant, but with my own experience as a FCHV, I assist in childbirth as well. I have delivered many children. Till now, nothing has happened to anyone.” FCHVS20.

Some mothers reported that FCHVs visited them during their delivery. One of them reported on a FCHV’s attendance at her home delivery:

“I was alone when I developed labour pain. Then, the FCHV sister came. She told me that I should have informed her earlier, but I was alone (at home and could not do so). She helped me during the delivery.” Woman D10.

Although few FCHVs were involved in assisting deliveries, nevertheless, this is a potentially lifesaving service for women in the remote hill region, where access to formal health care centres is limited. Besides the volunteers’ specific MHSs, some of them reported their involvement in additional activities that have potential implications for maternal health, which is discussed in the following section.

5.6.3 Additional activities with a potential impact on maternal health

FCHV additional activities are classified in three key areas: a) informing women on emergency contraception including the availability of abortion services, b) referring uterine prolapse cases for treatment, and c) increasing awareness on gender-based violence.

The educated FCHVs from the hill region reported that they administered urine pregnancy tests and counselled women on the use of emergency contraception. Once tested, the volunteers referred the pregnant women for antenatal care check-ups or informed them of availability of abortion services. Also, the illiterate and untrained

FCHVs reported their ability to use the pregnancy test kits and were aware of the available services. The pregnancy test kits were available from a health centre or a local pharmacy. Volunteers bought the test kit for NRs 50 (£0.33) and performed the urine test for NRs 100 per person (£0.66), thus making a small profit for themselves.

One FCHV reported her knowledge about performing urine pregnancy tests:

“For pregnancy check-ups, we have received the training. They [health workers] showed us how to do the check-ups. If there are two lines, pregnancy is confirmed otherwise it is not. Those women whose house is nearby, they come to me for check-ups.” FGD2 Participant1.

One FCHV claimed that she found a woman who was not pregnant but was actually diagnosed as pregnant by a health care provider. It could be a case of a false positive test result:

“She [a woman] asked me to do the urine check-up, and then I did it and found that she was not pregnant. She was sent from hospital saying that she was pregnant. She was happy to find herself not pregnant. Now, she frequently calls me to thank me.” FCHVD3.

Another FCHV mentioned how she informed and supported an unmarried girl to access abortion services:

“The girl had pregnancy out of wedlock, which is socially condemned and stigmatised. I informed her of availability of abortion service. So, she avoided the route for illegal abortion, thus saving her life.” [Field note- May 2014, FCHVD5].

In another case, a FCHV reported referring a woman for a safe abortion service when contraceptive failure resulted in pregnancy. [Field note –May 2014, FCHVD7].

Abortion services were available in the town centre of the hill village, where FCHVs could refer the women requiring the services. One health worker commented:

“There are various kinds of training, and services like MVA (Manual Vacuum Aspiration). In the past, there was MRP (Manual Removal of Placenta). Awareness was created on comprehensive obstetric care, and MVA. There was an increment in the available facilities in the health centres.” HW1.

One of the problems for FCHVs centred on providing appropriate messages to pregnant women, particularly around the use of abortion services:

“For women who have many children and whose menstruation has stopped, we perform urine check-ups. Then, we ask them about the time since they had their last menstruation. If they have had enough children already we tell them to go [for abortion] because till the ninth week of pregnancy, the baby can be aborted by using medicine.” FCHVD5.

Another important role of FCHVs was to identify and refer the women with uterine prolapses. One volunteer showed her determination to tackle such issue:

“We do not want to see the women having uterine prolapse with bleeding, tears and walking with flies around her body in the village. We saw it in the past, but this has changed now. Women are safe now and I feel happy.” FCHVD3.

This is consistent with a report of a woman who mentioned a FCHV identifying and accompanying a case of uterine prolapse in the village:

“A woman had a prolapsed uterus. A FCHV was there and a person from an NGO [xxx] came to inform the woman. She was taken to Dhading for her treatment and was accompanied by the FCHV. The treatment was free and she became all right after the operation.” WomanD11.

This also corresponded with a report of a health worker in the hill region who explained the available support for FCHVs and their work in reporting the cases of uterine prolapse:

“FCHVs have received some monetary support from village development committee, from which they are doing things like liaising with the government,

identifying and reporting the cases of uterine prolapse, and referring them.”
HW6.

Finally, a few FCHVs also discussed their involvement in reporting gender-based violence cases.

In the hill region, I witnessed a case when a FCHV along with other community members supported an unmarried girl who became pregnant. After heavy debate, the girl decided to move away with the man from whom she got pregnant. [31st May 2014].

In the Terai, separate funds were created for FCHVs to report any gender-based violence cases. A health worker mentioned the added responsibilities for FCHVs:

“Sarlahi district in the Terai is the one which has one of the highest cases of violence against women...There is a separate fund to support these cases. Initially people did not know about this and there were only 17-18 reported cases, but when we disseminated the information through FCHVs and their mothers’ groups then, people became aware. Now, if there is any case of rape or physical assaults, FCHVs immediately report them to the health centre.” HW8.

All the above activities of FCHVs indicate that they are important in overall maternal health improvement. The volunteers in the hill region administered urine pregnancy tests, and informed women of the availability of emergency contraception or safe abortion services. They also reported and referred cases of uterine prolapse and gender-based violence, both of which are important aspects of women’s health. The FCHVs’ are involved in a wide range of healthcare provision, which means that their role in the recording and reporting of health services have become another prime function, which is shown below.

5.6.4 Recording and reporting health activities

FCHVs regularly report all their community health activities to the health centre.

Sometimes they visit houses, though they were not incentivised to do so. This was particularly common if there was a specific health programme. For example, in the Terai, they visited homes to record the number of pregnant women or new mothers. A FCHV expressed her concern at having to record a large amount of health information:

“We need to submit reports on 40-50 items, sometimes about referral, sometimes about taking pregnant women to the hospital and sometimes about childbirth.” FGD1 Participant 4.

Another FCHV asserted that their activities had considerably increased as compared to the past, and commented:

“There is too much of recording as compared to the past. Health workers want records of under one year children, under five year children, pregnant women, new mothers, family planning cases, the number of pills taken by individuals, women on Depo-Provera injections, intrauterine contraceptive device users, vasectomy cases and so on. We need to calculate the numbers of each case.” FCHVD6.

This was consistent with a view of a health worker who also mentioned the increasing amount of recording activity required from FCHVs:

“Now they have 32, 33 things to report. They will have 83 things that have to be reported when a new HMIS (Health Management Information System) will begin from June/July (2015).” HW1.

As a result of the arduous time the volunteers spent on recording, a service user thought that the mere job of a volunteer was to record health events:

“She (a FCHV) just comes, writes and asks questions. She asks for how long I have been pregnant. She comes once a month and asks questions and then goes. After the delivery of the baby, she comes again to ask questions.” WomanS16.

The view of the FCHVs, health workers and their service users were consistent with regard to increased recording activities required of FCHVs. However, for some FCHVs recording of health events was rather challenging because they lacked the skills (Section 6.3.2), but they had to do it regardless.

5.7 Chapter Summary

In this chapter, I first presented a sociodemographic overview of FCHVs, their service users and local health workers from the two study regions of Nepal. Then, I described the access to MHSs in the villages due to the local presence of FCHVs. They provided better access to MHSs for the poor and distant population and delivered the service in a way that was acceptable to the users. This was possible because their gender as a female and their understanding of the local context facilitated their service provision.

I then presented five subthemes concerning the kind of MHSs provided by FCHVs: referring pregnant women for health check-ups, advising on diet using locally available food, preparing for childbirth, accompanying women to a health centre for delivery and visiting recently delivered mothers. FCHVs' services particularly in referral and accompanying women for health-checks or delivery were important to reduce pregnancy related morbidities.

The data analysis revealed that FCHVs raised health awareness among pregnant women or mothers through both formal and informal routes. The informal routes were the most common ways of sharing of maternal health information. This was especially common in the hill villages where they used noble ways to share maternal health information, for

example, they sang folk song which contained health messages or visited new mothers with food hampers (5.4.5).

In both regions, the FCHVs shared maternal health information through regularly organised mothers' group meetings where the meetings were also used for discussion around budgeting and finance, which sometimes left little time for discussion on health topics. Such activity combined with the lack of education of FCHVs often proved to be counterproductive to their service provision.

Occasionally, in the hill villages, the FCHVs took on the role of formal care health providers in the absence of skilled healthcare workers. They distributed medicines and vitamin supplements, attended childbirths and attempted to manage birthing complications. Some FCHVs administered urine pregnancy tests to women and informed them on the emergency contraception and the availability of safe abortion services. While safeguarding women from illegal abortion practices was one of the important roles of FCHVs, occasionally abortions became a means of family planning, which could be threatening to the women's health. Another activity of the FCHVs with a potential impact in maternal health was their involvement in referring uterus prolapse and gender-based violence cases, both of which are crucial aspects of women's health. Finally, in both the hill and Terai regions, FCHVs reported their involvement in recording a large number of health activities, which was challenging for the illiterate FCHVs.

Overall, the FCHVs were providing a wide range of MHSs to their communities.

Generally in both regions, poorer women received the services, thus making FCHVs an important human resource in improving access to MHSs in the villages where access to public health services was limited.

Chapter Six

Factors Affecting MHS Provision by FCHVs

6.1 Introduction

The previous chapter looked at a wide range of MHSs delivered by FCHVs as identified by themselves, their service users and health workers in the two regions of Nepal. This chapter identifies the factors that promote or hinder the provision of MHSs by FCHVs. Data analysis showed the factors affecting FCHVs' services could be classified into three levels: individual including family and friends, community and health centre. As shown in Table 10, at each level the factors were either promoting or hindering the FCHVs' services.

At the individual level, four key factors that affected FCHVs' services are presented in this chapter: (a) the age of FCHVs, (b) education of FCHVs, (c) motivation to volunteer, and (d) concerns for financial and non-financial incentives. The major challenge identified by both FCHVs and health workers was the need for financial and non-financial incentives for FCHVs, which is presented in detail in Section 6.5. Then, the four main reasons for the volunteering are presented: a) self-recognition of the importance of their role by FCHVs, b) opportunities for training or learning, c) desire for employment and d) support of family and friends.

At the community level, community recognition of FCHVs is presented followed by the FCHVs' perception of community views about their services. At the health centre level, support of health centres and NGOs in terms of FCHVs' selection, training, and supervision, including access to supplies and incentives are presented. Subsequently, relationships between volunteers and health workers are described under the following

subthemes: a) recognition of the FCHVs' contribution to MHSs by health workers, b) a lack of respect for volunteers by some healthcare workers and c) a lack of coordination between government health centres and NGOs that mobilise FCHVs.

In the next section of this chapter, for each factor the themes that promote FCHVs' work will be presented first followed by the themes that hinder their services.

Table 10 Key themes on the factors that support or hinder FCHV work in MHS

Levels	Factors	Themes supporting FCHV services	Themes hindering FCHV services
Individual	Age	Commitment towards their work	Reluctance to give up volunteering
	Education	Education enhancing the capacity of FCHVs	Illiterate FCHVs: inability to provide health education, report writing issues, educated service users bypassed the volunteers
	Desire to volunteer	Recognition of importance of role by FCHVs themselves, learning or training opportunities, desire for employment or financial incentives, and encouragement from family and friends	Competing demands on FCHVs' time, increased work expenses, disproportionate or unequal financial or non-financial incentives to FCHVs and absence of family support
Community	Perception of community	Community recognition – from role in medicine distribution, and the availability of tangible rewards such as uniforms and name plates	Community concerns: FCHVs considered as paid workers, their medicine provision seen as unnecessary and low service uptake from certain ethnic groups
Health centre	Public health centre and NGO support to FCHVs	Health centre support: selection, training, access to supplies, supervision and provision of incentives	Lack of health centre support Lack of coordination between government health centres and NGOs
	Relationship with health workers	Recognition of FCHVs' contribution to MHSs by health workers	Lack of respect for volunteers by some healthcare workers

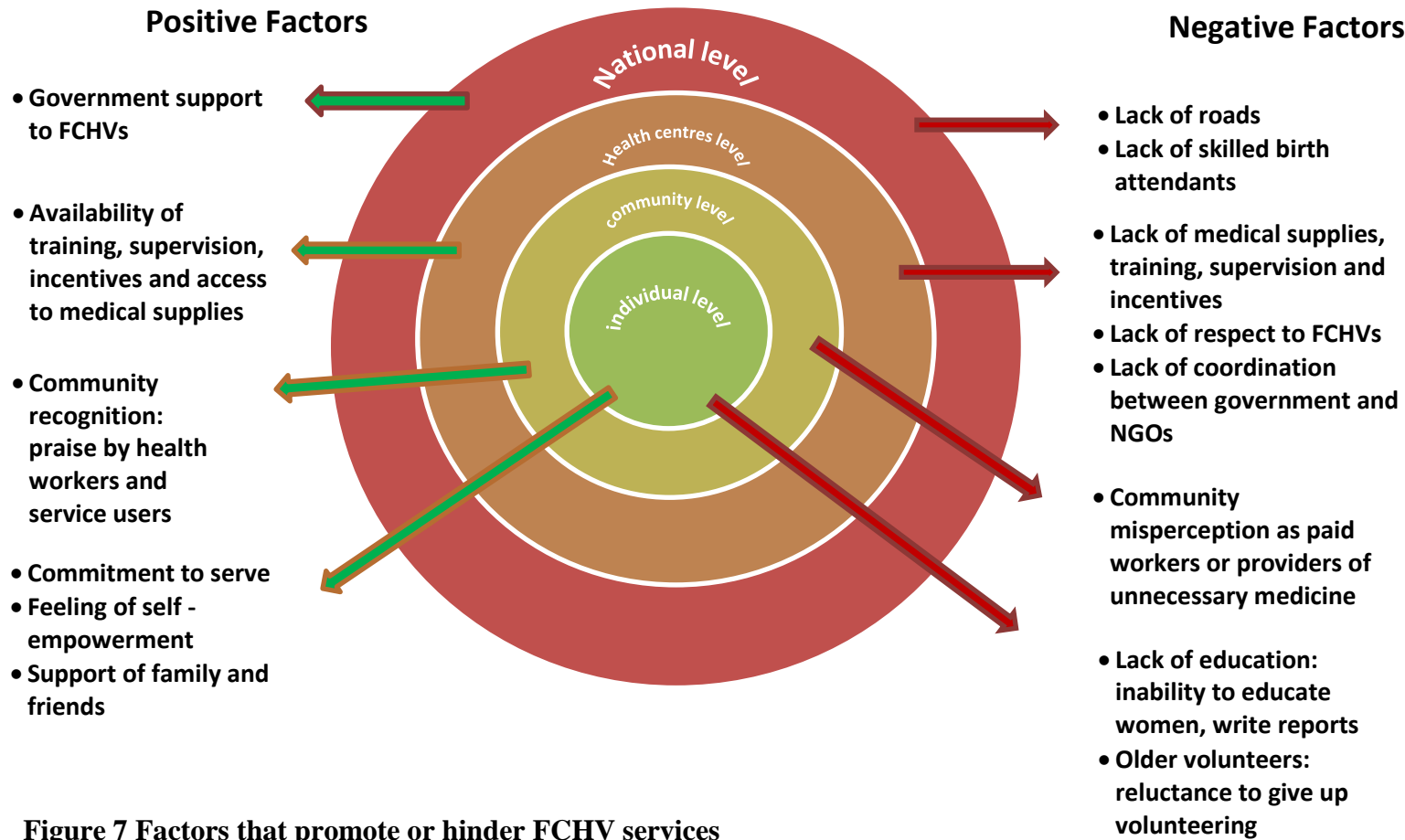


Figure 7 Factors that promote or hinder FCHV services

6.2 Age of FCHV

Most of the interviewed volunteers were aged between 45 and 60 years (Section 5.1.1). Regardless of age, the main emerging subtheme was FCHVs' commitment to the service, which they saw as a social responsibility. In addition, some elderly volunteers served for religious reasons. A few of them were above sixty and reported age-related physical problems, but they found difficulty in leaving the services and sought to continue volunteering. Therefore, both positive aspect of older age – volunteers' commitment to serve people, and the challenging aspect – reluctance to give up volunteering, are presented below.

6.2.1 Viewed their works as a form of basic human and social responsibility

The majority of FCHVs saw the service as a social responsibility. A 70-year-old FCHV emphasised the need to work together to achieve a common goal without giving much attention to money:

“If all the people work together with the same heart and the same courage in a group, then everything is possible. It is possible to raise the earth if all the women work together. If you ask for money in everything that you do and if you don't work, then how can the work ever be done?” FCHVD4.

Another FCHV emphasised service over money. She maintained that human relationships are far more important than money, and people should value these relationships in order to create a better society:

“Money is not a big thing, but humans in society are. We should not sell ourselves for money; it is not worth it.” FCHVD3.

Some FCHVs reported that serving others is one's religious duty and hence one should fulfil this responsibility. Others interpreted their service as a religion and they would provide it even if nobody cared about their services. One volunteer commented:

“Even after hard work, we don't have any greediness. It is the religious service for God. We do well and encourage the children to do their best. In return God blesses us and this way we feel fulfilled.” FGD3 participant2.

Of the FCHVs near or over 60, all but one wanted to continue their service despite their advanced age and associated physical limitations such as poor eyesight or inability to walk long distances. One of them described her enthusiasm for her work even in her mid-60s:

“I want to walk, I want to talk. Now, what to do? This knee is giving me a little problem. I am not able to see properly. Otherwise, I go everywhere they ask, be it Kathmandu, Delhi or Bombay. I go anywhere.” FCHVS12.

In one isolated case, a FCHV in her 70s from a remote hill village wanted to stop working. However, she could not do so, because no women from her village wanted to volunteer and the health worker insisted on her continuing the service:

“For the last six years, I have been telling them (the health workers) that I no longer want to do this work, but I haven't been able to stop yet. I have to walk to six hours to the health centre and back again. It is very difficult.” FCHVD4.

Apart from the above case, most FCHVs wanted to continue volunteering. While their dedication to services was praiseworthy, some older FCHVs reported physical problems, which meant they had difficulties in service provision. However, they were reluctant to give up volunteering, as they wanted either to continue the services or to be replaced by their family member, which is further discussed below.

6.2.2 Reluctance to give up volunteering

Some FCHVs had a long service history as volunteers (Table 6, p.94) and were facing physical problems such as poor vision and reduced ability to walk. They expected that they would get some extra financial benefit if they continued volunteering (Section 5.6.4). They were concerned about the financial security in old age and hence were reluctant to give up volunteering. They were also afraid to lose other benefits associated with volunteering (Section 6.6.1) and therefore wanted to continue.

One elderly FCHV was struggling to meet her daily basic needs:

“If I leave the work, I would get NRs 10000 (£66.66). That sum is not worth it. Today they provide and tomorrow it will run out. I would rather prefer to work as long as I can live. At least in this way I have enough money for salt and oil, don't I?” FCHVS19.

Another volunteer wanted to secure her future financial needs:

“We won't die immediately after the age of 60. We need some support, as there is the chance of disease as age increases. If there is no financial support available now, then it is better to continue the service.” FGD1.

In addition, the older FCHVs were more likely to be illiterate. One illiterate volunteer was keen to keep working irrespective of her age and educational status, as she protested against the health workers' plan to replace them:

“Whenever health workers talk about replacing us, I say, ‘in the past, you recruited all of us - illiterate volunteers. We had difficult times and faced many challenges. Do you need educated ones now? Why didn't you keep the educated ones at that time?’” FCHVS13.

Some volunteers wanted to pass the work to someone else within the same family, for example, their daughter or daughter-in-law. The practice was on-going as some FCHVs reported that they replaced family members who used to volunteer. One of them commented:

“My mother-in-law was a FCHV and then my sister-in-law became a FCHV. Once I got married, my sister-in-law refused to be a FCHV and she wanted someone to take her position. Then, I became a FCHV.” FCHVS10.

This was consistent with a health worker’s comment:

“Volunteers say, ‘for these long years, we worked. Now, we want our daughter or daughter-in-law to be a FCHV, or we don’t leave our work.’” HW7.

A few health workers also cited the problem with a FCHV strategy that stated that volunteers could continue to work as long as they wish to do so. Thus, the strategy lacked the clear guidance on the replacement of older FCHVs. A health worker emphasized a need to redesign the strategy:

“The (FCHV) strategy stated that someone could resign if she wished. Because of this, some of the old women who do not even have proper vision are not leaving their work. Nepal Government should design clear guidelines for the replacement of volunteers; otherwise it is difficult to deliver the services at the community level.” HW8.

Another health worker clarified that it was not possible to ask FCHVs to leave their work, as they were not paid employees. He talked about the use of a ‘soft strategy’ to convince older volunteers to leave their work:

“For the elderly people who do not want to leave, we (the health workers) cannot coerce them (the FCHVs). However, we frequently tell them in training sessions, meetings and seminars that if they wish to leave, the government provides a good package of money for them. After hearing this, some people decide to leave.” HW4.

Having discussed the positive and the negative aspects of age in their volunteering services, now I move on to present the education of FCHVs and how it affects their service delivery.

6.3 Education of FCHV

Just as age affected FCHVs' service provision so did the education of FCHVs. Whilst educated FCHVs showed enhanced capacity in delivering MHSs, a lack of education hindered the service provision. These points are further developed below.

6.3.1 Education enhancing the capacity of FCHV

Findings showed that in general the younger volunteers were better educated and were involved in other activities. Some educated volunteers had received additional training: for example, in the hill villages they were trained to administer urine pregnancy tests and counsel women on the availability of abortion services (Section 5.6.3). In both hill and Terai regions, educated FCHVs expressed more concerns and grievances regarding how little government support they received.

One of them declared that she was planning to take action if the village secretary did not support them:

"I became a representative as a chairperson of FCHVs from our village and have given them (women) a voice. I have threatened [name], if they would not allocate any budget for us even this year, then I would be bringing the mothers' group to beat them up." FCHVS16.

The same FCHV identified herself as an active member of a political party. Being a FCHV, it was against the government policy to get publicly involved in politics. She argued that the volunteer service was not enough for her to pay for her livelihood and acknowledged how the political affiliation built her confidence. She criticised the government for not being able to help them:

"I have a social status. I am in politics, I am in all places. Not only these things, I have got self-satisfaction from this work. Even though the government has not

given anything and has cheated us, I have the courage and determination to provide the services.” FCHVS16.

A health worker also reiterated the fact that some volunteers were leaders and were difficult to work with:

“Some FCHVs are leaders here. Some of them are difficult ones, as it is often difficult to ask them to work. However, there are other FCHVs who are working happily and continuously serving the people.” HW9.

Some educated volunteers were also found to be involved in activities that could barely leave them time to volunteer, as reported by the two volunteers working full-time in the Terai (for examples, see Section 6.6.2.1).

Overall, whilst educated FCHVs were helpful for MHS provision, since they could easily be trained to provide basic healthcare services, this was not without challenges.

As seen above, all activities of FCHVs were not necessarily related to health. Some educated FCHVs were involved in politics and full-time jobs which could have an impact on the time they spent as volunteers. On the other hand, FCHVs who were illiterate faced multiple challenges while providing MHSs, as is explained below.

6.3.2 Lack of education hindering the MHS provision

Poor literacy of FCHVs was recognised as an issue and was common amongst the older ones (Section 6.2.1). Illiterate FCHVs lacked the skills in educating women in mothers’ group meetings or reporting the health activities (Section 5.6.4). As they lacked the reporting skills, some mentioned getting support from family members, peers or health workers. In addition, these FCHVs were often bypassed by educated service users. Examples of each of these themes are illustrated below.

Some FCHVs reported that they could hardly read and write their name, as one of them commented:

“I don’t know much about reading and writing. I can read and write my name a bit.” FCHVD7.

This was consistent with a remark from a health worker who mentioned the issue of illiteracy among FCHVs and the action taken by the government:

“Some volunteers are not educated and use finger prints to sign. Therefore, it is hard for them to work. However, Nepal government provides training 2-3 times a year.” HW2.

A FCHV admitted that she was not able to read the book, so she could not share the health information with the mothers’ group members who were more educated and knowledgeable than her. Instead, the volunteer asked a group member to read:

“I have a book. There are educated girls in the mothers’ group now. I ask one of them to read and ask the rest of the group to listen to her and learn from that. We have become old and forgotten the training. ... We share health information from the knowledge we have. If there is anything wrong, then they correct us. They are clever [all of them laugh].” FGD3-Participant2.

This volunteer acknowledged that her reporting would have been easier if she were educated:

“As compared to the work in the past, current work is difficult. It is easier for educated people and difficult for those who cannot read properly, as we need to prepare a report.” FCHVS10.

An illiterate FCHV commented on how she prepared her report:

“There is a girl [name]. She helps to record health information. Otherwise, I send the report with sisters [female health workers] in health centre.” FCHVD4.

This was consistent with a view expressed by the majority of health workers who acknowledged the importance of education for volunteers, as one of them mentioned:

“I feel FCHVs should be a bit educated. There is a difficulty at work in every place. We ask them to bring the report; they would say they could not bring the report, as they are not educated. They ask us to make our own report. They can provide information orally, but it might be inaccurate. They ask us to fill in the information in the report card and the work is going on this way.” HW2.

On my visit to the local health centre in the hill region, I noticed a similar event:

I saw a health worker filling in a form based on their verbal accounts for a few illiterate FCHVs. The FCHVs were providing information on the number of pregnant women and the women taking iron tablets in their villages. (Field Note-18th May 2014).

The view of the FCHVs, health workers and my presence in the field showed that the recording of health events for illiterate FCHVs was not without challenges. Their attempts to report all kinds of health activities were praiseworthy, but reporting based on their memories risked its credibility. Consequently, educated users were reluctant to use the services.

Another problem with FCHVs illiteracy or low education was that often educated service users avoided the services of FCHVs. One FCHV emphasised that the current generation of women are much more confident and therefore, more forward than the FCHVs themselves, thus often not needing their help:

“There are many women who are more knowledgeable than us. In this case, when we tell them, they say that they know already themselves. We ask new mothers to take vitamins. Then they [women] say, ‘we know everything’, then why should I teach them?” FCHVS19.

The findings reflected this view. Some educated service users sought services directly from the health centres and demanded that FCHVs should be educated, well-trained and provided with essential medical supplies. One of them commented:

“FCHVs are older than us. She [FCHV] might have this feeling ‘these are young women. Why is it necessary to tell them when they already know?’

[Smiles]. There is not much discussion, nor have I received advice and suggestions from them. I visit hospital.” WomanD9.

Moreover, changes in the wider maternity service provision, including the availability of female health workers in the health centres has eased the access of women to such health services:

“Now they [pregnant women] go to the health centre. They don’t come to me. They used to come in the past. There is a midwife available now. In the past, the only person available in the health centre was male. Until the health centres had a midwife, pregnant women used to come to me.” FCHVD6.

To sum up, education was important for FCHVs in their everyday activities, but some of them were illiterate and faced multiple challenges such as educating women in the mothers’ group meeting and preparing the health reports. Moreover, some educated service users often avoided the service from illiterate volunteers. Yet, despite their older age and education, all the volunteers except one who was elderly, expressed their desire and were motivated to continue volunteering.

6.4 Motivation to Volunteer

The majority of the volunteers expressed their desire to continue volunteering within their communities. The key reasons for their motivation were: (a) recognition of the importance of their role by FCHVs themselves, (b) learning or training opportunities, (c) desire for employment and (d) support of family and friends.

6.4.1 Self recognition of importance of role by FCHV

A majority of FCHVs from both the hill and Terai regions reported that since they became FCHVs there had either been no maternal deaths or reduced maternal and child mortalities in their communities. The volunteers appreciated the fact that they were making a positive change to maternal health outcomes, which they themselves noticed in their respective communities. Comparing the past to the present, one of them commented:

“What I feel good about my work is that I am helping pregnant women, mothers and children to save their lives. In the past, sometimes the baby’s hands used to come outside the vagina, sometimes their foot used to come outside. It used to cost huge expenses for the families. Now, such incidents have been reduced. We have protected our children and mother and pregnant women from deaths that are the best thing we have achieved.” FCHVD2.

Another FCHV explained the changed perception of FCHVs and their service users over the years:

“I am the kind of a person who delivered babies even without TT (Tetanus Toxoid) immunization. I didn’t know anything about it. Now, I feel that people know much more before they become mothers. ...I feel happy while asking women not to have a baby at a young age, as it causes complications. I feel happy when they are curious for health information.” FGD3 participant1.

There was no mothers’ group when this woman started to volunteer:

“There was no women’s group when we became FCHVs. After 4 years of my work as a volunteer, I started to run a women’s group.” FCHVS9.

This woman confirms the perception of FCHVs, as shown by her understanding of the importance of health checks during pregnancy:

“Compared to the past, women now have developed more understanding. Usually, they all go for check-ups. In every village, there is a FCHV who provides information on TT immunization and the need for regular check-ups” WomanD9.

The number of women visiting health centres for health check-ups and hospital delivery was increasing. This is validated by health workers, as one of them from a remote village stated:

“When we started the birthing centre, there were only two cases of delivery in the first year. After the implementation of health awareness campaign through FCHVs and mothers’ group the number of health centre delivery raised to 60 cases within a year.” HW5.

Moreover, health workers praised the contribution of FCHVs in maternal health (Section 6.8.1), which inspired FCHVs to continue their services.

Above, I showed the growing awareness of health issues amongst FCHVs and their service users as reported by FCHVs, health workers and service users from both regions. Women have started to go for health check-ups and witnessing such positive change in health status inspired FCHVs to serve their communities.

6.4.2 Opportunities for training or learning

Many FCHVs talked about the importance of training opportunities while volunteering. Training had more than one function: they enjoyed the social gathering, valued the learning time and showed interest in the incentives they received from it. One of them interpreted training as a pleasing social experience:

“We are 37 FCHVs here. If we want to meet each other, it isn’t possible to visit each house. During training, we get the opportunity to meet in one place and share each other’s experiences...Being a FCHV provides a reason to leave the home and I feel good while attending the training. This motivates us at our work.” FGD3 Participant 1.

One FCHV described the advantage of learning through training as she often received training from both public and private organisations:

“I can visit different places and talk a lot in different issues. It is always good to have a new understanding of things that we are previously unaware. If we always stay at home then, we become ‘a house pork’ (to indicate laziness and limited movement).” FCHVS12.

Some FCHVs wanted to be able to read and write properly:

“We need training and education from the government. We can only write our name. I want to be more proficient. I really want that.” FCHVS13.

Training was also an opportunity for FCHVs to receive some financial incentives as one of them commented:

“Even if there is nothing, we want some [money] during the training, at least NRs 500 (£3.33) during training.” FGD4 Participant3.

This FCHV strongly emphasized her desire for money:

“We feel there should be a little bit of money for us, including some new training opportunities frequently to refresh us. That is all we need, nothing else is required. The main thing is money, if there is money it increases our desire to work.” FCHVS15.

During the training, volunteers enjoyed the social and learning opportunities, but they were also concerned about the incentives, which were related to their desire for employment.

6.4.3 Desire for employment

Most of the FCHVs wanted to continue volunteering (Section 6.2.2). Some educated FCHVs were hoping that volunteering services would provide them with better employment opportunity in future. They wanted financial support for their livelihood.

One volunteer identified how the government could assist them:

“We need to get our rights...we cannot ask for a salary for FCHVs, but it is possible to have allowances as many people get money that way. We don’t get

anything. The FCHVs from our village even do not get allowances. There is nothing, we have to work without anything.” FCHVS16.

A similar reason was acknowledged by a health worker in relation to the desire to continue volunteering.

“Women’s general economic status is very weak in the Terai, as is that of the FCHVs. In such situations, if they continue to volunteer, they get at least NRs 200 (£1.33) as a transport cost. The women here are not very educated. Because of their lack of education, they don’t have any economic opportunities. They think it is better to work as FCHVs and receive that money, rather than staying at home without doing anything.” HW8.

A FCHV explained how pointless expenses by the politicians influenced other activities and how money was being given the highest value in the society, therefore, highlighting her own financial interest in the service of FCHVs:

“What is happening is that everything is gauged in terms of money. Nowadays, people do not participate in the election events if they were not fed enough in the hotel. If we have a meeting or gathering in any place, first people will ask, ‘how much daily allowance will we receive?’ We tried to make villagers understand. However, they did not listen to us. Nowadays, does anyone work without self-interest?” FGD3 participant1.

Apart from their desire to be employed, FCHVs were motivated by the support of their family and friends who often encouraged them to volunteer.

6.4.4 Support of family and friends

Family support, specially that of husbands and mothers-in-law, was important for a woman to become a volunteer and to serve as a volunteer in her day-to-day life. One FCHV from the Terai explained how she was selected as a FCHV with her husband’s support:

“My husband was also there. He said, ‘if it is possible to work without education and without anything then my wife will be a FCHV’. Then, the village health worker wrote my name [as a FCHV].” FCHVS12.

The educated family members or peers helped them to prepare their health report:

“I ask my friends to do the signature for me and they do so. What should I do? I had an eye surgery, but my vision got poor. My friends help me if there is any work to sort out. Then, if there is anything that should be done immediately, I ask my grandchildren to write for me.”

However, some volunteers in the Terai complained that they could not receive enough family support. A FCHV explained how her household chores and absence of family support almost made it impossible for her to continue volunteering.

“I don’t have any difficulties at work. However, I was almost forced stop the volunteering because of the household chores. I felt overwhelmed when I returned home from volunteering. I was presented with big piles of household chores and it became almost impossible to continue the volunteering.”
FCHVS17.

For this particular FCHV, her friends encouraged her to continue volunteering, as she commented:

“Other friends motivated me to continue to work as an FCHV. They said, ‘this is very nice work. If you only stay inside the house, you know nothing. If you walk and talk as much as you can, then you will understand, learn and know new things, therefore don’t leave it.’” FCHVS17.

However, for some FCHVs volunteering still continues to be difficult, because they could not get enough support from their families:

“When someone asks us to visit them during pregnancy or during diarrhoeas, we need to attend. However, the family members exclaim, ‘there is no food, no drink, why are you walking so much?’” FCHVS16.

I was confronted with a similar question while I was attending some interviews with FCHVs in the Terai. The children of the volunteers were complaining that

the volunteers were simply wasting their time with the work that had no prospect (Field Note-17th July 2014).

From the above it is clear that many volunteers wanted to continue volunteering.

However, most of the volunteers expressed concerns regarding available financial and non-financial incentives, which are discussed in the following section.

6.5 Concerns for Financial and Non-financial Incentives

One of the key themes that emerged across the dataset was FCHVs' concern for financial and non-financial incentives, and reported by volunteers and health workers. FCHVs' main concerns were basic, but important for them to deliver MHSs in their communities. For example, they asked for some form of payment or incentives for the following items: the basic accessories such as shoes, torches, umbrellas; recharge cost for mobile or telephone communication; snacks during home visits and transport cost to visit the health centres. While these demands were reasonable, some of them expressed a slightly higher level of expectations, as given by their demands for salary. FCHVs from both the hill and Terai regions reported their concerns over the incentives they received and demanded more support.

As shown in Figure 7, the key reasons for FCHVs demands were: (a) competing demands on their time because of increased workload, (b) concerns about day-to-day expenses, (c) disproportional incentives available to them and (d) financial expectations of volunteers. They are further developed below with illustrations.

REASONS FOR FINANCIAL & NON-FINANCIAL CONCERNS OF VOLUNTEERS

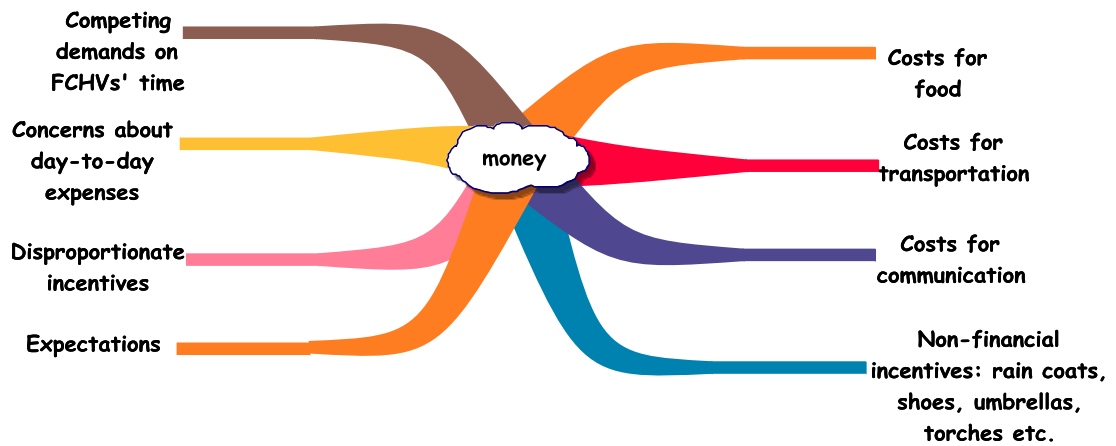


Figure 8 Importance of financial and non-financial concerns for FCHV

6.5.1 Competing demands on FCHV time

A majority of FCHVs and health workers reported that FCHVs' activities had substantially increased without considering their capacities and a need for financial and nonfinancial incentives. Apart from the volunteering, FCHVs worked on their farm and also did household chores. They reported problems specially during training or reporting days because they spent hours without adequate compensation.

One FCHV expressed her concern about not being able to work on her farm because of the time spent on travelling to the health centre:

“I have not been able to put paddy seeds for plantation while others have already done this. There are not many people to work at home. Because of that my situation is miserable.” FCHVD4.

The same FCHV complained of the trouble she had, because of the inability of a pregnant woman to visit the health centre despite the awareness of health check-ups:

“One woman in the village told me she would deliver at home, and I told her if she would call me during delivery then I would smack her face. What should I do? I cannot do their work only. I need to look after my animals. I need to eat food, don't I?These women don't even have time to go for check-ups, but they want me to live with them from the morning to the evening during their labour.” FCHVD4.

Though the work was voluntary, the FCHVs had to serve when required:

“We can't say that we have to harvest in field. We can't be saying that we need to plant in the field or need to do other work. The work can't be stopped for any other reasons.” FCHVD1.

This FCHV highlighted a problem at her farm work during her training, as she needed to hire someone to do the work:

“We can't stay in our houses if we have training sessions. We need to have someone to replace us for the farm work. It is too difficult [addresses interviewer]. We get NRs 200 (£1.33) per month, but hiring someone to work at our farm is not possible at that price. We cannot even get the workers at NRs 500 (£3.33) per day. It's too difficult.” FGD2participant1.

Another challenging aspect of FCHVs' work was the reporting of health activities (Section 5.6.4), which was stressful for illiterate ones (Section 6.3.2).

Above, I discussed the challenges experienced by some FCHVs in balancing the volunteering services with their household chores. Though their service was voluntary, the compulsory reporting of activities and training attendance meant that they spent a substantial time at work. This sometimes compromised their personal work. As a result, many FCHVs were concerned about the everyday expenses that were incurred during their services which are discussed below.

6.5.2 Concerns about day-to-day expenses

FCHVs needed and demanded some form of financial reimbursement to meet their expenses incurred during their service provision such as costs for snacks, travelling or communication. Some FCHVs reported that they needed umbrellas, sturdy shoes, drinking water bottles, bags and torches while walking around the villages. They wanted to be get protected from bright sunlight, rain or the dark nights on their walk in the villages:

“The problem is I don’t have a torch. While roaming around the village, it’s difficulty to get drinking water. I don’t have even a drinking water bottle. If we think about our work, we need an umbrella to protect us from the heat and rain. The government hasn’t given that either.” FCHVD1.

In both regions, the FCHVs travelled to the health centre at least once a month for reporting. They complained that the time and cost associated with travelling to the health centre was usually higher than the travel expenses they received. A FCHV commented on the expensive local transportation they were required to use:

“For travelling from a village to the health centre, it costs NRs 60 (£0.40) one way and NRs 120 (£0.80) for a return...If the FCHVs don’t attend the meeting then, they get criticised. It is very difficult for FCHVs from the remote villages.” FCHVD8.

This is consistent with a comment of a health worker who also thought incentives for FCHVs were not adequate specially when they had to walk a long distance to attend the meetings:

“From Sertung VDC, it takes 4 hours to reach the other VDCs. The FCHVs are provided with only NRs 200 (£1.33) per day when they have to walk almost 8 hours a day to attend the training.” HW4.

Another health worker also admitted that FCHVs were not supported enough although they were asked to do many things:

“FCHVs are working voluntarily without getting any financial support and they need some support for the work. They were asked to work on many things; however, support is very little, therefore, many of them complain.” HW11.

Another expense for FCHVs was the cost involved in making phone calls, for example calling an ambulance or a health worker in emergency or inviting mothers to attend the mothers’ group meeting:

“There is a zero balance in my mobile due to the mothers’ group meeting (shows her mobile). I need to call at the health post to enquire whereabouts of the ambulance. This also requires money.... Because there is no money, there is not much enthusiasm to work.” FCHVD8.

The main concerns of FCHVs for their day-to day activities were often simple, and logical. Both health workers and volunteers agreed about the low levels of support to FCHVs. While the volunteers from the hill region demanded things such as raincoat, shoes, lights, the volunteers from the Terai demanded bed nets, mobiles and bicycles. The FCHVs in the Terai also mentioned about the disproportionate incentives given to them, which is presented below.

6.5.3 Disproportionate incentives available to FCHV

There was a difference in the incentives available to FCHVs in different villages. In the hill region, FCHVs received small regular incentives from public health centres, but such support varied in the Terai (Section 6.7). In the Terai villages, while some volunteers did not receive any incentives, others received monthly allowances of varying amounts. Also, FCHVs from one village received bicycles. Such differences in the incentives as well as unfulfilled promises made by a local politician, who promised to provide mobile phones to the volunteers during his electoral campaign, caused

widespread resentment among FCHVs. One of them reported about the failed promises of the government:

“I haven’t got anything. The government was saying that bed nets (mosquito nets) would be provided. Where is the bed net? A mobile was supposed to come, a cycle was supposed to come. Where are they? It was all lip service. All of us are angry.” FCHVS19.

This FCHV from the hill region described the support she received from the government:

“It has been a year since they started to give NRs 200 (£1.33). From this Shrawan (July 2014), they (health centre) are going to provide NRs 500 (£3.33) per month. The district gives NRs 4000 (£26.66) for us yearly. If there is training, then there is some money.” FCHVD6.

The support to FCHVs in the Terai varied across the villages. A FCHV in Sarlahi commented:

“Friends from other villages – X, Y, Z - received the money at the rate of NRs 300 (£2) thus in total NRs 3600 (£24) for a year. Our xxx(name) village is yet to receive. We went to ask for that money, but the village secretary didn't tell us anything in a convincing way.” FCHVS15.

The volunteers in the Terai did not receive the money, which they were provided with in earlier years, hence there was a growing resentment towards health centres. Some volunteers found that merely talking about the issues was not useful, and rather they were prepared to file a written complaint as illustrated by this FCHV:

“[Name] sister was asking to write an application. She said that she would submit an application with signatures from all FCHVs in the ward. Even if they do not give the money, there is at least advocacy on the issues from FCHVs.” FGD3 Participant 3 [all nodded their heads together].

Some FCHVs were also concerned about the free health care services that the government promised to provide them within the public health care centres, but it was not available, as illustrated by this FCHV activist:

“I had gone to Bir hospital⁵ for check-up. I had to fight with them to receive the services. I showed them my card (FCHV identity) and demanded for the government facility to provide us with health services at free of cost. The sign showing the free service to FCHVs is available on the board, but it does not exist in practice.” FGD1 Participant1.

The discrepancy between the incentives promised and those delivered caused much of the FCHVs’ resentment.

6.5.4 Financial expectations of FCHV

The FCHVs were aware that their role is voluntary and knew that they were not supposed to expect any payment or incentives for their services. However, they also felt that they were doing more work than the paid health workers were and therefore, they needed to be remunerated fairly for their work. For example, the FCHVs reported that they were the ones who prepared most of the health report, but received nothing for the services, while the public health workers received money without out any effort, as they used the work of volunteers. One of them commented:

“Q. What else are you expecting in your daily work as a FCHV?

A. Salary would have been better. What else we need (big laughs)?

Q. Will you become a volunteer if you get a salary?

A. No. That’s why it is difficult, however, after that work, we should be paid. We bring all the records. Even educated people don’t work much. For example, health workers just use the report that we have given to them.” FCHVD6.

A FCHV from the Terai proposed that active and educated FCHVs should be selected for the work and they should be provided with a salary. She admitted that it was not possible to work voluntarily in the long-run:

⁵This is a major teaching hospital in Kathmandu.

“Whether a FCHV should be given a monthly payment, this needs to be considered. It is okay to keep the FCHVs who can work. At this time, it is not possible to work voluntarily.” FCHVS15.

In a few cases, FCHVs were demanding money for their monthly group meetings within their villages:

“If we could give training to women in the mothers’ group for health for at least 2-3 days with allowances of NRs 100 or NRs 200 (~£1.25), then women would be encouraged to attend the group meeting. The reason for our dissatisfaction is because they are always invited for the mothers’ group meeting only, and nothing is provided. This reduces their motivation to attend.” [Shows discomfort by her facial expression]. FCHVD8.

In some cases, FCHVs had a misconception of the financial support - NRs 200 (£1.33) - they received. This money was a travel allowance, but the volunteers perceived it as a salary, and felt ashamed of it. One of them remarked:

“Participant2. We should not feel shy when we say about our monthly salary. Participant1. Why should they give us NRs 200 (£1.33)? I would rather prefer they (village development committee) do not give us any money at all.” FGD4 Participants 1 and 2.

Health workers also acknowledged that FCHVs demanded for financial incentives:

“When they were recruited, they were known as FCHVs, they promised to work without any desire for money or incentives. But, once we provided them with some money, they said, “NRs 400 is travelling allowance, where is other allowance?” HW7.

But, the health workers also emphasised the need for financial support for FCHVs:

“We tell them in the training, but they say the same thing, ‘we are volunteers, but how can we work selflessly without money’ (laughs). They have their kids and they are needed to look after them.” HW7.

The findings above showed that the need for financial incentives for FCHVs was highly important given their expectations, and also the growing amount of work expected of them.

Having discussed the individual level factors affecting FCHVs' MHS provision, I move on to discuss the factor at community level – FCHVs' perception of community's view on their services.

6.6 FCHVs' Perception of Community Views

At the community level, FCHVs reported a mixed response to their services from the villagers. Many FCHVs reported that the community recognition as a result of volunteering was a positive factor and motivated them to volunteer. Others reported that the community concerns about their volunteering affected them negatively and reduced their enthusiasm at work. Figure 9 shows subthemes related to community recognition and community concerns and are discussed below.

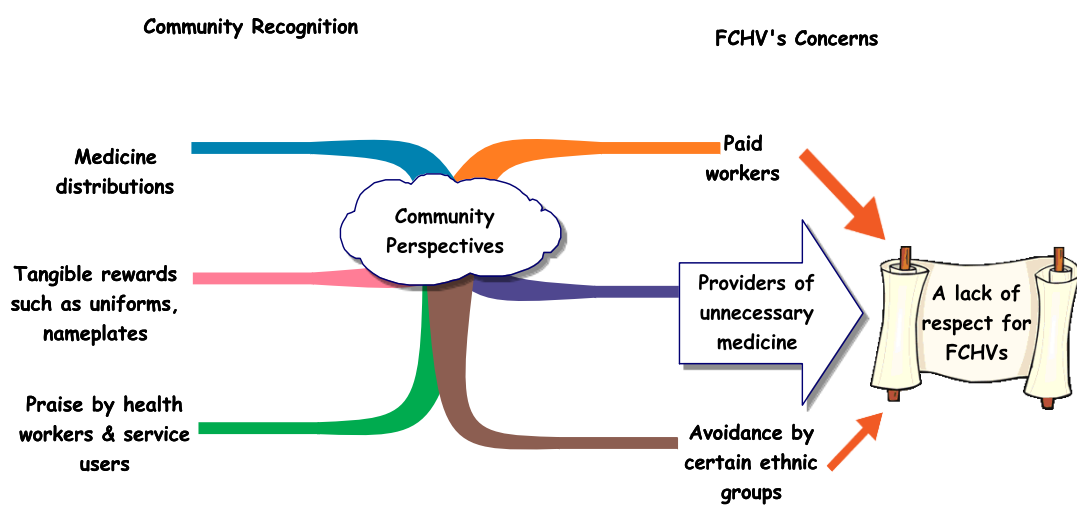


Figure 9 Community recognition versus community concerns as perceived by FCHVs

6.6.1 Community Recognition

Data analysis showed “community recognition” was an important motivator for volunteers. Most volunteers stated that they were well-known in their communities and described this as one of their important achievements. FCHVs were recognised in their communities mainly because of their role as a medicine provider. They were also recognised because of the provision of uniforms, nameplates or identity cards and an annual celebration of FCHVs Day. Also, the praise of FCHVs by the health workers and service users enhanced their recognition.

The majority of volunteers welcomed the respect and the recognition they gained:

“All people in the village recognise me as a FCHV. I feel happy being able to serve children under the age of five and pregnant women from the time of conception.” FGD3 participant5.

Many FCHVs mentioned that they were recognised in their communities after their involvement in medicine distribution (Section 5.6.1):

“People didn’t believe us much in the beginning. Once the national programme on vitamin A feeding began, we started to serve people directly. Until then, only doctors used to give medicines.” FCHVS16.

The same FCHV highlighted an unprecedented level of trust of women towards them:

“People trust us in the field. We had some difficulties in the past, but now, if FCHVs go there and ask people to eat anything to make them feel better, then they even eat the poison. There will be no doubt on what I give her.” FCHVS16.

This was consistent with a view of a health worker who described the FCHV as a trusted individual in the community:

“FCHVs are absorbed within the village and society. They are well recognised in the grass root level. They know how to work and there is a trusting environment as well.

The FCHVs were also recognised for other reasons, as one of them commented:

“They have at least given the identity to us. We have received the uniform with a circular mark after we requested for it.” FCHVD1.

On the FCHV celebration day, the best performing FCHVs in the Terai received a reward from the government as well as from their districts:

“We five FCHVs received the money for delivering good services. In the past, we got one shawl of NRs150 (£1). This year, we received NRs 500 (£3.33).” FCHVS14.

A FCHV expressed how important it was to have a FCHV identity card to meet new people, including me.

“You met us, we had a great chat. If we had not carried an FCHV identification card, we would not have known you. Later, when you visit us with your doctorate degree, we might be very old, but you might still remember us.” FGD3 participant1.

A health worker also reported the importance of symbolic rewards to motivate the volunteers:

“As FCHVs have been given special privileges, they have got a recognition. There is also a volunteer identity card for them to boost their confidence. This has helped them to get some health facilities offered from the government.” HW4.

The FCHVs’ are given a nameplate saying they are a “female community health volunteers” which is hung on the wall outside their houses. This name plate enhances easy notice of her by the villagers. (Field Note May 2014).

So far this section has shown that a majority of FCHVs appreciated the recognition for their services. However, the FCHVs showed concern about the views of community on their services, as presented below.

6.6.2 FCHV concerns at community level

While volunteers were able to earn community respect over the years, they admitted the existence of negative views by community members on their voluntary services. These hindered the FCHVs' from effective service provision. Three key themes were identified: a) FCHVs were considered as paid workers, b) their provision of medicine was seen as unnecessary or detrimental and c) their services were not accessed by certain ethnic groups.

6.6.2.1 Considered as paid workers

Some volunteers reported that they were being treated as paid health workers and expected to produce the same amount of work as paid health workers, but the volunteers could not do so, one of them commented:

“Some people say, ‘she gets a salary every month, but she does not come to our home.’ Many people do not say this, but a few people do so. I think we need to ignore such comments and keep working.” FCHVD7.

One of the reasons for this misunderstanding was the volunteers' uniform which not only promoted their wider community recognition, but also created confusion among community members:

“People think that we get a lot of benefits, only the volunteers understand what we actually receive and what we do not. When we walk into the village with a new and clean uniform, the villagers think that we have earned a lot of money from this work.” FGD2 Participant2.

Some women also reported that FCHVs get money for their work. One of them commented:

“What they (FCHVs) need to do is they should go to different places and provide suggestions and advice to women. There should be no concern for either

a low or high salary because one should fulfil one's responsibility.” Woman S17.

While many volunteers complained about the misconception of the villagers, two volunteers were found to be working in a full-time position to maintain their livelihood, which was against the national guidelines for the volunteers:

“When people from the village see us working in other places, they ask us, ‘from how many places you are earning?’ People feel that we are working for money; we have a big salary, so we are not volunteering.” FGD3 Participant3.

6.6.2.2 Medicine provision seen as either unnecessary or detrimental

As discussed in Section 5.6.1, FCHVs provided some basic medicines for mothers and children. Sometimes, the volunteers were mobilised in mass distribution of drugs by the Government of Nepal. For example, they distributed drugs to treat filariasis (See Appendix 6) and experienced many unexpected problems. The volunteers reported that they were accused of distributing unnecessary drugs and were also blamed for its side effects, as one of them commented:

“Interviewee: While we were giving medicine for filariasis, people chased us away with their sticks.

Interviewer: Why?

Interviewee: Some children became unconscious, some had fever and some developed typhoid due to that medicine, so people came several times to complain about the matter.” FCHVS9.

Some FCHVs reported that villagers talked to them rudely, as they did not have faith in the medicine:

“Participant4- Some villagers said, “You brought medicine to kill us”.

“Participant1- Some people ordered ‘you go away, you go away, you go away, we don't take your medicines.’ The people who reacted in such a manner were

the ones who were usually educated. They didn't take the medicine for filariasis." FGD4.

In the hill region, FCHVs were supplied with medicines, but some FCHVs distributed the medicines without careful consideration. One of them reported that she was giving zinc tablets to treat diarrhoea in adults, which she should have been using for treating diarrhoea in children under five years:

"I realised that zinc tablets could be given to older person with diarrhoea too. A man in my village had this tablet for 10 days and he became all right afterwards." FCHVD4.

In the Terai, one FCHV was found to be injecting people without adequate training (Section 5.6.1).

6.6.2.3 Not accessed by certain caste or ethnic groups

The lack of use of FCHVs' services by certain ethnic minorities such as, Chepang and Tamang in the hill region, and Madhesi and Muslims in the Terai, were noted. The main reason for this was either the service users were unaware of the FCHVs' presence or they had cultural misconceptions about modern healthcare services.

Some FCHVs reported that ethnic minority groups in the hill region did not understand the importance of immunisation, as some parents were reluctant to immunise their children:

"I went walking two to three hours to provide polio drops. The woman did not accept the medicine. She said, 'Our children do not need medicine, they will survive'. It took me three hours to reach them. I did not go there with my self-interest, yet I could not do anything about it." FCHVD7.

A health worker reported the challenging aspects of the work while working with different ethnic groups.

“It is mainly associated with the level of awareness among people. In this ward number 4, Chepang community is in the minority and the mothers’ group is functioning well. There are many members in the group. However, the issues such as hygiene are very poor among Chepang community. The enthusiasm for the work is also lower in this community and so is women’s participation in mothers’ groups.” HW5.

A health worker commented that people in the community were only interested in immediate health benefits from FCHVs’ services and not the long-term changes in lifestyle that was needed:

“People in the community would like to see immediate results rather than actually learning the skills. It is their nature. We have a limited budget and people have big expectations.” HW6.

In the Terai, pregnant women and mothers from Muslim and Madhesi group did not access the services as one FCHV commented:

“Some people do not understand the importance of healthcare check-ups during pregnancy or motherhood. Usually Madhesi women do not understand it.” FCHVS14.

Women from the Muslim community were not accepting FCHVs’ services due to their misconceptions about the use of healthcare services and medicines:

“I work in the Muslim village. They have been saying that if the polio medicine is taken, then it reduces the power of reproduction. People think that they can’t have children later in life, so refuse the medicine. We go their houses and ask them. Currently, when we go their houses and drag the children to have the polio drops; at least they do not stop us.” FGD3 Participant1.

Another FCHV commented:

“They said, ‘the wound from immunization makes our God angry. I don’t want to have any injection. Why did you ask me to have an injection? If my mother-in-law or father-in-law knew about this, they would be annoyed.” FGD3 Participant5.

A Muslim woman had her all four children delivered at home:

“There is no need to go to the health centre. I had all my children delivered at home. If I need any help then, my mother-in-law would assist me. She knows how to rotate the baby in abdomen, if needed.”

Some ethnic groups held misunderstandings regarding the available healthcare services and the services offered by FCHVs. There is a need for special awareness education for these ethnic groups.

6.7 Organisational Support to FCHVs (Government and NGO)

The organisational support (both public and NGO) to FCHVs is described in terms of the support they received from the government healthcare centres and local NGOs. Such support varied between the two regions studied as shown in Table 11. While FCHVs in the hill villages received small regular incentives and occasional training by both government and NGOs, such support widely varied in the Terai. The following aspects of organisational support to FCHVs in the hill and Terai regions are compared: selection, training, supplies of logistics, and supervision of volunteers. Each of them is further discussed below.

Table 11 Health centre support available to FCHV in the two study communities

Characteristics	Dhading (hill region)	Sarlahi (Terai)
Presence of NGOs supporting maternal health care	√	×
NGO supporting recruitment of new FCHVs	√	×
FCHVs administering urine pregnancy tests, informing the use of emergency contraception or the availability of abortion services	√	×
Regular supply of iron tablets to FCHVs	√	×
Supervision and training to run mothers' group meetings	√	×
Monthly support for travelling (regular incentives)	√	Irregular
Incentives for FCHVs for referring women or accompanying them to deliver in health facilities	Irregular	×
Volunteers attending deliveries (currently)	√	×

√- Present, ×- Absent

6.7.1 Selection of FCHV

FCHVs reported various methods used in their selection that were contrary to the guidelines. While some FCHVs were recruited based on the recommendation of health workers, others were selected according to the suggestions of existing FCHVs as given by this example:

“Though illiterate, my friend (another FCHV) is clever and can speak well, you might have met her. She was selected as a FCHV and when health workers were searching for another FCHV, she recommended me.” FGD3 participant3.

Some of these women were already active and were serving in their villages, so when the opportunity to volunteer arose, they took it. One FCHV was working as a traditional birth attendant before she became a volunteer:

“I received traditional birth attendant training and after 2 years, I received the FCHV training. I worked a lot as a birth attendant.” FCHVD6.

Currently, the selection trend has changed. In one case in a hill village, a woman actively replaced an inactive FCHV and served in her place:

“The health worker from the government health centre and NGO workers told us to have a village meeting to select a new volunteer, as the incumbent volunteer had migrated to a different village and could not serve any more. I gathered villagers for the meeting... Although, I did not plan to be a volunteer, some people in the meeting proposed my name and the majority supported me.”
FGD2 Participant1.

In the past, the volunteers were mainly selected through the recommendation of health workers or their FCHV friends. This trend was changing as seen by the action of a woman who replaced the incumbent FCHV. This indicated that the educated women in villages were not only interested to become volunteers, but also recognised a need for a change in their communities.

6.7.2 Training

There were some variations in the types of training received by FCHVs. The volunteers from the hill region had received additional training by both public health centres and local NGOs. For example, the volunteers in the hill region received financial and technical support to run the mothers’ group meetings (Section 5.5), but such support was not available in the Terai:

“In cases where mothers’ groups are inactive or if they have irregular meetings, we support FCHVs technically by setting the mothers’ group, training FCHVs and supervising them. We also provide financial support with NRs 3000 (£20) to set up the group.” (HW6).

Training about the mothers’ group facilitation method was provided to FCHVs in the hill region:

“We are training FCHVs upstairs now in group dynamics which involves – how to facilitate the group, how to mobilise the group.” HW5.

In the Terai, the training provided to FCHVs was not up-to-date:

I met a group of FCHVs who were receiving basic training, but had been working as volunteers for between one and three years and in one case for up to seven years (Table 7). They should have received their training before they began to work as volunteers. (Field Note - mothers’ group meeting, 17th July 2014).

Most FCHVs in the Terai reported that they had received training to save the lives of new-borns (Section 2.8.2.1). However, there was a delay in the supply of equipment for new-born care:

“We have forgotten (the training). If we had received the equipment during the training, then we could have remembered a bit, but the health workers provided it only after six months of training.” FCHVS10.

This was confirmed by a health worker who described the situation in the Terai villages where the training became irrelevant, as FCHVs were not provided with necessary equipment on time:

“Once the community-based integrated management of childhood illness programme was launched, this programme was run in many places of Nepal. But, it collapsed because there was a year’s difference between the training time and the implementation of work.” HW7.

In addition, interviewed volunteers from the Terai also reported that they never applied the skills learnt to resuscitate the baby, as mostly women delivered in the health centres:

“We are also given things required for the delivery. If a child suffers from pneumonia, we have a bag and a mask. We have received the training, but people usually go to hospital for delivery and there is no need to use them.” FGD4 Participant2.

There was a delay not only in basic training for volunteers, but also in the supplies of logistics. In addition, sometimes the training was irrelevant because FCHVs were not needed to apply their skills.

6.7.3 Supplies of medicines

Health centres in the hill region provided some medicines to their volunteers (Section 5.6.1); however, they could not do so in the Terai because they lacked essential medicines including pills, iron and folic acid tablets. This not only caused problems in their service delivery, but also risked the reputation of the volunteers.

One volunteer questioned the inability of health centres to provide a continuous supply of essential medicines:

“We are providing iron tablets and pills to the women and if we run out of them, we visit the health centre. Health workers say, they have run out of the medicinal supplies. What kind of medicine is this? Sometimes it is available and sometimes it is not. Pregnant women and mothers complain to us that they are not getting medicine.” FCHVS9.

As the volunteers lacked essential supplies, they felt embarrassed and did not visit pregnant women or new mothers who often asked for medicine:

“If I don’t have iron tablets with me, how can I visit the pregnant woman? At least, immediately after writing, I would have given her some iron tablets and asked her to visit the health centre if required. In my parts of village, we have six to seven pregnant women and I have not been able to visit them.” FCHVS20.

This mother’s view corresponded with the comments of volunteers:

“The FCHV sister didn’t come to me. During this child’s time, they said they haven’t had even iron tablets in the health post for two months. After seven months of pregnancy only, I finally received them. Then, I had to buy the tablets twice to take and was very expensive.” WomenS21.

The lack of medicinal supplies affected the service provision by FCHVs because they could not visit pregnant women and mothers and ask them for health centre visits.

6.7.4 Supervision

Both health workers and FCHVs from hill and Terai regions commented that supervision of FCHVs was not undertaken regularly. The FCHVs were supervised mainly during the mass campaigns (Section 2.8.2.1) which was of short duration (one or two days a year) compared to the need of supervision in every month.

Only a few FCHVs from the hill region acknowledged that an NGO worker regularly supervised them in the mothers' group meetings:

“There is a (xxx) miss from an NGO (xxx). She attends every mothers' group meeting on the 8th of every month. She helps us and teaches us to do things in our mothers' group.” FCHVD7.

In relation to public health workers' visits, many FCHVs complained that supervision was simply carried out during specific mass campaigns such as vitamin A feeding and polio immunisation days. One participant mentioned:

“Sometimes they come during polio drops and vitamin A distribution day without informing us. We don't know about that. They check whether we are working or not.” FGD2, participant2.

The supervision had a strong emphasis on reporting activities rather than on the work performance of FCHVs:

“The health workers never normally ask us how we are working. Only at the time of reporting do they ask us how well we have fill the reports in. The emphasis is on the report, not the work.” FGD1 Participant1.

When health workers were asked about the supervision they admitted that they could not do so regularly due to a limited health budget, one of them reported:

“We don’t have regular supervision from the centre to the district level because there are budget cuts....If there were some money provided to health workers responsible for supervising FCHVs then, it would have been easier.” HW8.

There was no regular supervision of volunteers from the government health centres in both hill and Terai regions. However, some mothers’ group meetings in the hill region were supervised by NGO workers.

6.7.5 Incentives

This study showed the varying levels of payment incentives available to FCHVs in the hill and Terai regions. Examples of available services including the needs expressed by FCHVs were presented in Section (6.5.3).

6.8 Relationship between Volunteers and Health Workers

The relationships between health workers and volunteers are presented under the following subthemes: (a) recognition of the FCHVs’ contribution by health workers, (b) a lack of respect for FCHVs by health workers and (c) the poor links between public health organisations and NGOs supporting FCHVs.

6.8.1 Recognition of the FCHV contribution to MHS by health workers

All the interviewed health workers credited FCHVs for their contribution in maternal health improvement. They specifically praised FCHVs’ role in raising health awareness and reporting health activities at the community level.

Health workers acknowledged that FCHVs were the ones who were delivering services at the community level:

“The responsibility of the Government of Nepal is to ensure basic health care to its people, as stated in the constitution and this is supported by FCHVs at grass root level.” HW4.

A health worker commented on the role of FCHVs in the reduction of maternal mortality:

“FCHVs have been providing health information to pregnant women or mothers in their communities. This has produced a big change. On the whole, FCHVs play a great role in the reduction of maternal and neonatal deaths.” HW5.

The majority of health workers admitted that they rely heavily on FCHVs’ work and their reporting activities. One of them mentioned:

“FCHVs are the ones who do all the work, because whatever the programme is available from the district, volunteers have been involved from A to Z programmes (every programme). In this regard, they are the ones taking responsibility for everything at the community level. The health record brought by FCHVs is forwarded to the upper health centres. In other words, we are sharing our work with them and our earning is partly possible because of them.” HW8.

One health worker commented that they have been informed of the adoption of similar programmes in other countries based on the FCHV programme:

“This programme is doing very well in Nepal. When people from abroad visit us, we came to learn that similar programme has been implemented in other places of the world as well.” HW1.

All the health workers applauded the contribution of volunteers in MHSs at the community level. Despite the generous praise for volunteers’ work, a lack of respect for volunteers by healthcare workers was reported, which is further developed below.

6.8.2 Lack of respect for FCHV by some health workers

Some volunteers reported rude behaviours of some health workers towards them. I also noted such attitudes of health workers to volunteers throughout my visit to the health centres in both regions. Health workers were ordering volunteers to follow their instructions carefully:

A health worker talked to a volunteer in a rude manner when she could not understand the health topic under discussion. I noticed it during FCHVs' monthly meeting with a health worker in the PHC in the hill region. (Field Note 31st May 2014)

Many FCHVs frequently complained that the health workers often criticised them, if they were unable to fill the report card on time:

"This work does not give credit in the village. Health workers ask us, 'did you do this work? If you don't bring the report, who will bring it.' There is no respect, no respect at all in this work." FCHVD1.

Not only did health workers lack respect to FCHVs, but they also behaved rudely towards pregnant women and mothers, according to FCHVs and their service users. The women were at a low risk of being treated badly, if they were to be accompanied by a FCHV:

"I go with pregnant women to hospital; while the staff scolds the women I close their (women's) mouth. Then I say to the health workers, 'why do you scold them, these are poor women, they cannot go anywhere.'" FCHVD3.

A similar fear towards a health worker was pointed out by a woman who did not take the iron tablets during her pregnancy, but pretended that she had taken them:

"I did not take those iron tablets. I didn't like the taste. I had a stomach-ache, so I didn't use them. I was worried that the health worker would scold me, so I told them that I had taken them. But, I threw them away." WomanD7.

In addition, a health worker admitted how some of his colleagues were involved in unfair actions:

“There are fixed rate of incentives for pregnant women attending healthcare centres for antenatal care check-ups or delivery. However, there are loopholes in the system because of which these women do not get the incentive even after attending the antenatal check-ups at prescribed times. Some health workers sometimes do not mark the entire four visits on the report card, so the women do not get the incentives. However, the visit is marked in the health centre register thus the centre makes profit from that case.” HW11.

He continued to reveal that revealed that some health workers simply paid for a day instead of three to four days of the actual training time and allowances:

“The training duration for FCHVs is reduced contrary to the given guidelines, so as to save money from giving allowances to them. If there is training for three or four days then, it would be reduced to one day”. HW11.

6.8.3 Poor links between government health centres and NGOs

Health workers from an NGO in the hill region expressed their concerns over the government health workers for not showing interest in the health activities implemented by the NGOs. As the public health centres were hesitant to take ownership of the NGO work, the long-term effect of the work was uncertain.

One NGO worker was worried about the long-term functioning of the mothers' group in the absence of public health centre support:

“If we want sustainability in the mothers' groups then public health centres should support them. Our NGO is supporting revival of the groups which should have been done by related health organizations.” HW6.

Another NGO worker working in the remote hill village mentioned the problems associated with supervision of volunteers:

“It is written in their work book that the government health workers (village health workers, and maternal and child health workers) should attend the mothers’ group meeting; however, they do not attend it. If I am there, then I am the only one; otherwise women in the group meet themselves. The group has been formed with FCHVs who are mobilised from the health post. However, there is no work from the health post for the sustainability of this group function.” HW5.

A NGO worker also highlighted the difficulties associated with working with the government health workers:

“For NGOs, it is difficult to coordinate with health workers, as they demand some allowances. It feels as if the health workers from the government are working for NGOs and not for their own people, whilst we are trying to strengthen the government programme.” HW6.

He further highlighted the challenges faced by NGOs:

“There is also some duplication of the programmes creating unhealthy competition among NGOs working in the same region. If different organizations run similar programmes in the same time, where should the community people participate? For example, a NGO (xxx) is working in the village (xxx) and has created a mothers’ group with 15 members only as compared to the average size of mothers’ groups of about 30 members in each village unit. This has created confusion among mothers about which group to attend.” HW6.

6.9 Chapter Summary

This chapter complemented Chapter Five where variations in the MHS delivery by FCHVs in the two regions were described. I sought to explore the factors that promoted

or hindered MHS delivery by FCHVs, and these were classified into three levels: individual, community and health centre.

At the individual level, four key themes were described: (a) older age of FCHVs, (b) education of FCHVs, (c) motivation to volunteer and (d) financial and non-financial concerns with respect to volunteering.

Older FCHVs were committed to their work, as they valued the service over the money, and some of them also served for religious reasons. However, a few FCHVs who were aged around sixty were volunteering despite some physical problems, as they wanted their family members to replace them, or expected some financial benefits before they leave.

FCHVs were delivering MHS regardless of their educational status. As compared to the volunteers who lacked education, educated volunteers in the hill villages had received additional training on administering urine pregnancy tests and informing women of the availability of abortion services. In the Terai, the educated volunteers were involved in social and political activities and some of them had full-time jobs. On the other hand, illiterate FCHVs lacked the necessary skills to educate mothers and record their health activities. Moreover, the illiterate FCHVs were not approached by educated women, as seen in the Terai.

FCHVs reported four key reasons for their motivations to volunteer: (a) recognition of the importance of the role by FCHVs themselves, (b) opportunities for training or learning, (c) desire for employment and (d) support of family and friends. While they were motivated by altruistic reasons as well as other benefits of volunteering, the majority of FCHVs' and health workers expressed the need for financial and non-financial incentives to undertake everyday activities. For example, the volunteers in the hill region wanted torches, sturdy shoes, umbrellas and raincoats. In the Terai, they

asked for bed nets and bicycles. While the FCHVs from both regions asked for the basic support, the FCHVs in the Terai were more vocal about their issues. The available incentives widely varied in the Terai, which made the FCHVs resentful and this simply served to demotivate them.

At the community level, FCHVs enjoyed the community recognition they achieved as a result of their role in treating simple diseases in the villages. Furthermore, the praise by health workers and the service users and the uniform, name-plate and identity-card for FCHVs afforded them a status within their community. However, the same tangible rewards sometimes caused community misunderstanding among villagers thus challenging the volunteer status of FCHVs. Many FCHVs expressed their concerns about community members' perception of them as paid workers or providers of either unnecessary or detrimental medicines. This is because they were often mobilised in national health campaigns without adequate support from the health centres and the communities. Furthermore, some ethnic groups such the Chepang in the hill region and Madhesi and Muslims in the Terai did not access the services of FCHVs because of the misunderstanding of modern healthcare and existing cultural practices.

At the health centre level, differences were reported between the support available to FCHVs in the Terai and the hill regions. In the hill villages, FCHVs were well supported by both public health centres and NGOs in terms of their selection, training and supervision, including access to supplies, whilst such services were not available in the Terai. Though health workers often praised the contribution of FCHVs in MHS provision, some volunteers reported rude behaviours of some health workers towards them. In addition, a lack of coordination between the government health centres and NGOs were reported.

Overall, all the volunteers were motivated to serve their communities as they viewed their work as a social responsibility, enjoyed community recognition, and recognised the importance of role by FCHVs themselves. However, they were highly concerned about financial and nonfinancial incentives in order for them to work well. Other key factors that caused barriers in their ability to deliver services were their older age, illiteracy, community misconception of their roles, and inadequate support from health centres. Furthermore, a need for cordial relations between government health workers and FCHVs as well as between government health centres and NGOs was identified.

Chapter Seven

Discussion

7.1 Introduction

This chapter begins by summarising the key findings from the previous two chapters (Chapter Five and Six). This is followed by a brief justification on the selection of key themes for the discussion which are: (1) MHSs offered by FCHVs, (2) their motivation to take part in volunteering, and (3) the challenges they faced in delivering services. Each of these themes is interpreted with respect to current literature on CHWs. Finally, the strengths and limitations of the research approach used in this PhD study are highlighted.

7.2 Summary of Key Findings

This study explored the role of FCHVs in MHS provision using a multi-method qualitative approach: semi-structured interviews with volunteers (n (number) =20), women (n=26) and local paid health workers (n=11); FGDs with volunteers (n=19) and field notes in the regions studied. Chapter Five presented the role of FCHVs in MHS provision in the hill and Terai regions of Nepal. Subsequently, Chapter Six focused on factors that promote or hinder the FCHVs' services.

The main finding from Chapter Five was that the FCHVs were responsible for increasing access to a wide range of MHSs in their communities. In the absence of formal healthcare providers, they provided additional healthcare services in the distant hill villages of Nepal. The following themes emerged: a) MHS provision through

informal routes, b) MHS provision through formal routes – mothers’ group meetings and c) provision of additional healthcare services.

The FCHVs provided basic MHS through informal routes, as their presence within the village often made them more accessible to service users. They provided the following MHSs: a) referring pregnant women for health check-ups and health centre delivery, b) giving them iron tablets to prevent anaemia, c) advising them on diet using locally available food and d) informing them to look for danger signs during pregnancy. In both regions, they also helped in preparation of childbirth and assisted the women if necessary. It was usually the poorer women who were more likely to receive services from FCHVs, because they were often available and accessible.

In the hill villages, the FCHVs used interesting techniques to share maternal health information. They sang folk songs containing health messages or visited new mothers with nutritious food hampers (Section 5.4.5). In addition, the FCHVs accompanied women for childbirth at health centres or at home.

In both regions, FCHVs provided services through formal routes - mothers' group meetings. Unfortunately, these meetings were also used for monetary discussions, which reduced the time for discussion on health related issues (Section 5.5).

The final theme of Chapter Five was about FCHVs taking the role of formal healthcare providers in their absence in the remote hill villages. The volunteers distributed medicines, assisted in childbirths, and informed women of availability of emergency contraception and safe abortion services and reported their work on a regular basis despite their illiteracy and limited training which were explored in-depth in Chapter Six. Chapter Six covered the factors that promote or hinder FCHVs’ role in MHS provision which were divided into three levels: individual, community and health centre. At the

individual level, FCHVs described being primarily motivated by their desire to help mothers in their communities, as they viewed their work as a form of basic human and social responsibility. They also perceived that they were self-empowered as a result of volunteering. However, the volunteers reported several barriers to their services. One of the key challenges was their concern for financial and non-financial incentives. This is followed by low literacy, and the older age of volunteers, which were reported in both the regions studied.

At the community level, community recognition played an important role in the volunteers' motivation. However, they complained that a number of community members perceived them as paid health workers, or their medicine provision seen as either unnecessary or detrimental. Certain ethnic groups such the Madhesi and Muslims did not seem to use the services provided by the volunteers (Section 6.6.2.3).

At the health centre level, differences were reported between the supports available to FCHVs in the two regions studied. In the hill region, FCHVs were well supported by both public health centres and NGOs in terms of their selection, training, supervision, access to supplies, and incentives whilst such services were rare and inconsistent in Terai. Whilst health workers praised for FCHVs' contribution in MHSs, some volunteers perceived that a few healthcare workers sometimes behaved rudely towards them (Section 6.8.2). Finally, a lack of coordination was noted between government health centres and NGOs that mobilise FCHVs (Section 6.8.3).

Having summarised the key findings from Chapters Five and Six, the main themes for the discussion will now be presented.

7.3 Selection of Key Themes for Discussion

For the discussion, deliberate selection of key themes was necessary, as inclusion of every theme (Section 7.2) was beyond the scope and limitations of this thesis. Hence, the discussion chapter focuses on three broad themes in order to provide a comprehensive picture of FCHV's role in MHS provision: (1) MHSs offered by FCHVs, (2) motivation to volunteer and (3) challenges in MHS provision.

The findings discussed here are related to literature from South Asia (predominantly Nepal, Bangladesh, India, and Pakistan) and are linked to Chapter Two and Three. In addition, studies from Africa (Ethiopia, Kenya and Tanzania) are included in the discussion because the recent evidence shows increasing MHS provision by CHWs in the region. The selected countries characterise a resource poor setting similar to Nepal.

7.4 MHSs offered by FCHV

FCHVs facilitated pregnant women or mothers' access to MHSs in three key ways: a) MHSs through informal routes, b) MHSs through formal routes - mothers' group meetings, and c) additional services – taking the role of formal healthcare providers. Whenever applicable, the hill and Terai regions are compared in terms of similarities and differences in the volunteers' services. This will help to understand the importance of their services in MHS provision.

7.4.1 MHS through informal routes

This study found that in both study regions, FCHVs provided MHSs mainly through informal routes, meaning that whenever they had the opportunity, be it at home or outside at work, they disseminated basic maternal health messages to pregnant women or mothers. For example, they often advised them on nutrition, and referred them for health check-ups. In the hill region, the volunteers shared maternal health messages through local songs and they also used the opportunity to visit new mothers with nutritious food hampers (Section 5.4.5). Such services were not immediately evident to outsiders, as the volunteers served in their free time, or at times when the users needed them. Such approaches to service delivery were reported earlier where FCHVs disseminated maternal health messages by word of mouth in support of the safe delivery incentive programme (Powell-Jackson et al., 2009). The FCHVs provision of MHSs through informal routes can be beneficial for pregnant women or mothers, as not all of them attend the mothers' group meetings (Section 5.5).

A few FCHVs reported that they accompanied pregnant women during labour so that they would not feel fear or anxiety in the health centre. This was particularly important in the hill region where many women did not visit the health centres for reasons such as illiteracy, lack of awareness of available health facilities, or fear of health workers. In such situations, presence of FCHVs during childbirth could comfort the woman and reduce her anxiety. This was also recommended by WHO (2012b).

Furthermore, my study noted that the FCHVs were mainly approached by poor women, as reported by the service users and volunteers. Similar findings were noted in Pakistan where the poorer people sought care from traditional birth attendants, and only sought care from skilled attendants in case of emergencies, while the wealthier groups used skilled attendants (Mumtaz et al., 2014). This was also the case in Afghanistan where

the poor population accessed health services from the volunteer CHWs (Edward et al., 2015). This indicates that services of CHWs can be beneficial to the poor because they receive at least the basic healthcare services on their doorstep, which otherwise would not have been possible.

7.4.2 MHS through formal routes - mothers' group meetings

All the FCHVs reported that they provided MHSs through regularly organised monthly mothers' group meetings. They discussed various maternal health issues in the groups and referred women for health checks if required. Such meetings are important to raise health awareness, as one study noted that more than one-third of women were involved in local mothers' groups with higher participation in the Terai (around 50%) than those in the hill region (around 30%) (Devkota, 2008). Moreover, studies including systematic reviews have shown that convening regular mothers' group meetings to raise awareness of maternal and new-born health by CHWs were important, because this could save mothers' lives (Manandhar et al., 2004; Prost et al., 2013).

CHWs have the ability to raise awareness of MCH issues amongst women in their communities. CHWs increased the utilisation of antenatal, delivery and postnatal care in health facilities, as reported in India (ASHA) (Bajpai and Dholakia, 2011; Khan et al., 2010) and in Ethiopia (HEWs) (Gebrehiwot et al., 2015). In Kenya, volunteer CHWs were able to raise awareness of MCH issues among local women. This is evidenced by a higher level of knowledge and increased health centre deliveries among those who were exposed to CHW messages compared to those who were not exposed (Adam et al., 2014). While the mothers' group meetings were useful for sharing of health information, they were not without challenges.

FCHVs reported two key challenges in the meetings: a) illiterate FCHVs could not educate the service users, and b) monetary issues sometimes overtook the health matters under discussion. First, the illiterate FCHVs lacked skills to educate the group members, who were often more educated and knowledgeable than the volunteers. The gap was especially reported in the Terai where the educated mothers/pregnant women wanted to have access to more educated FCHVs (Section 6.3.3). Such knowledge deficit of CHWs was reported in other places. In a cross-sectional study of Ethiopian CHWs, more than half of them did not have knowledge of antenatal care counselling, and the majority had poor knowledge of danger signs and symptoms during pregnancy even after more than five years of work experience (Medhanyie et al., 2012). Similar findings were noted in India, where CHWs lacked the ability to recognize the danger signs exhibited by some mothers during the postnatal period (Bajpai and Dholakia, 2011; Khan et al., 2010). Without education, CHWs service quality can be poor, because they may lack a clear understanding of the health messages.

Another challenge for FCHVs was that the health issues were overshadowed because of the money saving activities in mothers' groups. Most of the mothers' groups operated a microcredit scheme. In this scheme, group members regularly contribute a small amount of money and lend the money at low interest to the other group members. The purpose of microcredit scheme is to help group members in emergency situation and ensure their regular attendance in the meetings. However, sometimes the group members spent more time talking about money than health. This finding was consistent with an earlier study from Nepal that showed the mothers' group was more concerned with money raising and consequently discussed maternal health issues less (Kc et al., 2011). This suggests that FCHVs need to be trained to engage in discussions that focus on health issues.

Another aspect of women's involvement in credit groups is that these can be empowering to be discussed in Section 7.5.2.

To sum up, FCHVs' activities in facilitating the mothers' group is important as it raises health awareness among the women and makes them feel more empowered. However, FCHVs' illiteracy and the focus on saving activities limit the discussion on maternal health issues. This has implications for building the FCHVs' capacity, something the MoHP, Nepal needs to consider before adding any extra roles to their workload.

7.4.3 Additional role of FCHVs - the role of formal health workers

The FCHVs interviewed in this study provided a wide range of MHSs especially in the hill villages. They were often the only immediate health resource available and hence, were involved in additional roles. Four key sub-themes are discussed here: a) providing therapeutic services, b) identifying pregnancies and referring them, c) assisting in childbirth and d) reporting the cases of gender based violence.

7.4.3.1 Providing therapeutic services

Whilst at a strategic level FCHVs mostly focused on preventive and promotional MHSs (FHD, 2010), the operational reality was that FCHVs were also involved in therapeutic activities, and this was one of the main findings from this study. Here, I present their role in provision of authorised and unauthorised medicines in the villages.

FCHVs distributed medicines in national campaigns and also provided vitamin A. They provided iron tablets and albendazole to pregnant women and new mothers, and vitamin A to breastfeeding mothers. In addition, they treated pneumonia with cotrimoxazole

tablets (Appendix 7) and diarrhoea with oral rehydration solutions and zinc tablets for children under five, for which they were trained (DoHS, 2014). However, the FCHVs reported that they gave additional medicines such as paracetamol, antacids, vitamins and metronidazole to treat symptoms such as headache or fever, heartburn and stomach-ache respectively (Section 5.6.1). The FCHVs were not authorised or trained to administer the medicines and were unaware of their possible side effects or contraindications. Interestingly, health workers supplied the medicines to FCHVs because they lived two to three hours' walk away, and, in one case, six hours from the health centres.

In Nepal, if patients visit the health centre, the health workers usually need to provide a type of medication even if it is a placebo so that they will trust the health centre and revisit again when it is really necessary. This was the case with a FCHV - if she was able to provide medicine to the villagers, even if it was a vitamin tablet, then the villager trusted her (Curtale et al., 1995). Similar findings were noted in an earlier study (Gilson et al., 1989) indicating the preference of curative services over health promotion because the latter outcome takes substantial time to materialise compared to the former, which is often immediate.

In many parts of Nepal, FCHVs have been mobilised to distribute misoprostol tablets – a drug used for the prevention of post-partum haemorrhage (Section 2.8.2.1). Since evidence has become available on FCHVs distributing misoprostol to pregnant women safely, with a significant reduction in MMR (Rajbhandari et al., 2010), the drug distribution by FCHVs has been upgraded in 35 districts of Nepal (DoHS, 2014). A similar finding was noted in a global literature review that showed the highest coverage of misoprostol through CHWs, who provide the medicine in home visits, compared to formal health care providers (Smith et al., 2013). The WHO (2012b) has made similar

recommendations. This indicates that through careful training, FCHVs can distribute medicines in communities.

The findings above suggest the possibility of FCHVs' involvement in the provision of over-the-counter medicines. However, they should be trained well on the indications, contraindications, doses and side effects of the medicine that they distribute.

The next important activity of FCHVs that has potential implications in maternal health is to inform women of the availability of safe abortion services, which is discussed below.

7.4.3.2 Identifying pregnancies and referring

In the hill villages, FCHVs administered urine tests and referred women for health check-ups. In the case that the pregnancy was unwanted, the FCHVs suggested using emergency contraception or opting for safe abortion services. This service is relevant in a country where unwanted pregnancies and births are highly stigmatised. Abortion is the third major cause of deaths among women of reproductive age. Moreover, this could be a possible reason for suicide, one of the most common causes of deaths among women of reproductive age (15-49 years) (Simkhada et al., 2015b; Suvedi et al., 2009). In such situations, the FCHVs' role in informing women about abortion services is important.

An evaluation of FCHVs showed that, if volunteers were well trained and provided with necessary supplies, they could detect pregnancies at an earlier stage, and refer women to appropriate facilities, including safe abortion services (Andersen et al., 2013). However, my study noted that caution is required, as abortion was sometimes being used as a means of family planning rather than as an emergency procedure.

7.4.3.3 Assisting childbirth

In remote hill villages, FCHVs also reported that they assisted in deliveries although technically they were not supposed to do so. The study found that in doing so they bridged the gap between the poor health care provision and the community. Such service was necessary in remote villages because there was no professional healthcare available. Only a small numbers of auxiliary nurse midwives serve in Nepalese communities (Section 2.7) and the country lacks professional midwives, although attempts have been made to introduce them (Bogren et al., 2013a). The production of skilled midwives is unlikely to occur in the near future, because the government lacks the necessary training resources, as seen by its dependency in external donors (Section 2.8.4).

7.4.3.4 Reporting the cases of gender based violence

FCHVs also provided services that were beyond the specific MHSs, but had impact on maternal health. For example, they reported incidents of gender-based violence in the Terai, and others reported managing such cases in the hill region. Their gender as a female enables them to listen to the concerns of service users, which helps to identify any suspicious cases of gender-based-violence in a highly gender unequal society (Section 3.6.1.1). Moreover, a FCHV comes from the same community as their service users. Therefore she is more aware of what is happening in her surroundings and able to provide services that are locally acceptable (Rasmussen, 2014). Some NGOs trained FCHVs to identify and report cases of gender-based violence (SOLID Nepal, 2012; UNFPA Nepal, 2007), but the empirical research is not available in this area.

To sum up, in terms of the multiple roles of FCHVs in the two regions studied, they had broader roles in the hill region. This was particularly because of easier accessibility and availability of the volunteers in the villages in the absence of immediate formal health care providers. Their roles in providing therapeutic services, informing women of the access of safe abortion services, and attending childbirths while attempting to manage pregnancy complications indicate that they are important resources in the provision of MHSs in the hill region.

The following section discusses the findings related to the FCHVs' motivation derived from this study, while comparing them with the current literature.

7.5 Motivations to take part in Volunteering

This study sought to explain the factors that promote volunteers' work in MHSs. The analysis showed that the key motivating factors for volunteers was that they viewed their service as their social responsibility. This is followed by volunteers' perceived self-empowerment and community recognition they gained as a result of volunteering. These themes are further developed in the following paragraphs and the volunteers' motivations in the two regions are compared.

7.5.1 Viewed their work as a form of basic human and social responsibility

Data analysis showed that the majority of FCHVs in the hill and Terai regions stated that they were motivated by a desire to help others, because social responsibility was deemed personally relevant. They couched this in terms of serving their own people, and hence were committed to their work. In most cases, they had witnessed the

reduction in maternal and child deaths since the beginning of their services. Such changes inspired them to continue volunteering. In some cases, the volunteers mentioned that serving others should be the main purpose. This was evident from their free manual labour services to build outreach clinics that serve mothers and children in the hill villages (Section 5.3.1). The volunteers were not required to undertake extra efforts such as this, but through this, they reported achieving happiness. Similar findings were reported in an earlier study where FCHVs viewed their work as a moral responsibility (Glenton et al., 2010). This was similar to Bangladesh and Tanzania, where CHWs volunteered because they felt they were needed by the community (Greenspan et al., 2013; Rahman et al., 2010).

A few FCHVs mentioned religious reasons for their motivation to volunteer. They likened helping others to a religion and reported a feeling of being rewarded in doing so. Nepal is a religious country where almost 81 percent of the people are Hindus and 9 percent are Buddhists (CBS, 2012). Hinduism includes the concepts of sacred duty expressed in moral behaviour and karma (Sundar, 1996). For Hindus, selfless service to those in need is an important part of one's religious duty (Anand, 2004). In Buddhist countries such as Thailand, Sri Lanka and Myanmar, the volunteers were motivated by strong religious or ethical values, thereby leading to a successful national scale volunteer programme (Walt et al., 1989b). The volunteers worked for social and religious reasons, which help to explain how Nepal's volunteers have been able to deliver their services for the last two and half decades. The volunteers typically enjoy greater honour or higher status from the general public because it is related to the notion of self-sacrifice and strong sense of responsibility.

The volunteers can also benefit individually by being empowered, as discussed below.

7.5.2 Perceived self-empowerment

This study found that the FCHVs were informed about basic health issues in relation to mothers and children's health, and were also more confident and vocal in comparison to their service users who were often shy and reserved. Some FCHVs expressed that they felt empowered in their communities (Section 6.3.1). Their empowerment was related to opportunities for learning and socialising as well as other socio-economic opportunities as a result of volunteering, which are discussed below. A comparison of both regions is also made.

The learning opportunities as a part of volunteering provided FCHVs with knowledge and skills in important areas of health. For example, most of the educated volunteers in the hill region were trained to administer urine pregnancy tests in women and inform them of the availability of safe abortion services (Section 5.6.3). While so doing, FCHVs maintained the privacy of women, as the talk about abortion is often socially stigmatised. Not only did FCHVs inform pregnant women or mothers of the health check-ups, but they also expressed their own need clearly in order to improve their services (Section 6.5). This is consistent with a study by Wilson and Musick (1999) that showed volunteers were interested in coming forward because it provided them with skills which other members of their community group did not have. These additional skills acted as a motivating factor for volunteers because being trained in a variety of health topics, they not only improved their skills but also developed self-confidence. Similar findings were reported in Bangladesh and Ethiopia where CHWs volunteered because of their desire for self-development (Haile et al., 2014; Rahman et al., 2010).

In addition, volunteering provided opportunities for FCHVs to socialise, as they could move beyond home during service provision, training, or reporting. They could meet their friends and new people, share their stories, and gain new experiences. Such

opportunities were important for the CHWs as reported in earlier studies (Glenton et al., 2010; Greenspan et al., 2013) or as in the case of other healthcare workers (van Teijlingen et al., 2010). Moreover, social roles and social networking, including the process of volunteering itself made the volunteers happy (Borgonovi, 2008).

Volunteering also provided many FCHVs with some economic opportunities. The majority of FCHVs in both study regions were involved in running saving and credit groups within the mothers' groups, which gave them a little financial freedom in case of an emergency (Section 5.5). In Bangladesh, such groups were not only helpful in terms of finance but also raising health awareness among them (Pitt and Khandker, 1998; Steele et al., 1998; Zaman, 1999). One study from Bangladesh showed that women who attended saving groups had greater health awareness than those who did not attend such groups and the knowledge effect was greater among those who attended a group for a long time (Strobach and Zaumseil, 2007). In addition, women attending credit programmes were more likely to use modern contraceptives and had lower fertility rate than those who did not attend such programmes (Amin et al., 2001; Steele et al., 1998). However, the same studies also showed that the women who attended credit groups tended to be better educated and more socially independent than women who did not attend. It may be the case that poor women, who are most vulnerable and who need health services most, are in fact unable to join credit groups, as they do not have money to contribute.

A further aspect of volunteering was that it provided volunteers with some traveling or training incentives (Section 6.5.3). These financial incentives, however small, were valuable for poor FCHVs in both regions, as otherwise they did not have any other source of income. In addition, two educated volunteers in the Terai had a full-time salaried job and another one from the same region was involved in politics while still

holding the role of volunteer. These volunteers were aware of the fact that working like this contravened the FCHV strategy guidelines (FHD, 2010). However, they needed to work for living. A case study of educated volunteers in Sri Lanka showed that women joined voluntary services because they expected to gain employment eventually (Walt et al., 1989a) and this was frequently highlighted in reviews (Glenton et al., 2013; Shakir, 2010).

The involvement of FCHVs in politics and other full-time jobs can affect their volunteering but it is also an indicator that women in rural Nepal are now more empowered. This is consistent with the report highlighting that “women’s volunteering or social entrepreneurial activity enables them to create a power structure and to use them for politicising and socialising women, either directly or indirectly” (Sundar, 1996, p.426). My study also noted that the training and education received as result of volunteering enables FCHVs to take care of themselves as well as the villages (Sections 6.4.1 and 6.4.2). Volunteering services may also empower the CHWs to gain power, where empowerment meant that comparatively powerless individuals work together to enhance control over measures that determine their lives and health (Laverack, 2006). As reported by Laverack, the feeling of empowerment came from within individuals as noted by FCHVs. Moreover, the empowerment of volunteers was one of the long-term goals of the FCHV programme (FHD, 2010).

The learning, social and financial opportunities as a result of volunteering improved the knowledge, skills and abilities in FCHV service provision. The volunteers showed increased confidence and were more vocal about their issues, thus indicating empowerment as compared to other women in the villages. Volunteers were also motivated by the recognition they received from their community, which is discussed below.

7.5.3 Community recognition

FCHVs are well known in the villages as a result of their service, praise by health workers and service users, and the non-financial awards. Specifically, the volunteers' role in distributing vitamins and medicines in the villages contributes to their recognition as health workers. This was more so in the hill villages where there was good availability of medicine than in the Terai where it was poor (Section 7.6.6.1). The FCHVs could not give any medicine despite the easy access to health centres in the Terai, because the centres ran out of supplies. This finding supports previous studies, which suggest that when CHWs provide medicines, this enhances their role in their communities, which in turn can increase up-take of and demand for curative services (Gilson et al., 1989; Glenton et al., 2013).

FCHVs are also recognised because they are praised by health workers and service users for their voluntary services. Service users often trust and listen to FCHVs because they come from the same village and are often neighbours or relatives. Health workers also highlight the importance of the FCHV's work in maternal health. This praise not only causes the volunteers to feel valued in their community, but also encourages them to continue volunteering. Similar findings have been reported in earlier studies (Bhattacharyya et al., 2001; Glenton et al., 2010; Rahman et al., 2010).

The findings of the study showed that the FCHVs are also recognised by being provided with uniforms, name plates and supported with an annual celebration of FCHV day (Section 3.6.3). However, such non-financial rewards were not reported as frequently as for those financial rewards by FCHVs (Section 7.6.1). Non-financial rewards were important for volunteers because this not only helped them to gain recognition in the

community but also motivated them (Amare, 2009; Bhattacharyya et al., 2001; Haile et al., 2014).

In sum, volunteers are mobilised by their community but they also face various challenges. These challenges are explored in detail in the following section.

7.6 Challenges in MHS Provision by FCHV

FCHVs reported several challenges in the provision of services. Throughout the study, a key challenge was the financial concern of the volunteers, followed by their perception of community misunderstanding of these services. For ease of understanding, the key challenges for FCHVs are classified into three different levels: 1) individual, 2) community and 3) health centre. At the individual level, the financial and non-financial concerns of volunteers are presented, followed by a discussion on their lack of education affecting the services. At the community level, FCHVs' perception of community misunderstanding of their services is presented. This is followed by a discussion of avoidance of healthcare services by certain caste-ethnic groups. Finally, at the health centre level, support from government health centres and NGOs to FCHVs is presented. In addition, health workers' attitudes to volunteers and a relationship gap between public health centres and NGOs are discussed.

7.6.1 Financial and non-financial concerns

Data analysis showed that in both regions all the interviewees and participants acknowledged that financial or non-financial incentives are necessary for FCHVs to perform the tasks effectively. The necessity for non-financial incentives is initially

discussed followed by financial incentives for FCHVs. Subsequently, the conflict between the moral standards associated with volunteering and the volunteers' financial concerns are presented. The evidence proving the necessity for the provision of financial incentives for FCHVs to function effectively is presented. Finally, the financial concerns of older volunteers are presented.

The FCHVs from the hill region demanded non-financial incentives such as torches, sturdy shoes, umbrellas, bags and water bottles to help them work. In the Terai, some FCHVs asked for bed nets to protect against mosquito bites, while others asked for bicycles. In most cases, the FCHVs were asking for basic items that would ease their day-to-day services. This is consistent with the studies that reported the importance of non-financial incentives to motivate volunteer CHWs (Amare, 2009; Bhattacharyya et al., 2001; Haile et al., 2014).

A majority of FCHVs strongly demanded financial incentives to support their services. They were required to spend money on activities such as travelling, food and communication for which either they did not receive any reimbursement or received a meagre amount. A few FCHVs also asked for a mobile phone tariff to contact women and health workers, while others from the Terai mentioned a mobile handset that they were expecting from the government. While providing a mobile handset for every FCHV might not be feasible, a technique is urgently required to reimburse the costs incurred during service. This is important because most of the volunteers are often poor and, besides volunteering, spend time doing household chores or farming.

In addition, a conflict between the ideals of volunteering and financial concerns of FCHVs was noticed. Many volunteers asserted that their enthusiasm for volunteering was being quelled, because they did not get any incentives for their services. In one case, in a remote hill village, an elderly FCHV felt obligated to work even though she

was in her 70s because no women were interested in volunteering. Moreover, a few volunteers expected a monthly salary (Section 6.5.4) while others mistook the meagre amount of travel support (£1.33 per month) they received as their salary and hence, felt ashamed of it in comparison to the rate of inflation and the cost of living. Others showed resentment towards the unequal support available to them such as provision of bicycles for some FCHVs in the Terai region, while others received nothing (Section 6.5.3).

The above findings suggest that volunteers require financial incentives to undertake their work, which is consistent with an earlier study in Nepal in which FCHVs expressed economic insecurities (Baskota and Kamaraj, 2014). Another study in Nepal highlighted a need for support for FCHVs depending upon the place they lived rather than setting a flat rate of remuneration for all volunteers (Glenton et al., 2010).

However, the findings of this PhD suggest that the FCHVs require payment to undertake their services given the amount of work expected of them and their concerns for money. Similar recommendations for the use of financial and nonfinancial rewards to improve volunteers' health services have been recommended by many primary studies (Alam et al., 2012b; Brunie et al., 2014; Condo et al., 2014; Glenton et al., 2010; Greenspan et al., 2013; Khan et al., 2010; Takasugi and Lee, 2012) and systematic reviews (Bhutta et al., 2010; Glenton et al., 2013).

Available evidence suggests that financial factors are an important motivator for CHWs. In Bangladesh, CHWs, whose life would have been difficult without their income as a CHW, were three times more likely to be active, thus showing that the financial incentives are their major motivating factor (Alam et al., 2012b). Similarly, in India, CHWs (ASHAs) were involved primarily in incentivised work: helping in antenatal registration, referring women for health check-ups, arranging transportation for

delivery, accompanying women for delivery, and making home visits for postnatal care. On evaluation of the CHW programme, CHWs reported their role for incentivised activities, but they did not mention their role in low paid or unpaid services such as postnatal care, and promoting exclusive breast-feeding (Khan et al., 2010). This shows that CHWs require money to work effectively.

This study also found that the majority of FCHVs desired financial incentives due to the fact that they anticipated financial difficulties in their old age. Therefore, they were keen to stay on as a volunteer despite their physical and educational limitations. They expected that the government might increase the financial incentives available to them as they did not find the currently offered incentive of NRs 10,000 (£66.66) adequate, which they would receive as a farewell package after at least 10 years of their services (FHD, 2010). This seems similar to Pakistan where CHWs are endangering their lives by working in an unsafe environment, because they simply do not have any choice, as their livelihood is dependent on that job. The poverty and a lack of opportunities compelled women to work for as little as US\$5 per month (Closser and Jooma, 2013).

Finally, older FCHVs expressed a desire to replace themselves with their daughters or daughters-in-law to secure any benefits from volunteering within the families (Section 6.2.2). The incentives, no matter how small, are important where paid unemployment and women's status are relatively low (Section 2.3). The main issue was that the volunteers were working on their own wishes and it was against ethics to forcefully prevent them from providing services even if their work was substandard. However, introducing some benefits to support the older FCHVs who have spent their lives serving others might possibly help toward their graceful exit.

In summary, volunteers by definition are not paid; however, incentives and rewards would help to maintain their motivation as shown by the majority of CHWs who wished

to receive some type of financial and non-financial incentives. Moreover, it is difficult to appeal to other women to dedicate their time to volunteering when there are no incentives. The government of Nepal must clarify how FCHVs can be supported so that they can effectively contribute to MHSs. Consideration of the introduction of incentives might be helpful to motivate these volunteers and also to support older volunteers who have contributed to maternal welfare over long periods.

7.6.2 Lack of education

More than half of the interviewed FCHVs were either illiterate or had only become literate in adulthood. A number of them could merely sign their name (Section 6.3.2). Despite their low levels of literacy, the FCHVs provided MHSs and sometimes they were the only source of trained health providers for mothers and babies in remote villages. This was consistent with a previous report that mentioned the ability of illiterate FCHVs to provide allocated services (DoHS, 2014; New ERA et al., 2007). They also appeared to be more compliant to the instructions of health workers which indicates that the authoritarian structure could be one of the reasons for the survival of the FCHV programme, as suggested by Walt et al. (1989a). However, the lack of education affected their service provision in several ways, which are presented in the following paragraphs.

Firstly, the requirement that FCHVs record health activities meant that those who were illiterate lacked the skills to do so. They complained of difficulties in recording of health activities and obtained help from their family members, peers or health workers. While doing so, they used their memories to document the work, which increases the potential for mistakes and undermines the credibility of the data. Similar issues of FCHVs were reported in an earlier study by Schwarz et al. (2014).

In another case, an illiterate FCHV was perceived as a fraud by her own mothers' group members after her group lost all their savings. A woman from the group took all the money and walked away, but the FCHV was blamed for this act, because she was the facilitator and secretary of the group. However, had the FCHV been educated, perhaps she would have documented the saving activities and could have used the written evidence as proof, thus possibly preventing the misunderstanding and avoiding blame.

Moreover, many educated service users bypassed the services from illiterate FCHVs. Usually women in the Terai were more educated and they preferred services from professional health practitioners over FCHVs, which supports the study findings of Furuta and Salway's (2006) that showed a strong association between increased education and access to health care services.

To sum up, the increasing number of tasks and responsibilities expected of FCHVs, as well as the increasing number of educated women in the villages mean that there are possibilities of recruiting young and educated volunteers to provide MHSs. However, careful consideration is needed to select the volunteers who are educated and committed to the services, as there is the possibility that those who are educated may not be as committed as those who are illiterate (Mulingwa, 2014). This occurred in Sri Lanka and Bangladesh where educated women joined volunteering, because they saw it as an opportunity for future employment, (Gilson et al., 1989; Rahman et al., 2010; Walt et al., 1989b) and in Sri Lanka, many of them left the services after a short time.

Having discussed the challenges at the individual level, I will move on to present the community concerns regarding FCHVs' services.

7.6.4 FCHV perception of community misunderstanding of their services

According to the FCHVs in this study, some community members misunderstood of their services in both the hill and Terai regions. There were two main reasons for this. First, the FCHVs reported that a number of community members viewed the volunteers as paid staff and expected services similar to the paid staff. When the FCHVs could not offer services on demand, the villagers complained of inadequate services. A similar view was also reported by Baskota and Kamaraj (2014). Surprisingly, service users in my study did not report such opinions of FCHVs apart from one case where one of them thought that the volunteer would receive money for her services (Section 6.6.2.1).

The second reason for the misunderstanding of the community members was the FCHVs' involvement in mass medication. They distributed medicines to prevent filariasis⁶ in the Terai about six months before this study. They were blamed for the side effects of the filariasis medicine by community members (Section 6.6.2.2) which was a result of a lack of awareness. For this, health education to the FCHVs and communities on the use and side effects of medicines might have been effective. Such activity is important for every medicine that the volunteers distribute because such campaigns might not be directly related to maternal health, but have an impact on maternal health through reduced trust in FCHVs. For any CHWs, a good relationship with the community is one of the most important motivating factors (Bhattacharyya et al., 2001). Therefore, professional health workers need to ensure that FCHVs are properly trained for the services and the community is well aware of those services in order to achieve the community's support (Bhutta et al., 2010; Gilson et al., 1989; Walt et al., 1989a). This can help to maintain a good relationship between the FCHVs and the community members.

⁶ A disease transmitted from infected mosquito bites. Elephantiasis – painful, disfiguring swelling of the legs and genital organs – is a classic sign of late-stage filariasis.

7.6.5 Avoidance of healthcare by certain ethnic groups

The interviewees and participants came from different ethnic groups (Section Table 7, 8 and 9, p.96, 98 and 100 respectively). Some users from certain ethnic groups in both the hill and Terai regions did not access services from FCHVs. In the hill region, this was partly because the users preferred local healers or were unaware of the presence of FCHVs. While there were a few FCHVs that represented low caste-groups such as Chepang, Tamang, there was no one from Dalit (low caste group) despite the presence of many Dalit service users. In the past, a Dalit woman could not be a FCHV because she could not enter the house of an upper caste person if the service was needed (Section 5.3.1). This corresponds with the findings from a national report that showed a substantially low number of FCHVs that represented Dalits (8%) compared to those from upper-castes (40%) (New ERA, 2008). This was despite the fact that the health needs of Dalits is high (Bennett et al., 2008; New ERA, 2008).

In terms of service delivery, my study did not notice any service differentiation by FCHVs based on the caste or ethnicity of the users. Instead, in the hill village, one FCHV from an upper caste family was converted to Christianity and served everyone. In addition, many Dalit women were present in the mothers' group meeting (Section 5.3.1) and other service users reported the awareness of the FCHV's services.

Therefore, improving the capability of FCHVs, particularly in the hill region is recommended, to ensure that they serve everyone and was also recommended in earlier studies (Bennett et al., 2008; New ERA, 2008).

In the Terai, FCHVs reported that the use of health services was low from women of ethnic groups such as Madhesis and Muslims. Many women from these groups did not access health services including those of FCHVs. This was either because of the cultural

perceptions that childbirth does not require skilled care, or because their previous home deliveries were safe, and they expected the same for the current pregnancies. FCHVs reported that Muslim families believed that their god would be angry if they received modern healthcare services, hence they refused it. Similar findings were noted in India where Muslim families did not accept CHWs (ASHA) and could not receive any services (Khan et al., 2010). In addition, low caste CHWs in India and Pakistan experienced challenges associated with caste-based hierarchies. This caused difficulty in establishing the trust of CHWs in the community, thus affecting their services (Mumtaz et al., 2014; Peterson et al., 2014). In Pakistan, LHWs tended to be from low castes and poor families and therefore, they usually provided MHSs to their relatives who were also poor, thus unintentionally serving the most disadvantaged (Mumtaz et al., 2013). In Nepal, there was no study that reported caste-based barriers in FCHVs' service provision. Further research is required to see why Muslim and ethnic minority women are not seeking healthcare services and whether the caste or ethnicity of the FCHVs affect their services.

7.6.6 Health centre and NGO support to FCHV

Numerous challenges with regard to health centre support to FCHVs are reported. Three subthemes are discussed: (a) health centre or NGO support to volunteers, (b) health workers' attitude to volunteers and (c) relationships between government health centres and NGOs. Differences in the two regions are highlighted.

7.6.6.1 Health centre or NGO support

The available government health centre and NGO support to FCHVs in the hill and Terai regions varied widely. While in the hill region, FCHVs received some support from both the government health centres and NGOs in terms of their selection, training, logistic supplies and supervision, such support was minimal in the Terai (Section 6.7) and is discussed below.

The FCHVs were chosen using a wide range of selection strategies (Section 6.7.1). A majority of them reported that they were recruited by either local health workers or their friends, often with the support of their family members, in-laws or husbands. Whilst a few volunteers replaced their mothers-in-law, others became volunteers due to their active social role. Thus, the reality was starkly different than the proposed FCHV strategy that suggests the selection of volunteers from organised mothers' group meetings (FHD, 2010). A similar finding was reported in the analysis of nationally representative FCHVs where local health workers selected FCHVs and later formed mothers' groups to endorse the decision (Kc et al., 2011; New ERA, 2008). Such a random selection of FCHVs might have an impact on their working capabilities and service provision. Moreover, they may not receive the support or trust from the community, as discussed in Section (6.6.2). Evaluation of CHWs in India showed that selection processes and criteria were not being met in many regions, which could be the reason for CHWs not being able to perform satisfactorily (Bajpai and Dholakia, 2011).

In terms of training, incentives and access to medical supplies, FCHVs in the hill region were trained monthly by the public health centre, provided with a small regular payment of NRs 200 (£1.33) and had regular access to medical supplies. A local NGO also trained FCHVs and provided them with NRs 3000 (£20) to run a mothers' group and supervised them in the meetings. Such support was rare, and the level of support varied

among FCHVs in the Terai (sections 6.5.3 and 6.7.2). Instead, certain FCHVs in the Terai received their basic training after a year of their service as a volunteer and others received the logistics after almost the same gap in their training. Hence, most of them demanded additional training and incentives. This is consistent with studies that showed training as a key motivational factor for the volunteer CHWs (Amare, 2009; Haile et al., 2014). The importance of incentives for FCHVs was discussed in Section 7.6.1.

In terms of medical supplies, many FCHVs in the Terai expressed hesitation to visit the service users who asked for iron tablets. Similar weaknesses in the healthcare system were reported in Nepal (Bhattarai et al., 2007; Miyaguchi et al., 2014) as was the case in Bangladesh and India (Khan et al., 2010; Puett et al., 2013). In a systematic review of CHWs, this issue was also highlighted as the major barrier for CHWs (Glenton et al., 2013).

In terms of supervision, if CHWs were not supervised on a regular basis, the quality of their work would suffer; data on activities would not be dependable; and finally further policy decision based on this programme would be misleading (Bhutta et al., 2010; Liu et al., 2011). CHWs do not work in isolation. If they are expected to work well in our communities, then they need to be well supported, as seen by the different working capacity of FCHVs in the two study regions (Section 5.6). The findings from my study not only recorded the inadequate health centre support given to FCHVs, but also a lack of respect for volunteers by healthcare workers.

7.6.6.2 Health workers' attitude to volunteers

A few volunteers reported a lack of respect by paid health workers (Section 6.8.2). This issue was reported as a key challenge to FCHV programme implementation (Schwarz et

al., 2014). Although the freedom to deliver the services in the volunteers' free time is the key to volunteering (Glenton et al., 2010), the compulsion to attend health events at fixed times means that the FCHVs need to be there, and the inability to attend such meetings means they have to hear criticism from health workers. Other South Asian countries such as Pakistan and India reported similar problems, where the health workers did not pay appropriate respect to the CHWs (Khan et al., 2010; Mumtaz et al., 2003). Such lack of respect by health workers could further hinder the development of a strong referral network between community and health centres (Gebrehiwot et al., 2015).

7.6.7.3 Relationship between government health centres and NGOs for sustainability of CHWs

Along with the government health care system, numerous NGOs in Nepal work to provide MHSs throughout the country (Section 2.8.3). It is assumed that the government and NGOs working in healthcare would plan and implement programmes together to deliver basic healthcare services to its people. However, the operational reality on the ground shows that they lack the coordination skills and thus work independently. This indicates a relationship gap between government health centres and NGOs. For example, NGO workers complained of different sets of mothers' groups operated by local NGOs in the village. This caused confusion among FCHVs and women regarding which group to attend leading to a lack of adequate attendance in any of those groups. Moreover, this wasted valuable resources through duplication of the work. A similar situation was reported in a review of CHWs (Tulenko et al., 2013). Nepal, being an extremely resource poor country, needs to be cautious to avoid such programme

duplication in a time when there are increasing post-earthquake community level interventions (Simkhada et al., 2015a).

It is the responsibility of the government health centres to ensure that adequate service is provided to its population although they have not been able to do so in various remote villages. Instead, local NGOs provide some important health awareness programmes in these areas. For example, an NGO trained FCHVs to facilitate the group, provided seed money to initiate the group, and supervised it on a regular basis (Section 7.6.6.1). Such activities of NGOs must be supported by the government health centres in order to fill the gap in poor health care provision, as recently recommended by WHO (2015c).

However, the NGO workers in my study reported that the government health workers were reluctant to participate in their maternal health programme. Without government support, the continuity of mothers' groups in remote villages was at risk, as the NGO was planning to exit its activities in 2016. This is often the case with NGO related CHW programmes, because they have their own commitments and do not liaise with the government healthcare providers. A similar view was reported in a review by Tulenko et al. (2013).

In addition, there are other challenges with NGO services. Provision of training and incentives for the FCHVs by NGOs is promising in the short-term, but such actions might generate a false hope among the volunteers, due to the fact that most NGOs work temporarily. When the financial incentives introduced by NGOs are no longer available, FCHVs might feel demotivated, as was the case in the Terai (Section 6.5.3). Therefore, the government needs to ensure that FCHVs are working according to its strategy (FHD, 2010) and a close collaboration is established with local NGOs. The NGOs must also cooperate with the government healthcare systems if the health gains are to be secured in the long-term (Tulenko et al., 2013).

A close collaboration between the government health centres and the NGOs who mobilise CHWs is mandatory in order to ensure the universal coverage of basic healthcare for mothers and children. This is especially important in the remote areas of Nepal, where access to healthcare is often limited and FCHVs are the only available resources. Both the government and NGOs must work in partnership to mobilise FCHVs in order to deliver low-cost but high-impact services for MCH, as recommended by the WHO (WHO, 2015c). Such interventions are a logical choice for achieving the SDG targets in maternal health and meeting the UHC in a resource-poor country like Nepal (Section 1.4).

Having discussed the challenges in MHS provision by FCHVs, the following section presents the study's strengths, limitations and challenges.

7.7 Study Strengths, Challenges and Limitations

Here, I will provide an account of how I believe my position and background shaped the entire research process – the data collection, analysis and interpretation (Creswell, 2014). Through careful reflection on each of them, the rigour of this study is enhanced (Mays and Pope, 1995). The following is a discussion of the study strengths, challenges and limitations, including methods employed to increase study rigour.

7.7.1 Study strengths

Several attempts were made to improve the rigour of the study. Firstly, a pilot study was conducted to see whether the research instrument or topic guide (Appendix 2) would generate the desired information. After the test, the topic guide was reviewed and refined. Secondly, I spent about two months living in the communities under study. I

visited the hill communities on three separate occasions for the data collection. During my first visit, I attended a training of FCHVs by health workers where I noticed that the health workers lacked the respect for volunteers. Similarly, I saw health workers in the Terai did not provide regular educational session to the volunteers in comparison to in the hill regions where the volunteers received education every month. While I was in the village, I saw women who approached FCHVs asking for medicine for headache and I also noticed that FCHVs gave medicines such as paracetamol, antacid, metronidazole, and vitamin B complex (Appendix 7). In addition, I attended mothers' group meetings where I noticed that the FCHV lacked the skills to operate the group in both study regions. One of the reasons for this was her illiteracy. The group members spent more time talking about money savings and credits rather than about health matters (Section 5.5). Understanding of such details was possible because I stayed in the villages where I learnt important aspects of FCHVs' services, which were not obvious at first sight. This helped me to understand the importance of the volunteers in the remote hill villages.

Thirdly, the use of multiple data collection tools such as interviews, FGDs, and field notes captured a wide range of information. For example, questions in the topic guide (Appendix 2) had flexibility allowing any necessary issue to be discussed (Bryman, 2012; Creswell, 2009; Mason, 2002). This lack of restrictions allowed modifying questions from interview to interview while ensuring that the necessary areas under investigation were covered. By using open-ended questions, indicating interest through active listening and encouraging the interviewees to speak, the interviewees and participants expressed their views freely about the topic under discussion (Bowling, 2009). In addition, the use of field notes enabled me to reflect on events that arose in interviews or FGDs. For example, I perceived the power imbalance between health workers and FCHVs because some health workers instructed FCHVs to work without

giving them due respect (7.6.7.3). Thus, the use of multiple data collection tools enriched the study.

Fourthly, in order to bring different perspectives on FCHVs roles in MHS delivery multiple groups were interviewed. Diversity within the group was maintained. For example, interviews were held with FCHVs with different years of work experience, with their potential service users - mothers/ pregnant women, and with local health workers who supported the volunteers' work. Inclusion of range of participants helped to capture the comprehensive views with regard to FCHVs' role in MHSs.

Fifthly, my familiarity with the data collection sites as well as my involvement in the complete data collection, translation and analysis process helped to ensure the data consistency. In one of the data collection sites, some interviewees recognised me and were pleasantly surprised to see me there, as I was one of the few girls from my village pursuing advanced education. For many interviewees, I was the first one to approach them and to interview them about anything. As public health research is still rare in these parts of the Nepal, they were happy to share their stories. After finishing the individual interviews, some even asked me to provide health information during one of their mothers' group meetings. I asked them to have their discussion first so that my involvement would not affect their meeting. Then I shared my knowledge on topics they were interested, for example, importance of health check-ups and nutrition. They seemed to admire my work and helped me to find other potential interviewees.

Sixthly, data quality was ensured through my own involvement in every stage of the research process. This study did not use any interpreter as I speak Nepali, the same language used by my participants (Section 4.8). For all extracts transcribed verbatim I did the translation into English. Then, one of my PhD supervisors (PS) being a native Nepali-speaker ensured the data quality through explanation of some colloquial

expressions used by the interviewees so as to interpret them correctly in their particular context. In addition, one of my supervisors (EvT) coded a part of the data (three interviews with FCHVs, four interviews with women and one FGD) to compare whether there was any difference between the codes generated, thus ensuring the quality of themes generated.

Seventhly, data triangulation was undertaken by comparing the findings obtained from the different respondent groups, geographical locations, and data collection tools (Section 4.10.4). This was achieved by analysing the similarities and differences in the data across the range of participants: volunteers, their service users and health workers supporting the volunteers, across the study regions: the hill and Terai, and across the methods used: interviews, FGDs and field notes.

Finally, my previous studies and experiences of work in Nepal added strength to this study. Having a nursing background and a Master's degree in Public Health with more than five years of work in maternal health in various parts of Nepal was an additional benefit. My background as a nurse helped local people to express their feelings openly as people tend to discuss health matters more openly with health personnel. I noted this when I was interviewing volunteers and health workers who openly expressed their concerns. Some examples of this are presented in Section 4.11.

Above, I discussed the key strengths of this study: conducting a pilot study, staying in the study villages, attending mothers' group meetings, using multiple data collection tools, interviewing multiple groups. In addition, my familiarity with the study places, not needing an interpreter, data triangulation, and finally my study and work experience were some of the major strengths of this study that enhanced its rigour.

7.7.2 Study challenges

Methodological and practical challenges that occurred during fieldwork are presented here including how I addressed them. They are presented under the following subheadings: (1) planning interviews and group discussions; (2) collecting the data and (3) analysing the data.

7.7.2.1 Planning interviews and group discussions

Here, I discuss the aspects that were relevant to gaining access to research participants: preparation of data collection site visits and using a local guide. In the preparation of data collection site visits, I met key people in Kathmandu who provided a broader understanding of the volunteers' activities in different regions (Section 4.4.6). Next I travelled to these data collection sites. Due to the difficult terrain and absence of roads, sometimes I walked up to five hours to meet interviewees in one of the hill villages. The tracks in the remote areas were dusty on hot days and muddy on wet days. Travelling to the Terai required up to eight hours by jeep through one of the most dangerous routes from the capital city, Kathmandu. In both places, there were no public vehicles running through the villages (Section 4.4.1). But, I managed to visit local health centres where I got the opportunities to attend meetings of health workers and FCHVs. The visits also provided opportunities to build rapport with potential interviewees and organise dates and times for the research interview.

Support from local guides remained vital for gaining access to research participants in the villages. A local guide accompanied me in both study regions because I was an outsider and, moreover looked unfamiliar in the Terai. The guide introduced me to community members and the interviewees, which helped me to build rapport with them.

Had it not been for the presence of a local guide, it would have been difficult to get information as illustrated by one attempt to collect data on my own. I had identified a suitable interviewee by asking people in one of the hill villages. However, I realised her husband was sceptical of me and was reluctant to allow her to be interviewed. He interrogated me about my family, study and purpose of my visit. After responding to all his queries, I was allowed to interview his wife. Following this experience, I ensured that a local guide is present if I am unfamiliar with the places which eased my work thus reducing any apparent hostility with participants.

7.7.2.2 Collecting the data

There were several challenges during data collection. First, some FCHVs and service users expressed doubts as to whether they could speak openly in front of the recorder. A few were worried that their voice would not be good enough to be recorded. Once I explained the study aim, highlighting that what mattered most was their experiences in maternal health, and then they consented to being recorded. At the end of the interviews or discussions, some interviewees kindly enquired if I got the information that I needed. Usually older and illiterate FCHVs were concerned about the way they spoke, but the younger volunteers seemed more comfortable during the interviews or group discussions.

Secondly, often pregnant women or mothers from remote villages were a little shy during the interviews and often responded with short answers unlike the volunteers and health workers who could easily express their experiences. One reason for this could have been my own initial naïvety in conducting qualitative interviews which required a purposeful discussion and important skills (Mason, 2002). It could also be because many service users were rarely exposed to such interviews before and were illiterate,

and represented a minority caste. In order to make them at ease, I allowed enough time for them to respond. I encouraged women to talk by explaining repeatedly about the purpose of my visits. In addition, I asked them short and simple questions and sometimes even closed questions to explore their experiences about FCHV's services. However, sometimes I have to deal with unexpected interruptions during interviews.

Thirdly, managing interruptions during the interview was another challenge, but it could affect the data quality. To prevent such interference, I tried a number of techniques. I informed the interrupters about the interview process and its significance, while assuring them that I would get back to them as soon as I finished the interview. I spoke many times on why I wanted to speak to the particular individual and why it was important that she answered for herself. Explaining to husbands and mothers-in-law about who I was, why I was there, and the importance of this research, meant they allowed me to talk with the women in private. I interviewed them in a separate room, in the field nearby or in the shops where they could talk comfortably.

There were also instances when FCHVs themselves interrupted an interview or a FGD but because their view was valuable for the study, I included them. For example, one of the volunteers who had already been interviewed helped to identify participants for a FGD. I explained to her that I would be talking to other volunteers this time, but she stayed and attended the group and shared added her experiences to the discussion. I could not stop her, as it was related to the topic under discussion and was relevant. The problem partly arose from the FGD arranged in a common meeting room of the PHC centre where FCHVs had gathered for their training. I used this opportunity, as otherwise arranging them in a different space would have been difficult because it is often difficult to find an isolated space for the interview in villages (van Teijlingen et al., 2013). Moreover, some of them lived far from each other, sometimes two to three

hours apart. Understanding of the areas and its culture enabled me to meet my objectives.

7.7.2.3 Analysing the data

Analysing qualitative data was very cumbersome and challenging and the details are thoroughly explained in the Section 4.9.2.

7.7.3 Study limitations

Study limitations relate to the study design, sampling and methods.

7.7.3.1 Study design

As with all qualitative interview studies the data generated is a limitation, yet, this is the best method to explore people's experiences or perspectives (Silverman, 2006). The use of qualitative methods with multiple methods of data collection, interviews, FGDs and field notes, enabled me to include more comprehensive views of study participants. An alternative study design could have been mixed methods research design which would have quantified knowledge level of FCHVs in maternal health. However, it was not feasible within the time or resource available for this PhD given the lack of empirical study in this area.

7.7.3.2 Sampling

This study was conducted in two small geographically distinct villages in the hill and the Terai regions of Nepal. The study participants included FCHVs, their service users and salaried local health workers. By bringing multiple perspectives together, this study covered the breadth and depth of the key MHS provided by FCHVs. In addition, I included as many FCHVs as possible in the interviews and group discussions, as they were the main study group. However, it was not possible to include all the FCHVs from the study villages; hence some volunteers' views may be missing. Furthermore, this study could have involved in-depth interviews with increased sample size of FCHVs in one specific region instead of two. This would have increased the study rigour. However, I wanted to compare the work of FCHVs in two different socio-cultural and geographical contexts of Nepal.

7.7.3.3 Methods

Here, I begin by reflecting on my understanding of how the power relations/differences between the researcher and the interviewees affect research outcome. Then, I discuss the technical aspects of data collection, managing audio recording, which is followed by brief information on data translation and analysis.

I had to be reflective at all times about my relationship with my participants as their preconception of me could affect the quality of the data. I had to think about how my background (Section 4.11), my thoughts and the interview process could affect the quality of data that I needed. I realised how interviewees' perceptions of me changed their responses in some interviews and in group discussions. For example, I was younger than most of the FCHVs, but I was treated with great respect because of the

educational differences. They addressed me using language styles that are commonly used for someone senior.

From above it is clear that the power relation of the interview interaction is one of the important aspects that need to be considered as there can be '*asymmetries of power*' in interviews (Kvale and Brinkmann, 2008). It was usually assumed that the interviewer controls the agenda for the interview (Mason, 2002). For example, in one of the group discussions, FCHVs initially reported simply positive aspects of the volunteering, as they thought that I was there in some kind of official capacity and was interested to hear simply good aspects. However, as soon as I assured them that I wanted to listen to any of their concerns on both positive and negative aspects of volunteering, they became more open and shared the challenges they had. This might be because when they felt that I was really interested in understanding their experience, after that they then felt more comfortable about expressing themselves.

In addition, power relations within families were also noted while interviewing pregnant women or mothers. While most interviews went as planned, a few were interrupted by the participants' family members or neighbours as the interviews were generally held on verandas outside houses. Sometimes questions directed at mothers or pregnant women were answered by either their husbands or mothers-in-law, who often influenced the uptake of pregnancy care services by these women, as often reported in the literature (Furuta and Salway, 2006; Mullany et al., 2007; Simkhada et al., 2010). Occasionally a curious passer-by interrupted the interview. In the Nepali context, it is socially acceptable to ask questions or show interest in someone even if one hardly knows the other person (van Teijlingen et al., 2013) and is common in rural villages.

Regarding the technical aspect of the recorder, I have painful memories. I lost a part of my data due to an error in the instrument. During one of my group discussions, the

audio recorder suddenly stopped working and I did not realise it until I was half way through. Then, I asked my research assistant to keep an eye on the digital recording equipment – Dictaphone. I also used my mobile phone recorder as a backup and gathered demographic information on a separate sheet.

In addition, some initial interviews were not clear due to external interruptions during the recording. In one instance, I interviewed a health worker in a restaurant next to the highway, as that was the only time he was available. I did not realise how disturbing the background noise was until later when I heard it: some of the excerpts were incomprehensible. This happened because initially I was not aware of the effect of background noise (Kvale and Brinkmann, 2008). Following this experience, I became more careful in the subsequent interviews and held them in quieter places. Also, when I realised that interviewees with low voices were difficult to hear in the recording, I asked them to raise their voices in subsequent interviews.

Another limitation was data translation from Nepali to English for the analysis.

Attempts were made to ensure the accuracy of translation so as to reduce the negative impact of translation and ensure its quality (Marshall and Rossman, 2011) (Section 4.8). However, certain depth, and cultural nuances might still be missing from the translation.

7.8 Chapter Summary

In this chapter, I discussed the FCHV perspectives on MHS provision using three key themes: MHS offered by FCHVs, their motivation to take part in volunteering, and the challenges they faced in delivering services. FCHVs provided health messages to pregnant women and mothers mainly through informal routes. Easy accessibility and availability of FCHVs in the villages meant that they could provide MHSs at any time.

For example, FCHVs in the hill villages shared health messages through local songs, and visited new mothers with nutritious food hampers. Such informal approaches were useful to increase awareness of the importance of health check-ups and hospital delivery among service users.

In both regions, FCHVs shared health messages through formal routes such as regular mothers' group meetings where most of the groups were also involved in money saving and lending activities. Spending time on such monetary activities, combined with their lack of education, limited the ability of FCHVs to discuss health topics in depth.

FCHVs were involved in additional health activities, especially in the hill region. They distributed medicines, detected pregnancies, referred pregnant women for health check-ups or informed them of availability of emergency contraception or safe abortion services, assisted in childbirth and managed its complications. Such services were beneficial to the poor women in the distant villages, who otherwise would not have received any healthcare services at their doorstep. However, further training of FCHVs is needed if they are to provide medicines and report their health activities accurately. Nevertheless, FCHVs are critical human resources for MHS provision given the growing human resource crisis in health and increasing needs of mothers in poor and isolated hill villages.

This study found a number of factors that motivated FCHVs to volunteer. The key motivating factor was that they viewed the work as a form of basic human and social responsibility. This is followed by perceived empowerment, community recognition of their services and recognition by health workers of their contribution to improving maternal health. The FCHVs were passionate about their services but they demanded compensation in order for them to deliver the services and to maintain enthusiasm at work.

At the individual level, the major factor that hindered FCHVs' services was their concern for appropriate financial and non-financial incentives. Provision of very basic items such as umbrellas, shoes, or bags would make their everyday volunteering easier. In addition, while their low level of education caused problems in the provision of health education and report write up, older volunteers were reluctant to stop volunteering.

At the community level, reducing the occasional community misunderstanding towards FCHVs is necessary. The study also noted that service users from certain ethnic groups who needed the services were either not aware or did not want to use volunteers' services. Given that some service users were not accessing their services and that there were increasing concerns about the education of volunteers, FCHVs' need for education should be addressed.

At the health system level, factors such as random selection of FCHVs, lack of appropriate training, irregular supervision of FCHVs and limited access to supplies were reported. Generally, FCHVs in the hill region were better supported by both public health organisations and NGOs than those in the Terai. In both regions, some FCHVs perceived that health workers sometimes behaved rudely towards them. This behaviour needs to be improved alongside developing a mechanism to coordinate relationships between the government health centres and NGOs that mobilise FCHVs.

Finally, the chapter presented the study strengths, challenges and how I managed them.

Chapter Eight

Conclusion and Recommendations for Policy, Practice and Research

8.1 Introduction

This chapter presents the main conclusions of the thesis, offers recommendations for policy-makers, practitioners and researchers and concludes with suggestions for future research.

8.2 Summary of Conclusions

In this PhD, I have explored the role of FCHV in MHS provision in two regions: the hill and Terai of Nepal, from the perspectives of health workers, service users, and FCHVs themselves. I also focused on factors that promote or hinder the services of FCHVs. My key contribution to this subject has been to document the points of view of the women volunteers working in maternal health whose voices are rarely heard. I collected the research data from these two regions of Nepal using qualitative methods. The findings are summarised under the following headings: a) the FCHVs are highly important in MHS provision in both regions, b) they provide MHSs through formal and informal routes and c) they have a desire to volunteer, but lack the necessary support to do so effectively.

a) Importance of FCHVs in MHS in both study regions

The FCHVs primarily provide the following MHSs: a) increased awareness of the danger signs during pregnancy and delivery, b) referral of pregnant women for health check-ups and health centre delivery, c) provision of iron tablets to women and d)

advice on nutrition. All the FCHVs acknowledged the importance of keeping records, which they found difficult because they lacked the necessary skills (Section 6.3.2). For example, reporting was often done verbally, or if written, done with the help of family members, friends or health workers, which could undermine the credibility of the report.

The FCHVs are invaluable in MHS provision in the rural villages where public health care systems and skilled healthcare resources are limited. In the absence of professional healthcare, they also provided additional healthcare services: they distributed medicines to treat simple illnesses (Section 5.6.1) and accompanied pregnant women to health centres for childbirth. Where this was not possible, they also assisted in delivering babies. In so doing, they were sometimes involved in lifesaving work as exemplified by the case of a woman with a prolapsed uterus (Section 5.6.2).

FCHVs also administered pregnancy tests and informed the women of the availability of emergency contraception and safe abortion services (Section 5.6.3). This is important to women's health, as unsafe abortion is the third major cause of the death of women of reproductive age in Nepal (Section 7.4.3.2).

It appears that FCHVs provide services way above the accepted expectations for their role which makes them immensely important in poor and geographically isolated villages where there is no access to professional healthcare.

b) Formal and informal routes to MHS provision

In both regions, the FCHVs raised health awareness among pregnant women or mothers informally or through formal mothers' groups meetings. The informal approach was the most common. However, the differences in service provision were noted in the two regions. In the hill villages, they used novel and innovative ways to share maternal

health information, for example, singing folk songs containing health messages in them or visiting new mothers with nutritious food hampers (Section 5.4.5). This form of health message sharing is a highly effective way to raise awareness among women in the rural villages, many of whom are poor and illiterate (Section 7.4.1).

The FCHVs also shared maternal health messages through regularly organised mothers' group meetings and the meetings were also used for monetary discussions (Section 5.5). Due to this, there was little time left for discussion on health topics. Such activity combined with the lack of FCHVs' education often proved to be counterproductive for service provision (Section 7.6.2).

Having both informal and formal routes to MHS provision by FCHVs is beneficial for women in the remote villages, as all women may not attend the group meetings, but still might be informed of key maternal health messages.

c) FCHVs have a desire to volunteer, but lack the support to do so effectively

This PhD also documented the factors that promote or hinder the FCHVs' services. In both regions, it was the FCHVs' motivation to volunteer which had sustained their services. They were primarily motivated by their desire to help mothers in their communities and continued to see it as an important social responsibility. In addition, in volunteering, it was apparent that they felt empowered and enjoyed community recognition (Section 6.6.1). However, in both the study regions, they were concerned about the lack of financial and non-financial incentives (Section 6.5). It was also pointed out that there were misperceptions about FCHVs' voluntary status. In a number of cases, illiteracy and the older age of volunteers also affected the FCHVs ability to provide services effectively (Section 7.6.2).

Finally, various health systems factors hindered the delivery of services, including a lack of access to medical supplies, inadequate training and supervision. Volunteers in the hill region were generally better supported than those in the Terai, but still lacked adequate training and support to function effectively (Section 7.4.3). In addition, a perceived lack of respect by some health workers towards volunteers and a lack of coordination between government health centres and NGOs were noted (Sections 7.6.6.1 and 7.6.7.3).

Overall, this PhD found that most participants perceived FCHVs as an invaluable resource for improving the maternal health of the poorer women in the remote villages. Despite facing many challenges during their service provision, the volunteers continued to provide MHSs in the absence of skilled healthcare workers. The benefits to women of the volunteers' work was significant, and it is likely that their services provide very important contributions to improvements in maternal health, particularly, as more pregnant women and mothers from the poorest communities were able to visit health centres. Also, the health awareness of these women volunteers alone is a substantial public health benefit. Therefore, their contribution to MHSs needs to be recognised and respected by both the healthcare workers and the communities. It is also important that FCHVs are provided with context specific support - incentives, access to supplies and supportive supervision - to enable them to deliver services more productively and to ensure that these services flourish in the future.

8.3 The Way Forward (The Future of FCHV in Nepal)

Nepal continues to suffer from a lack of skilled health workers while the needs for maternal health care continue to rise. This study was conducted before the earthquake

hit Nepal in April 2015 which severely damaged many healthcare centres in one of the study districts from the hill region. Approximately two million pregnant women were affected by the earthquake with another 126,000 women who required immediate healthcare services (UNFPA, 2015). In such a situation, FCHVs have the potential to raise basic health awareness around MHSs. In addition, as global attention moves towards the Sustainable Development Goals, there is a real opportunity for FCHVs to provide basic MHSs. Any investment in FCHV would have a major impact within the community in serving poor rural women in the absence of immediate access to professional care.

I found that the volunteers were an important asset for MHS provision in rural communities where resources were often scarce. While they faced various challenges in delivering services and the problems described in this thesis are specific to certain places in Nepal, such issues may be widespread in the country and similar settings elsewhere (Section 7.6). The failure to tackle such problems may deprive pregnant women and mothers of basic MHS where there is no professional healthcare available. For these reasons, I believe that the study findings have implications for other similar CHWs around the globe as other countries can learn from the experience of Nepal.

The next section presents specific recommendations to improve FCHVs' work in MHS provision.

8.4 Recommendations

Based on the key findings of this PhD, the main implications for policy makers and practitioners are presented and the thesis is concluded by presenting some areas for further research.

8.4.1 Recommendations to the policy makers

Based on the findings of this study presented in earlier chapters, the following recommendations are made:

1. Prioritization and allocation of adequate financial resources to train and supervise FCHVs in rural villages

This study clearly showed the relevance of FCHVs in MHS provision in the resource-poor hill villages of Nepal. Given the lack of professional care, the FCHVs had an important function in terms of distributing medicines, accompanying women to health centre delivery and assisting in childbirths if the women were unable to visit the health centre. These services bring many benefits to the pregnant women or mothers who otherwise would be left with no care. A bigger group of FCHVs trained with specific skills in MHS and well supported by the public health care system can be a part of the solution to improve the basic MHS in rural Nepal.

2. Provision of financial incentives for FCHVs at local level

In both regions, the FCHVs require financial incentives to carry out day-to day services, which is important given the increasing amount of work and the level of responsibilities expected of them.

3. Ensuring non-financial incentives or logistical support for FCHVs

The volunteers asked for basic things such as torches, umbrellas, bags etc. (Section 6.5), which the government might want to address to build support for volunteers so that they feel valued and motivated in their services.

4. Arrangement of literacy education for FCHVs

The volunteers' activities required them to be able to read and write in Nepali. This calls for a need for literacy education for volunteers in villages.

5. Clarification of roles and responsibilities (job descriptions) on the ground

The FCHVs are widely mobilised by government health centres and NGOs, but a gap in the link between these two organisations was noted as reported by the mobilisation of same FCHVs and service users in the different mothers' groups (Section 6.8.3). In order to avoid such a duplication of work, policymakers need to adopt a clear strategy to coordinate function between these organisations with a clear role description for volunteers. This will reduce the work burden of FCHVs and make efficient use of scarce resources.

6. Planning a better incentive package for the FCHVs leaving after long years of services

In this study, a majority of volunteers had served for more than 10 years. They expected to receive some form of incentives on withdrawal from the services. An attractive financial package might be helpful for the older volunteers who wish to leave but cannot do so as they feel financially insecure. The packages would not only support older volunteers when they leave their service, but also motivate other women to volunteer.

8.4.2 Recommendations to practitioners

Here, practitioners refer to people who implement the FCHV programme in districts or at community level and are directly involved in training, supervision or provision of incentives to FCHVs. They can be either government health workers or NGO workers and can be public health professionals, doctors, nurses or other trained health care providers.

1. Provision of context specific practical support to FCHVs

It is important that the government health centres including NGOs consider actions to support FCHVs. For example, FCHVs sometimes spend money out of their own pocket to travel to health centres, or communicating with service users and healthcare workers. The volunteers often find it difficult to afford the expenditure involved in volunteering. Such costs need to be reimbursed. In addition, the volunteers need logistics such as umbrellas, shoes, rain coats, bags, torches and water bottles in the hill region and mosquito nets and bicycles in the Terai. These needs are basic and logical. Fulfilling them would facilitate the volunteers' services and improve their work enthusiasm.

2. Arrangement of monthly training to update on local health issues

FCHVs provide important healthcare services in the villages. For example, in both regions they facilitated mothers' group meetings, but they often spent more time advising and discussing issues around borrowing money and saving activities which overshadowed the discussions about health topics (Section 5.5). It is arguable that training FCHVs to prioritise health related topics in these meeting might be useful, but it is also acknowledged that the discussions around money and saving can be useful ways of empowering women which may also have impacts in terms of health and well-

being, at least in the long time. Training is also necessary to inform the volunteers of the use and side effects of the medicines they routinely distribute. Similarly, training is required to inform volunteers of the potential dangers of abortion so that they would inform their service users about it and encourage them to use contraception in order to avoid unwanted pregnancies and unnecessary abortions (Section 7.4.3).

3. Coordination between government healthcare organisations and NGOs for integrated MHS provision

As both government organisations and NGOs mobilised volunteers, there is a need to plan how they are going to train volunteers, determine how many hours they are expected to work, what outcomes are expected from them and whether they are to be remunerated. Such discussions should not only clarify the volunteers' roles, but also prevent any duplication of activities. Therefore, improved coordination between the various organisations involved in supporting and managing FCHVs is important for volunteers as well as for the deprived communities.

4. Regular supervision of volunteers

One of the key findings from the study was that volunteers were only irregularly supervised by local health workers, and as a result they were not able to provide services in line with expectations, given that they were involved in other areas of work, such as money saving activities in the mothers' group meetings (Section 5.5). Ensuring the regular supervision of volunteers would be helpful to educate women in the groups.

5. Provision of literacy classes

Some volunteers are illiterate, but they need to share health information in the mothers' group meetings and report their health activities on a regular basis. Such activities require volunteers to be able to read and write in Nepali. Arrangements for basic

literacy education at local level are needed for them to deliver services and if necessary, expand their roles (Section 6.3.2).

6. Activities to inform the community recognition of volunteers

Many volunteers were concerned that they were increasingly viewed as paid health workers by some community members (Section 6.6.2.1). Some volunteers also reported that they were viewed as providers of unnecessary medicines (Section 6.6.2.2). Such misconceptions reduced their enthusiasm for work and demonstrated a need for a programme to raise public awareness about the voluntary nature of services delivered by FCHVs. One possible approach would be use radio to highlight the role of FCHVs' so that the community recognises and values their services.

7. Training of local health workers to improve their attitude toward volunteers

Though volunteers are praised for their contribution by all the health workers, some of them lacked the professional respect to the volunteers. Training of paid health workers on the importance of respect for each other within the healthcare system is important so that the volunteers feel valued.

8.4.3 Recommendations for further research

This research has revealed following important areas for further study which would help to improve MHS provision by FCHVs:

1. There is a need to examine the quality of healthcare services provided by FCHVs. As this study has demonstrated, volunteers claimed they are providing adequate and appropriate services to the communities they serve. However, there is a lack of monitoring and evaluation of FCHVs work, complicated by the fact that they work

with both government and NGOs. A mixed method research assessing the knowledge level of FCHVs in provision of basic maternal healthcare can be useful to examine effectiveness of volunteers.

2. Evaluation of the performance of FCHVs in MHSs, who work solely with government health centres compared to those who work with government centre and NGOs, needs to be considered. This study showed a wide variation in MHS provided by FCHVs in the hill and Terai regions, and thus more comparative studies will be useful. This would also help to explore whether FCHVs are becoming an example of task shifting (Section 7.6.7.3), assuming that they deliver responsibilities that are typically expected to be undertaken by government health organisations and NGOs.
3. Research is necessary to design a model for incentivising the FCHVs, including discussion of the best minimum possible package with financial and non-financial incentives, to attract the new volunteers and to convince the elderly volunteers to withdraw their services.
4. Research is necessary to examine potential ways of training the volunteers for delivering priority health messages in mothers' group meeting, the safe use of medicines and counselling on abortion services.
5. An important but under-recognised role of volunteers that needs to be studied is the part they play in identifying and reporting cases of gender-based violence in the Terai (Section 7.4.3). This is a crucial aspect of women's health.
6. A study is needed to explore why women from ethnic groups such as Madhesi, and religious minority Muslim in the Terai and Chepang in the hill region are reluctant to use healthcare services from FCHVs or health centres. This thesis has briefly discussed some of the possible reasons, including misconceptions about women and

the lack of respect for women by health workers, but further in-depth research is necessary to reveal the barriers to service utilisation among these minority groups.

The author recognises that some of these recommendations require time and the investment of significant resources to address. However, these recommendations are considered crucially important in order to understand the effective functioning of FCHVs in resource poor-settings. Subsequently, policy-makers, practitioners and researchers are expected to initiate policy and research actions to recognise, cherish and support the MHS provision by FCHVs in Nepal and similar settings elsewhere.

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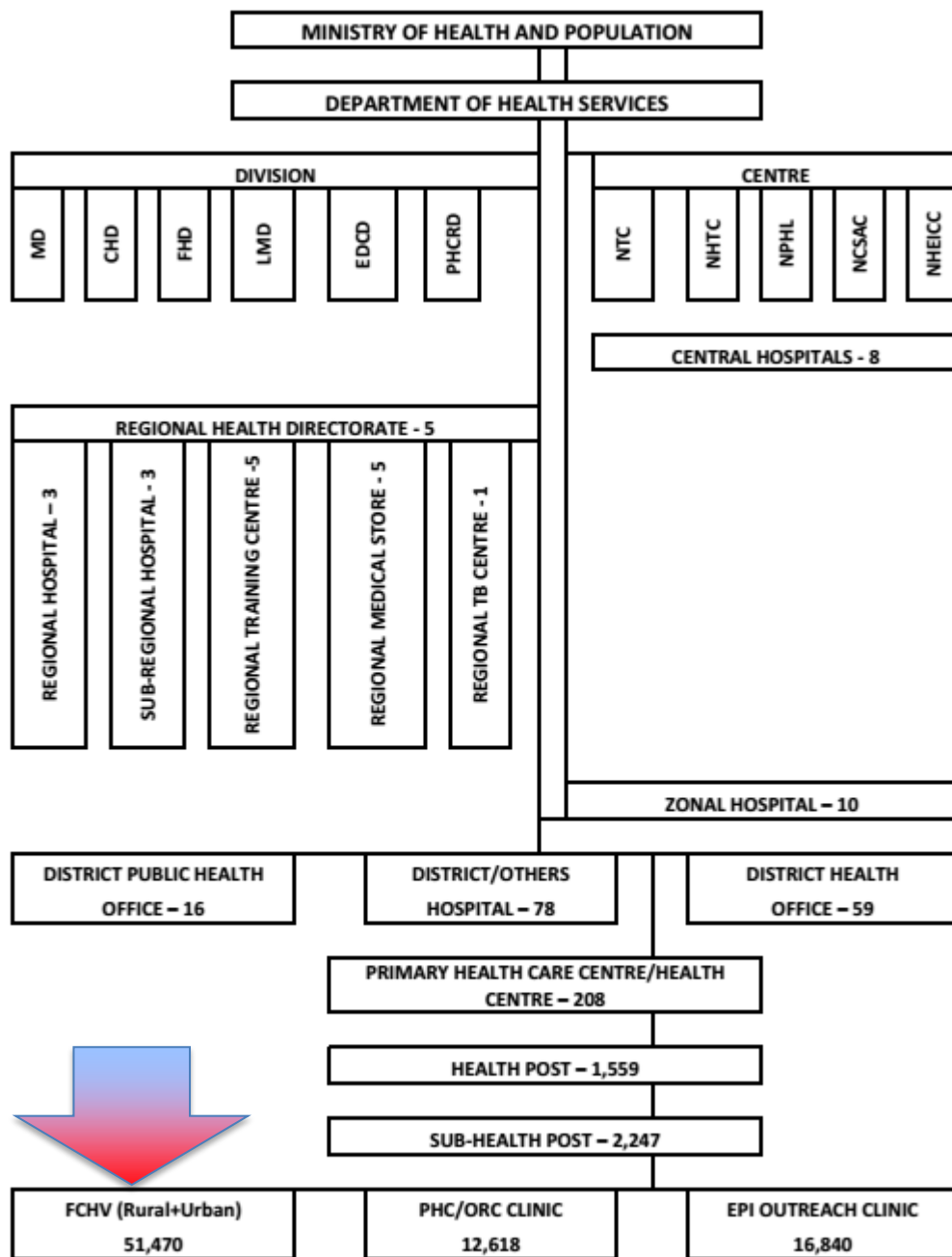
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Appendix 1 Organogram of Department of Health Services (DoHS)



Source: (DoHS Annual report, 2013/2014 p.4)

Appendix 2 Topic Guide for Data Collection

1) Topic Guide for interviews with Female Community Health Volunteers (FCHVs)

Socio-demographic characteristics of FCHV

Age

Gender

Caste/Ethnicity

Education

Work experience in years

Religion

Husband's occupation

Number of houses covered

Distance from the nearest government health centre (min)

Topic Guide for semi-structured interviews with FCHV

- I am interested to know about your role as a FCHV. Tell me about your experience of being a FCHV (or describe your typical working day/what kinds of work do you generally carry out?)
- What services do you provide in relation to maternal health? (It seems sharing health messages to groups is important part of your function. What type of health messages do you disseminate? How do you inform mothers?)
- What was the state of maternal health in your village before you became FCHV? What difference have you found since you started?
- What have you done to make pregnant women to attend health care check-up?

- What is your role during delivery of women? What have you done to make women to deliver at health centre?
- What do you say to the women who have recently delivered?
- How have you been able to reach women or pregnant mothers in the village), if not why not? (Mothers' group meeting/ home visits/referred by someone..)
- What are the difficulties/barriers you faced while delivering MHSs?
- Do women or community members seek or accept your services? Yes/no, why? (Your selection process, training, skills, communication, access, availability)
- How are you supervised at work? When do the supervisors come to you for supervision?
- What kinds of support system available for you to deliver these services? (Skills, training, supervision, regular access to supplies, incentives, availability of nearby health facilities)
What types of practical things are you given with? Who gave you these?
- Why did you become FCHV? What made you to serve mothers and children? (motivations)
- What makes you motivated to continue this work?
- In your opinion, what is necessary for FCHVs to enable them to deliver standard services to the women in village that helps in maternal health improvement?

At the end of an interview, ask:

Would you like to add anything?

2) Topic guide for interviews with women (service users or potential service users)

- Where do you go when you do not feel well? Why do you go there?

- Have you received services from a FCHV?
- What sorts of services have you received from FCHVs?
- Why do you seek care from her? / What makes you to seek services from her?
- How do you assess MHS from FCHVs and why do you use it this way? How FCHVs help you to seek antenatal, delivery or postnatal care services from health centres?
- Does a FCHV come to you to provide services, (or do you visit her)? Why did you see her last time?
- What is your impression on FCHV's services – what do you think about the relevance of their services?
- What makes FCHVs' opinion important to you? (Looking for their acceptance)

At the end of an interview, ask:

Would you like to add anything?

3) Topic guide for local health workers

- What do you think about the role of FCHVs in maternal health improvement in your community?
- Why FCHVs are motivated to volunteer? Why older volunteers are committed to continue volunteering?
- What challenges FCHVs face in carrying out their activities?
- What sorts of training FCHVs have been provided with in relation to maternal health and whether the training to FCHVs is adequate to deliver assigned services? (For example whether FCHVs have been provided with training on

community mobilisation, birth preparedness packages, communication skills, counselling skills).

- How do you supervise them (including mothers' groups meetings and monitoring of FCHVs work)?
 - What can be done to improve FCHVs' activities?
- Would you like to add anything?

4) Topic guide for focus group discussions

- What kind of work you generally do? (Could you explain more about MHSs?)
- What helps you to deliver these MHSs?
- How have you been able to reach women in the village, if not why not?
- Why they (women or community member) accept your services? (Your selection process, training, skills, communication, access and availability etc.)
- If the service users are not willing to accept your services, what are the reasons for this?
- What challenges do you face while providing MHSs?

At the end of FGD, ask:

Would you like to add anything?

4) Field notes

a) Mothers' group meetings

I attended mothers' group meetings facilitated by FCHVs during my stay in the village.


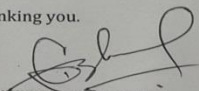
I noted who participated in the group, how FCHVs facilitated the groups, and what they

discussed in the group. This helped to further understand their maternal health activities within their communities.

b) Meetings of health workers and FCHVs

I got opportunity to attend meetings of health workers and FCHVs. During the meeting, I noted how health workers trained FCHVs and how they talked to them.


Appendix 3 Ethical Approval from Nepal Health Research Council

 Nepal Health Research Council Estd. 1991	
<p style="text-align: center;">NHRC</p> <p>Ref. No. 1341</p> <p>Executive Committee</p> <p>Executive Chairman Prof. Dr. Chop Lal Bhusal</p> <p>Vice - Chairman Dr. Rishi Ram Koirala</p> <p>Member-Secretary Dr. Shanker Pratap Singh</p> <p>Members Prof. Dr. Meeta Singh Prof. Dr. Suman Rijal Dr. Narendra Kumar Singh Dr. Samjhana Dhakal Dr. Devi Gurung</p> <p>Representative Ministry of Finance National Planning Commission Ministry of Health & Population Chief, Research Committee, IOM Chairman, Nepal Medical Council</p>	<p style="text-align: center;">13 May 2013</p> <p>Ms. Sarita Panday Principal Investigator The University of Sheffield, UK</p> <p>Ref: Approval of Research Proposal entitled The role of social economic and demographic development in the reduction of maternal mortality in selected districts of Nepal</p> <p>Dear Ms.Panday,</p> <p>It is my pleasure to inform you that the above-mentioned proposal submitted on 24 March 2013 (Reg. no. 32/2013 please use this Reg. No. during further correspondence) has been approved by NHRC Ethical Review Board on 10 May 2013 (2070-01-27).</p> <p>As per NHRC rules and regulations, the investigator has to strictly follow the protocol stipulated in the proposal. Any change in objective(s), problem statement, research question or hypothesis, methodology, implementation procedure, data management and budget that may be necessary in course of the implementation of the research proposal can only be made so and implemented after prior approval from this council. Thus, it is compulsory to submit the detail of such changes intended or desired with justification prior to actual change in the protocol.</p> <p>If the researcher requires transfer of the bio samples to other countries, the investigator should apply to the NHRC for the permission.</p> <p>Further, the researchers are directed to strictly abide by the National Ethical Guidelines published by NHRC during the implementation of their research proposal and submit progress report and full or summary report upon completion.</p> <p>As per your research proposal, your research amount is self-funded and NHRC processing fee is US\$.100.00.</p> <p>If you have any questions, please contact the research section of NHRC.</p> <p>Thanking you.</p> <p style="text-align: center;"> Prof. Dr. Chop Lal Bhusal Executive Chairman</p>
<p>Tel.+977-1-4254220, 4227460, Fax: +977-1-4262469, RamShah Path, P.O. Box 7626, Kathmandu, Nepal. Website: http://www.nhrc.org.np, Email : nhrc@nhrc.org.np</p>	

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Nepal Health Research Council

Estd. 1991

Ref. No. : 1209

22 April 2014

Ms. Sarita Panday
Principal Investigator
The University of Sheffield
UK

Subject: **Amendment of the research proposal entitled The role of social economic and demographic development in the reduction of maternal mortality in selected districts of Nepal**

Dear Ms. Panday,

In reference to your letter dated 7 March 2014, the meeting of the Ethical Review Board of Nepal Health Research Council held on 17 April 2014 has approved your requested amendment in above- mentioned research project.

If you have any questions, please contact the research section of NHRC.

Thanking You



.....
Dr. Guna Raj Lohani
Executive Chief

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21:28
11/04/2015

Appendix 4 University Recommendation Letter



The
University
Of
Sheffield.

School Of
Health
And
Related
Research.

Sarita Panday
Postgraduate Research Student
School of Health and Related Research
The Innovation Centre
217 Portobello, Sheffield S1 4DP
C/C
Kupondol, Lalitpur

8th April 2014

To whom it may Concern

I would like to certify that Miss Sarita Panday is a registered postgraduate research student in the University of Sheffield, pursuing a PhD degree at the School of Health and Related Research (SchARR).

Sarita is doing research in the role of female community health volunteers in maternal health improvement in Nepal. This research is expected to explore the views and experiences of community volunteers delivering maternal health services in rural Nepal, the health professionals working alongside them, and the individuals who receive services from them.

Sarita is visiting Nepal for her data collection from April 25 to October 5, 2014 and detailed information is provided in the information sheet attached. I appreciate your cooperation with her in this research.

Best wishes,

Professor Mike Campbell
Director of Postgraduate Research
School of Health and Related Research

2011
THE AWARDS
AWARD WINNER
UNIVERSITY OF THE YEAR

University Letter (Nepali)



The
University
Of
Sheffield.

School Of
Health
And
Related
Research.

मिति २०७१/१२/ २५

यो जो सँग सम्बन्धित छ।

महोदय,

उपरोक्त सम्बन्धमा म यो अबगत गराउन चाहन्छु कि सुश्री सरिता पाण्डे यस शेफिल्ड विश्व बिध्यालयमा "नेपालको मात्रै स्वास्थ्य सुधारमा महिला स्वास्थ्य स्वयम् सेविकाको भूमिका" भन्ने विषयमा बिद्यावारिधि गर्दै हुनुहुन्छ। उक्त विषयमा अध्ययन अनुसन्धानका क्रममा २०७१ बैसाख महिनादेखि असोजसम्म नेपाल भ्रमणमा रहनु हुनेछ। भ्रमणका क्रममा उहाले महिला स्वास्थ्य स्वयम् सेविका लगायत महिला, समुदाय सदस्य तथा स्वास्थ्य कर्मी सँग सोधपुछ गरि जानकारी संकलन गर्नु पर्ने भएकाले यहाहरुले आवश्यक सहयोग गरि यस अनुसन्धानलाई सफल पार्न सहयोग गरिदिनुहुनेछ भन्ने आशा गरेको छु।

यस अध्ययन सम्बन्धि थप विवरण "सहभागी जानकारी पत्र" मा उल्लेख छ।

सहयोगका लागि धेरै धेरै धन्यवाद।

प्राध्यापक माइक क्याम्पबेल (Mike Campbell)

स्नाकोत्तर अनुसन्धान निर्देशक

शेफिल्ड विश्वबिध्यालय

2011
THE AWARDS
AWARD WINNER
UNIVERSITY OF THE YEAR

Appendix 5 Participant Information Sheet

1. Research Project Title:

The role of Female Community Health Volunteers (FCHVs) in maternal health provision in Nepal: a qualitative study.

2. Invitation

You are being invited to take part in a research project. Before you decide it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Ask us if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part. Thank you for reading this.

3. What is the project's purpose?

This research is intended to explore the experience of female community health volunteers and their services in rural Nepal. We would like to listen to your (female community health volunteers/women/health supervisors) views and experiences in providing maternal health services. It might take 45-60 minutes to complete the interview; however, you can take more time if you need to clarify further.

4. Why have I been chosen?

You have been selected because you are providing the services to the community/ you are receiving the services from FCHV/ you are potential service users / you are supervising FCHV. There will be some other FCHVs with similar experiences will be involved.

5. Do I have to take part?

It is up to you to decide whether or not to take part. If you do decide to take part you will be given this information sheet to keep (and be asked to sign a consent form) and you can still withdraw at any time without it affecting any benefits that you are entitled to in any way. You do not have to give a reason.

6. What will happen to me if I take part?

You will be interviewed to get information on your work experience as FCHVs only on this occasion. The interview/group discussion will be recorded.

7. How will the recorded media be used?

The audio recordings of your activities made during this research will be used only for analysis and for illustration in conference presentations and lectures. No other use will be made of them without your written permission, and no one outside the project will be allowed access to the original recordings. Excerpts of the interviews/group discussions might be used in the write up of this research; however I would like to ensure that you will not be identified in any report or publication.

8. What are the possible disadvantages and risks of taking part?

As such there will be no discomfort from taking part in this research, however you might feel distressed if there is any major incident happened during your work as a FCHV/ or receiving FCHV's services.

9. What are the possible benefits of taking part?

Whilst there are no immediate benefits for those people participating in the project, it is hoped that this work will help to explore the perspectives from FCHVs and beneficiaries of their services helping to identify potential barriers and facilitators to delivery maternal health services in the community that informs policy makers and planners to improve FCHV programme.

10. What if something goes wrong?

If you have any concern associated with this research you can contact me (Sarita Panday at +977-9841528505). If you are not satisfied with my approach you can contact my supervisor Padam Simkhada or you can report complaint to Nepal Health Research Council.

11. Will my taking part in this project be kept confidential?

All the information that we collect about you during the course of the research will be kept strictly confidential. You will not be able to be identified in any reports or publications.

12. What will happen to the results of the research project?

The research is expected to complete in August 2015 and the results of the research is expected to publish in 2015/2016. I will leave a copy of my work in Nepal Health Research Council as well as in the village health centre where you can read the published results. I will like to ensure you that you will not be identified in the study.

13. Who is organising and funding the research?

I am spending myself for the data collection; however, local transportation cost will be supported from the Sheffield University.

14. Who has ethically reviewed the project?

This project has been ethically approved by Nepal Health Research Council's (NHRC) ethics review procedure. Sheffield University Ethics Committee approves the ethical approval from NHRC and does not require undertaking separate ethical approval.

15. Contact for further information

Sarita Panday, Kupondole, Lalitpur (Mobile-+977 9841528505)

Padam Simkhada, Senior Lecturer (Sheffield University 0044 (0) 114 222 0752)

You will be will be given a copy of the information sheet and, if appropriate, a signed consent form to keep.

Thank you for your participation in the project.

Appendix 6 Participant Consent Form -Interview

Title of Research Project:

The role of female community health volunteers in maternal health improvement in Nepal

Name of Researcher:

Sarita Panday

Participant Identification Number for this project: _____ Please initial box

1. I confirm that I have read and understand the information sheet dated / _____ / explaining the above research project and I have had the opportunity to ask questions about the project.
2. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason and without there being any negative consequences. In addition, should I not wish to answer any particular question or questions, I am free to decline.
3. I understand that my responses will be kept strictly confidential. I give permission for members of the research team to have access to my anonymised responses. I understand that my name will not be linked with the research materials, and I will not be identified or identifiable in the report or reports that result from the research.
4. I agree for the data collected from me to be used in future research
5. I agree to take part in the above research project.

Name of Participant

Date

Signature

(or legal representative)

Sarita Panday
Lead Researcher

Date

Signature

To be signed and dated in presence of the participant

Consent form for focus group discussions:

Participant Number:

Title of Research Project: The role of female community health volunteers in maternal health improvement in Nepal

Please initial the boxes where you agree with the statements.

- 1. I confirm that I have read and understand the information sheet explaining the above research project and I have had the opportunity to ask questions about the project.
- 2. I understand that my participation is entirely voluntary and that I am free to withdraw at any time without giving any reason and without there being any negative consequences. In addition, should I not wish to answer any particular question or questions, I am free to decline.
- 3. I understand that my responses will be kept strictly confidential. I give permission for members of the project team to have access to my responses and to use anonymised quotes in any report related to the research. I understand that I will not be identified in any reports or other outputs of the research.
- 4. I agree that quotes from discussion can be included in any report that results from the research provided it does not enable me to be identified as an individual.
- 5. I agree to keep the information shared within the group confidential. However, I am also aware that information shared in the group might be disclosed beyond the group.
- 6. I agree to take part in the above research project.

_____	_____	
Participant	Date	Signature
_____	_____	
Researcher	Date	Signature

To be signed and dated in presence of the participant

Copies

Once this has been signed by all parties, the participant will receive a copy of the signed and dated participant consent form and the information sheet. A copy of the signed and dated consent form will be placed in the project’s main record, which will be kept in a secure location.

Researcher: Ms Sarita Panday

Email: s.panday@sheffield.ac.uk

Tel: [\[+977 9841528505\]](tel:+9779841528505)

Participant Information Sheet (Nepali)

सहभागी जानकारी पत्र

नेपालको मातृ स्वास्थ्य सुधारमा महिला स्वास्थ्य स्वयं सेविकाको (म.स्वा.से) भूमिका

तपाइहरूलाई यस अनुसन्धानमा भाग लिन अनुरोध गरिएको छ । यस अनुसन्धानमा भाग लिनु पूर्व यो अनुसन्धान किन गरिदैछ र यसमा के गरिन्छ भन्ने बारेमा जान्नु जरूरी छ । तलका जानकारीहरू राम्रोसँग पढेर (सुनेर) यसका बारेमा प्रष्ट नभएमा वा थप जिज्ञासाका लागि निर्धकतापूर्वक मलाई सोध्न सक्नु हुनेछ । तपाइ यस अनुसन्धानमा भाग लिने अथवा नलिने भन्ने निर्णय गर्ने पूर्ण अधिकार राख्नुहुन्छ ।

अनुसन्धानको उद्देश्य

यो अनुसन्धान नेपालमा मातृ स्वास्थ्य सुधारमा महिला स्वयं सेविकाको (म.स्वा.से) भूमिका लगायत म.स्वा.से. मार्फत सेवा लिने आमाहरूको साथै स्वास्थ्य कर्मीको प्रतिक्रिया बुझ्नको लागि गरिएको हो । समुदायमा मातृ स्वास्थ्य सेवा प्रदान गर्ने म.स्वा.से. लगायत सरोकारवालाहरूको विचार र अनुभवको साथै उनिहरूको सम्बन्ध बुझिने प्रयत्न गरिएको छ ।

यो अन्तर्वाता पूरा हुन ४५-६० मिनेट लाग्नेछ तर तपाइलाई थप समय चाहिएमा लिन सक्नु हुनेछ ।

किन मलाई छानिएको ?

तपाइलाई यस अन्तर्वातामा भाग लिन अनुरोध गर्नुको कारण तपाइ मातृ स्वास्थ्य सेवा प्रदान गर्दै हुनुहुन्छ । तपाइ जस्तै अरू व्यक्तिहरू समक्ष पनि यि प्रश्न राखिने छन ।

के मैले भाग लिन जरूरी छ ?

यो अनुसन्धानमा भाग लिने अथवा नलिने भन्ने निर्णय तपाइमा निहित छ । यदि तपाइले यस अनुसन्धानमा सहभागी हुने निर्णय गर्नु भएमा तपाइलाई यो जानकारी पत्र दिएर केहि प्रश्नहरू सोधिने छन् ।

मैले यस अनुसन्धानमा भाग लिए भने के हुन्छ ?

तपाइको कार्य अनुभवका बारेमा केही जानकारी लिनेछ । तपाइको यो अन्तर्वाता रेकर्ड गरिनेछ ।

कसरी रेकर्ड भिडीयाको प्रयोग गरिनेछ ?

तपाइको अडियो रेकर्डलाई यस अनुसन्धानको प्रयोजनका लागि मात्र प्रयोग गरिनेछ । जस्तै, कक्षा र सम्मेलन, अन्य अवस्थामा यिनको प्रयोग गरिने छैन । यो अनुसन्धान बाहिरका मान्छेलाई यो रेकर्डिङ उपलब्ध हुने छैन । यस रेकर्डिङको केही भाग अनुसन्धानका क्रममा जस्ताको तस्तै राख्न सकिनेछ तर त्यसबाट तपाइहरूको नाम अथवा चिनारी हटाइने छ ।

यस अनुसन्धानमा भाग लिनुका संभावित बेफाइदा

साधारणतः यस अनुसन्धानमा भाग लिनुको कुनै बेफाइदा छैन तर तपाइको कार्य अवधिमा नराम्रो अनुभव भए त्यसको सम्भनाले तपाइलाई केही नराम्रो अनुभव दिन सक्ने छ ।

यस अनुसन्धानमा भाग लिनुको फाइदाहरू

जब कि यस अनुसन्धानमा भाग लिनुको कुनै प्रत्यक्ष फाइदा छैन, यो आशा गरिन्छ कि यस खोजले समुदायमा म.स्वा.से प्रदान गर्दा त्यसलाई सहज बनाउने तत्वहरू साथै त्यसमै परी आउने अप्ठ्याराहरूका साथै उनीहरूको कार्य अनुभव र उनीहरूलाई सो कार्य गर्न प्रेरित गर्ने तत्वहरूको बारेमा जानकारी हासिल गर्न सजिलो हुनेछ । यसले नीति निर्मातालाई समुदायमा मातृ स्वास्थ्य सेवा कार्यक्रम सुधार गर्न सहज बनाउने छ ।

केही जिज्ञासा भएमा

केही जिज्ञासा भएमा तपाइहरूले मेरो फोन नं ९८४१५२८५०५ (सरिता पाण्डे) मा सम्पर्क गर्नु होला । यदि मेरो प्रतिक्रिया तपाइहरूलाई चिन्त नबुझेमा मेरा सुपरिवेक्षक प्राध्यापक पदम सिम्खडा अथवा नेपाल स्वास्थ्य अनुसन्धान परिषदमा सम्पर्क गर्न सक्नु हुनेछ ।

अन्त्यमा,

यो अनुसन्धानमा आएका प्रतिक्रियाहरू पूर्ण गोपनीयता राखिने छ ।

यो अनुसन्धान २०७२ सालको पुष मसान्त भित्र सकिने अनुमान छ । जसको एउटा प्रतिलिपी नेपाल स्वास्थ्य अनुसन्धान परिषद र सम्बन्धित स्वास्थ्य संस्थामा बुझाउने छु ।

यो अनुसन्धानलाई नेपाल स्वास्थ्य अनुसन्धान परिषदबाट अनुमति प्राप्त छ । सेफिल्ड विश्वविद्यालयले यस अनुमतिलाई मान्यता दिने भएकाले पूनः अनुमोदनको जरूरी हुदैन ।

थप जानकारीका लागि

सरिता पाण्डे, कुपण्डोल, ललितपुर (+९७७-९८४१५२८५०५) वरिष्ठ प्राध्यापक पदम सिम्खडा, (सेफिल्ड विश्वविद्यालय +४४१०१ ११४२२२०७५२)

यो जानकारी पत्र पढ्न (सुन्न) समय दिनु भएकोमा धन्यवाद ।

सहभागी अनुमति पत्र

अनुसन्धानको शिर्षक

नेपालको मातृ स्वास्थ्य सुरक्षा तथा महिला स्वास्थ्य स्वयं सेविकाको (म.स्वा.से) भूमिका

अनुसन्धान कर्ताको नाम

सरिता पाण्डे

सुपरिवेक्षक

पदम सिम्खडा, इडविन भा । तेजलिंगेन

सहभागी चिनारी पत्र

१. मैले यो अनुसन्धान सम्बन्धि सहभागी जानकारी पत्र पढे र यस सम्बन्धि प्रश्नहरू राखे ।

२. मेरो सहभागीता स्वेच्छिक हो र म कुनै पनि बेला यो अनुसन्धानमा भाग लिनबाट पछि हट्न सक्छु ।

३. मेरा विचारहरू अत्यन्तै गोपनीय राखिनेछ भन्ने मैले बुझेकि छु । मेरो व्यक्तिगत चिनारी बिना मेरो विचारहरू यस अनुसन्धान कर्ताहरूले प्रयोग गर्न पाउने छन् । मेरो नाम यस अनुसन्धानसंग जोडिने छैन ।

४. मेरा विचारहरू भविष्य त यस अनुसन्धान सम्बन्धि अध्ययन तथा प्रकाशनमा प्रयोग गर्न र पूर्ण सहमत छु ।

५. म यो अनुसन्धानमा सा भागी हुन पूर्ण सहमत छु ।

सहभागीको नाम

मिती

हस्ताक्षर

अनुसन्धान कर्ताको नाम

मिती

हस्ताक्षर

सरिता पाण्डे

Appendix 7 List of Medicines, Vitamins and Supplements

(Provided by Female Community Health Volunteers in this study)

Albendazole – Tablet used for de-worming, a single dose of albendazole 400 mg is given in the first four months of pregnancy.

Chlorhexidine – Drug applied to the umbilical cord of new-borns to prevent infection through the umbilical cord.

Cotrimoxazole – Antibiotic for the treatment of acute respiratory infections.

Depoprovera injection – Injectable family planning spacing method.

Digene – Antacid for symptomatic relief of heart burn, gastritis or peptic ulcer.

Filariasis medicine – Annual mass drug administration of two drug regimens (Diethylcarbamazine Citrate & Albendazole) to interrupt transmission of filariasis.

Iron & folic acid – Supplementation of iron and folic acid tablets to pregnant and lactating women to reduce anaemia.

Metronidazole – An antibacterial medicine used to treat various infections.

Misoprostol – An oral medicine given to women to promote uterine contraction after home delivery to prevent haemorrhage.

Paracetamol – Painkilling (analgesic) medicine often given to reduce any pain or fever.

Oral contraceptive pills – An oral medicine given to avoid pregnancy and for birth spacing.

Vitamin A supplementation – A supplementation given to new mothers to reduce night blindness caused by nutritional deficiencies.

Vitamin B complex – A vitamin commonly provided to relieve weakness.

Source: (Department of Health Services (DoHS), 2014)

Appendix 8 DDP (Doctoral Development Programme) Portfolio

Conference Presentations

Oral Presentations

Panday, S., Simkhada, P., van Teijlingen, E. 2015, *Role of female community health volunteers in maternal health improvement in Nepal*. London, 13th Nepal study day organised by Britain Nepal Academic Council in SOAS, 17th April 2015.

Background: Community Health Workers (CHW) known as Female Community Health Volunteers (FCHVs) are providing maternal and child health services in Nepal. This study highlights how CHWs are delivering innovative maternal health services in remote villages of Nepal.

Methods: Between May and September 2014, semi-structured interviews were conducted with 20 CHWs, 26 local women and 11 local health workers including four focus group discussions with 19 CHWs.

Results: The majority of CHWs (n=39) had been working for more than 10 years. The main role of the FCHVs is providing local access to healthcare services. Being mothers themselves and having been recruited from their own community, FCHVs are in a unique position to understand pregnant women and mothers in their community. While most of these FCHVs had no opportunity to access health information during their own pregnancies and childbirth, they are attempting to make a difference in society by creating greater health awareness of the importance of nutrition, health check-ups and hospital deliveries including family planning. They disseminate this information through local activities such as folk songs composed of relevant maternal health messages and meeting with new mothers with gifts full of nutrient food. They share information with mothers and pregnant women during monthly meetings and refer them on if necessary. In some places, FCHVs were even conducting deliveries as there were no immediate facilities. Generally it is poorer women who utilised FCHVs' services.

Conclusion: FCHVs have a substantial role in creating greater health access for rural women in Nepal. They provide health services to some of the most disadvantaged groups of women in the country. Efforts should be focused on providing FCHVs with context specific support to enable them to fulfil their role more effectively.

Panday, S., Simkhada, P., van Teijlingen, E. 2015, *Role of female community health volunteers in sexual reproductive health promotion in Nepal*. Liverpool, Centre for Public Health, Liverpool John Moores University, 1st April 2015.

Background: Community health workers known as Female Community Health Volunteers (FCHVs) are the first point of contact for Nepali women accessing reproductive health services in the villages. This paper highlights the importance of FCHVs in early pregnancy detection and referral.

Methods: Between May and September 2014, semi-structured interviews were conducted with 20 FCHVs from two districts to study how FCHVs provide maternal health services to the women. Four focus group discussions were held with 19 FCHVs. In addition, interviews were conducted with women of reproductive age and other reproductive health service providers on their perceptions of the FCHVs' services.

Results: Apart from regular distribution of family planning measures, the researcher found that the FCHVs also administered urine pregnancy tests, offered education, and referred women to antenatal or safe abortion services. FCHVs were trusted by women and they often provided confidential services to them appropriate to local cultural norms. FCHVs were an easily accessible resource in the rural areas where health centres tended to be too far away for most women. FCHVs shared information either during their monthly mother's group meetings or whenever they met each other.

Conclusions: FCHVs are suitably placed to advise their communities on safe abortion care because they come from the same community. With their skills and materials for early pregnancy detection, FCHVs were able to make referrals to reproductive health services. To improve the work of FCHVs the emphasis should be on making the service available, providing better supplies and skills training such as record keeping.

Panday, S., Simkhada, P., van Teijlingen, E. 2015, *Community health workers: mobilising communities through mother's group to improve maternal health in Nepal*. Sheffield, SIID (Sheffield International Institute for Development) 6th Annual Postgraduate Conference, 12th March 2015

Background: community Health Workers (CHW) known as Female Community Health Volunteers (FCHVs) are providing maternal and child health services in Nepal. This paper highlights the functioning of CHWs to improve maternal health in the villages of Nepal.

Methods: Between May and September 2014, semi-structured interviews were conducted with 20 CHWs including four focus group discussions with 19 CHWs.


Results: All CHWs (n=20) interviewed were female and most of them were working for more than 10 years. Their main role was to create awareness through regularly conducted mother's group for health meeting where women gathered together to discuss relevant maternal and child health issues. CHWs provided education and awareness services including preventive, promotive and curative services whilst many CHWs showed greater interest in providing medicines to the people. CHWs showed greater interest in their work in areas where partner organisations were supporting them with finance, training and supervision in the group meeting. In other places, CHWs are working with government support alone. The most common attribute across the group was running a saving credit to attract women participation in the meeting. CHWs themselves had support from their home and they were motivated to their work. Some CHWs were aged and illiterate which caused difficulty to write and report their activities from the meeting.

Conclusions: While CHWs' role in mobilisation of women in villages of Nepal is undoubtedly important, it requires regular training in facilitating the group meeting, financial support and monitoring the group activities for the success of mother's group meeting.

Poster Presentations


Panday, S., Van Teijlingen, E., Simkhada, P. and Bissell, P., 2016. 'Female Community Health Volunteers providing maternal health services in Nepal: health system support and barriers', *Fourth Global Symposium on Health Systems: Resilient and responsive health systems for a changing world Research*. Vancouver, Canada. 14-18th November 2016.

Panday, S. 2014, 'Review of sociocultural factors affecting maternal mortality in Nepal', *Exploring workforce and quality of care in maternal and new-born health*. Bournemouth University, Bournemouth, The UK. 5th February 2014. Available at: https://drive.google.com/file/d/0B_syg_izYpBkZnFBTDhXR1M1YWM/edit?pli=1




The University
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School of
Health and
Related
Research



Bournemouth
University



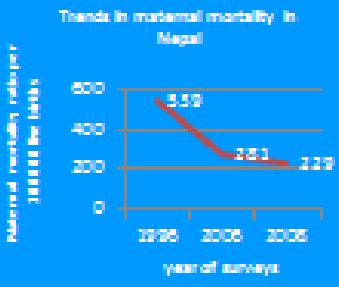
Review of socio-economic factors in reducing maternal mortality in Nepal

Sarita Panday^a, Padam Simkhada^a (PhD), Prof Edwin van Teijlingen^b
^a-University of Sheffield, ^b- Bournemouth University

Background

Nepal is one of the few countries, which has reduced its Maternal Mortality Ratio (MMR) by three-fourth between 1996 and 2011 with overall 78% reduction. As facility based delivery and skilled birth attendant at delivery are still very low in Nepal, socioeconomic factors might have played role in reducing MMR.

Trends in maternal mortality in Nepal



Year of survey	Maternal mortality ratio per 100,000 live births
1996	530
2006	251
2011	129

Aim

This narrative review aims to identify studies of socioeconomic factors associated with maternal mortality in Nepal.

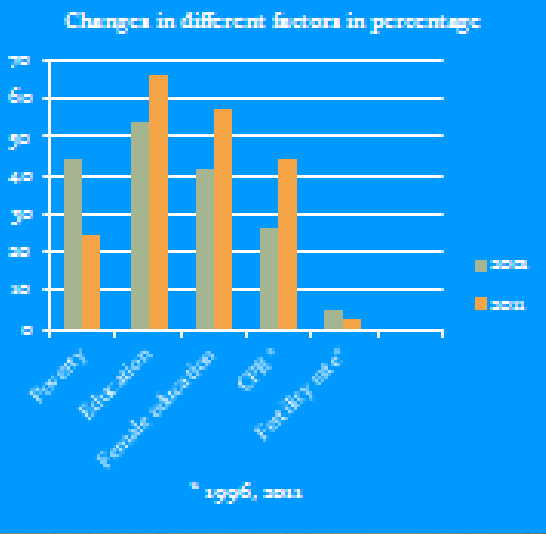
Methods

A systematic search of English journals conducted in Medline, Embase, Scopus, Web of Science, Popline, ASSIA, and Google Scholar including grey literature from January 1995 to September 2013. Both qualitative and quantitative studies were selected where maternal mortality was measured as an outcome.

Results

Total 38 papers including 6 government documents were included in the review. Key factors are highlighted.

Changes in different factors in percentage



Factor	1996 (%)	2011 (%)
Poverty	45	35
Education	55	65
Female education	42	58
CRR*	35	45
Facility use*	10	5

* 1996, 2011

Social factors

- Age at marriage increased
- Women Autonomy increased
- Community volunteers roles increased

New Policy and program

- Safe motherhood policy/program
- Reproductive health strategy
- Safe abortion policy /program
- Free health care policy/program
- Skilled birth attendant strategy
- Safe delivery incentive program

Conclusion

Literature review showed association of socioeconomic factors like income, education and women empowerment and maternal mortality though the results were mainly from survey studies. Changes in socioeconomic factors have helped to achieve MMR reduction.

For further information, please visit <http://www.sheffield.ac.uk/wharr/actions/ph/placeholder/panday>
 Sarita Panday email s.panday@sheffield.ac.uk

Panday, S., Van Teijlingen, E., Simkhada, P. and Bissell, P., 2016 'Factors that promote or hinder maternal health service provision by female community health volunteers in rural Nepal', *Britain-Nepal Academic Council (BNAC) 14th Annual Nepal Study Days*. Liverpool, England. 14-15th April 2016. (Unpublished). Available at: <http://eprints.bournemouth.ac.uk/23435/>

Factors that promote or hinder maternal health service provision by female community health volunteers in rural Nepal

Sarita Panday, The University of Sheffield

Introduction

Nepal reduced its maternal mortality substantially and achieved the millennium development goal despite its poor developmental status. One group that has possibly contributed to this reduction are the Female Community Health Volunteers (FCHVs) who are widely mobilised in the provision of maternal health services by government and non-governmental organizations, but their voices are seldom heard. This study examines the factors that promote or hinder the volunteers to provide maternal health services from the perspectives of service users, local health workers and volunteers themselves.

Materials and methods

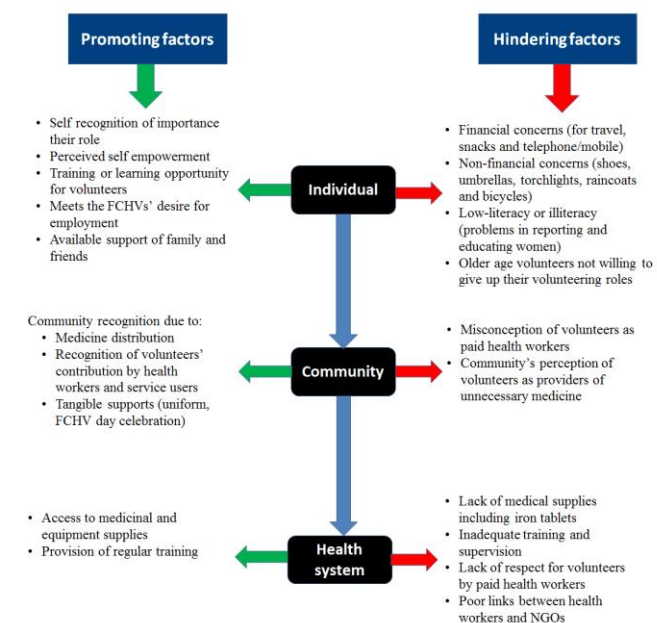
- Between May and September 2014:
- Semi-structured interviews were conducted with 20 FCHVs, 26 local women and 11 local health workers.
 - Four focus group discussions were held with 19 FCHVs.
 - Field notes were taken.



Figure 1 Study sites (indicated by arrows)
Source: e-Pop Info Nepal (<http://www.e-pop.gov.np>)
<http://www.e-pop.gov.np/index.php/nati-onal>



Findings



Recommendations



In order to make best use of FCHVs, we need to understand what drives FCHVs, and what creates the barriers in their daily practices. This is important specially if Nepal hopes to engage its FCHVs in new health projects and interventions.

Conclusions

Efforts should be focused on recognising the aspects that make the role of FCHVs satisfying and reducing the hindrances so as to enable them to fulfil their role more effectively.

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Blogs

Panday, S. 2015, *In Nepal, community health volunteers increase access to reproductive health supplies*. [Online]. Boston, MA, Maternal Health Task Force (MHTF) Blog. Available from: <http://www.mhtf.org/2015/04/21/nepal-community-health-volunteers-increase-access-reproductive-health-supplies/>

Nepal has experienced a substantial reduction in maternal mortality in recent years. Credit has been given to community health workers known as Female Community Health Volunteers (FCHVs) for this achievement. However, Nepal still has a high rate of maternal mortality at 170 deaths per 100,000 live births and unsafe abortion is one of the main causes of these deaths. This blog is aimed to promote the function of FCHVs in pregnancy testing and making referrals in villages of Nepal.

FCHVs are the first source of contact for maternal and child health services in the rural communities of Nepal. In some of the poorer villages, FCHVs are the sole source of health care. While some of these FCHVs have been providing services for the last two and half decades, others have been recruited recently. Apart from health advice and referral for antenatal care, FCHVs distribute temporary contraception such as condoms and pills to both men and women of reproductive age. This contraception is provided free along with education and referral for long-lasting or permanent methods of family planning.

Over the years, the roles of FCHVs have been extended. Currently FCHVs play an important role in undertaking urine pregnancy tests and referring women for safe abortion services if required. As a part of my PhD research I visited Dhading, a rural community. I found women contacted FCHVs if they required confirmation of their pregnancies. The pregnancy test kits were obtained by the FCHVs either from a health centre or a local pharmacy. If women were pregnant, FCHVs usually referred them for antenatal care check-ups. However, if a pregnancy was unintended, then FCHVs would provide information on emergency contraceptive pills and availability of safe abortion services. Women would receive confidential services if required.

Abortion was legalized in Nepal in 2002 and was practiced from 2004. However, the abortion service was initially limited to cities. From 2009, FCHVs were enabled to inform women on safe abortion services in some communities of Nepal. FCHVs were, and still are, trusted enough to be approached by women.

FCHVs are able to be effective in delivering these services because they belong to the same community that they are serving. They are in a position to understand the needs of local women as they have experienced the same needs themselves. Information on contraception and safe abortion is shared by FCHVs whenever they meet with women: be it at work or be it at home. Besides the government health care system, almost all private health organizations also utilize FCHVs to deliver their health interventions in rural communities.

It is the availability and accessibility of information on contraception and safe abortion services in the villages by the FCHVs that has made a real difference. In my opinion, learning from these small villages can be up scaled to other villages of Nepal that lack access to information on safe abortion services. As FCHVs are highly trusted in the community, they can play an effective role in improving access to reproductive health information. For Nepal, this is the right moment to enable and support the FCHVs by training them to identify pregnancies using simple urine pregnancy test kits. It is important to ensure FCHVs have the urine pregnancy test kits and temporary contraceptive measures with them all the time so as to be able to offer services to women when required, thus helping to improve maternal health.

Panday, S. 2015, *Female Community Health Volunteers (FCHV) providing social justice for Nepalese women*. [Online]. Sheffield, The Sheffield Institute for International Development (SIID). Available from: <http://siid.group.shef.ac.uk/blog/female-community-health-volunteers-fchv-providing-social-justice-nepalese-women/>

Social injustices develop when there are preventable differences in health within a population. Nepal, one of the poorest countries in South Asia, experiences such health inequalities; maternal and child mortality especially are alarmingly high. Despite this maternal mortality dropped substantially over the past two decades compared to similar countries in the region. This improvement is partly due an increased health awareness among women, delivered mainly through community health workers known as Female Community Health Volunteers (FCHVs). This blog introduces FCHVs and their roles in bringing greater social justice to Nepalese women. I draw examples from my qualitative Ph.D. research into the FCHVs' role in maternal health improvement in Nepal.

Social injustices both arise from health inequalities but also cause them. Since the early 1980s, Nepal attempted to address these inequalities by deploying large numbers of trained FCHVs as a part of nationwide programme. This programme helped to ensure access to primary healthcare services, including family planning, for its general population. These FCHVs were mainly trained to provide some basic maternal and child health services, which helped to address broader social determinants of health thus leading to greater social justice for women. In the next paragraphs, I will point out three main roles of FCHVs which are helping to achieve greater social status: increasing access to health care services; dealing with broader social issues; and engaging in their own self-development over the period of time.

The main role of the FCHVs is that of providing local access to services in places where there is no easy access to health care services. FCHVs have fulfilled their societal roles by providing dedicated services for maternal and child health improvement within their community irrespective of gender, religion, education, caste or ethnicity. They view their work as a commitment and responsibility to their society and help to bridge the gap between their community and health centres. These FCHVs come from the local community where many have witnessed child deaths and maternal deaths in the past. They feel that these events should be preventable in their communities.

While most of these FCHVs had no opportunity to access health information during their own pregnancies and childbirth, they are attempting to make a difference in society

by creating greater health awareness in understanding the importance of nutrition, health check-ups and hospital deliveries, and family planning. They disseminate this information to mothers and pregnant women during monthly meetings in their local community. Being mothers themselves and having been recruited from the same community, FCHVs are in a unique position to understand other pregnant women and mothers in their community.

Furthermore, it is important to note that it is the poorer groups of women who usually utilise the services of FCHVs. For example, although technically FCHVs are not supposed to conduct child deliveries, I found that they do at times and, in doing so, they bridged a gap in the poor health care provision for those least able to afford it. From this, it is obvious that their gender status allows them to fulfil their role in the community, thereby somewhat contributing towards social justice for women in a society mainly dominated by men. I believe that efforts should be focused on providing FCHVs with context specific training and adequate support, supplies and incentives to enable them to fulfil their role to a greater extent. This is especially important in cases where FCHVs themselves are poor and where there is no immediate access to health centres.

Another important role of FCHVs is supporting women to get justice through the FCHVs' involvement in non-health related activities. FCHVs have been widely involved in social activities and are actively mobilised by both public and private organisations. It is often easier to reach the community through the FCHVs as they are recognised and respected within their community. Furthermore, having them in any community program helps the programme to be more successful. These FCHVs are directly connected to the people and are widely involved in addressing issues such as gender based discrimination and violence against women, including the trafficking of girls and intimate partner violence.

FCHVs are often involved in community awareness activities in these areas through community education and are also asked to report any suspected cases in this regard. Usually, community based organisations train them to recognise and report these issues, which help them to provide some justice to the women who are vulnerable. However, these services are limited to specific settings only. In many places, FCHVs themselves had suffered gender based injustice within their families, but were brave enough to find a way to work outside their home and fight against these injustices.

The third and perhaps most important part of their role is the self-transformation of FCHVs. The work facilitates FCHVs to work outside and become exposed to the wider community, thus enabling them to learn from each other. Regular meetings provide them with the opportunity to see their friends with whom they could meet, talk and share their concerns while giving them a reason for being away from their daily household chores. The role also provided them a level of freedom which otherwise would not have been possible in a context where women are generally confined within their homes.

It is of great importance that Nepal has developed a network of more than 50,000 women across the country that enjoys such opportunities, and contributes to their basic human rights. Furthermore, the training, education, and some financial and nonfinancial incentives (such as social respect and recognition) have brought great changes to the lives of these women, while providing new opportunities for social engagement and new roles within the community. This in itself is a great achievement and a route to empowerment for these women, especially in a social context in which the majority of women would not be expected to have a say in the decision-making process, even within their own family.

In conclusion, FCHVs have a substantial role in creating greater social justice for women in Nepali society. They provide health services to some of the most disadvantaged groups of women in the country; secondly they are working for the greater social cause through their involvement in non-health activities and finally they themselves are benefiting from the social status and opportunities for engagement within their community. Other low-income countries should learn from the experience in Nepal and investigate the possibility of similar volunteers to improve social justice.

Doctoral Development Programme Training

Please note that 'Credits' refers to the value of the module, and does not indicate a module result.

PhD/Health & Related Res FT Level of Study: 1

Unit Code	Unit Name	Semester/Session	Credits
<u>FCM6100</u>	Research Ethics and Integrity	GRAD YR 12	0
<u>GSC640</u>	Ideas to Enterprise	GRAD YR 12	0
<u>HAR6045</u>	Further Statistics for Health Science Researchers	SPR SEM 12	15
<u>HAR6531</u>	Qualitative Research Design and Analysis	SPR SEM 12	15
<u>HAR675</u>	Key Issues in Global Public Health	AUT SEM 12	15

PhD/Health & Related Res FT Level of study: 2

Unit Code	Unit Name	Semester/Session	Credits
<u>GSC621</u>	Teaching Small Groups	AUT SEM 12	0

PhD/Health & Related Res FT Level of study: 3

Unit Code	Unit Name	Semester/Session	Credits
<u>ELT6050</u>	Thesis Writing: Principles and Practice	SPR SEM 14	5
<u>GSC620</u>	Sheffield University GRAD School (SUGS)	SPR SEM 14	5

PhD/Health & Related Res FT Level of study: 4

Unit Code	Unit Name	Semester/Session	Credits
<u>HAR6501</u>	Systematic Reviews and Critical Appraisal Techniques	ACAD YR 12	15