Healthcare Professionals' Assessment of Pregnant Women's Psychological Health in Indonesia: A Qualitative Case Study

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In memory of my mother; a caring midwife and a loving mum

"Paradise lies beneath the feet of mothers" (Prophet Muhammad PBUH)

"A person came to the Messenger of Allah and asked, "Who among people is most deserving of my fine treatment?" He said, ***"Your mother"****. He again asked, '"Who next?"* ***"Your mother"****, the Prophet replied again. He asked, "Who next?" He (the Prophet) said again,* ***"Your mother"****. He again asked, "Then who?" Thereupon he said, "Then your father". (Abu Hurairah)*

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This thesis is dedicated to all women around the world who deserve equal healthcare, without any exception.

Abstract

Introduction: Poor psychological health during pregnancy can contribute to adverse outcomes on mother's health, her newborn baby and family when it is left unrecognised and untreated. Assessment for psychological health during pregnancy is recommended by the World Health Organisation (WHO) and has been part in maternity care in several Higher Income Countries (HICs). The psychological health assessment during pregnancy could provide opportunity for pregnant women to receive appropriate care and treatment if needed. However, such assessment is underdeveloped in Lower-Middle Income Countries (LMICs). This research is the first study in Indonesia which illuminate pregnant women's psychological health assessment from the perspective of healthcare professionals and women in Indonesian primary healthcare settings during a routine antenatal booking visit.

Method: A qualitative case study approach with 26 in-depth interviews were conducted involving 12 midwives, 2 General Practitioners (GPs), a psychologist and 11 pregnant women across two study sites. Interview data were analysed using a thematic analysis. Interpretation was strengthened by non-participant observations of practice, field-notes and documentary analysis.

Findings: Pregnant women expected healthcare professionals to pay more attention to their psychological health during the routine antenatal visit. Women's health and their social factors such as marriage life, financial situation and their relationship and support from spouse and families had critical roles in shaping their psychological health during the pregnancy period. Women were concerned about the lack of privacy and midwives' attitudes during the assessment, which hindered disclosure of their personal feelings. Healthcare professionals (HPs) were aware that pregnant women's psychological health need to be assessed appropriately. However, HPs felt ill-prepared to perform a sensitive and thorough enquiry related to pregnant women's psychological health. A biopsychosocial approach in health and illness is used to interpret the findings.

Conclusion and recommendation: This study have led to a model development which incorporates psychological, sociocultural and religious values that influence pregnant women's views on their life difficulties and psychological health. A strong influence of Indonesian sociocultural and religious context also influenced healthcare professionals' routine practice in psychological health assessment during antenatal visit. Healthcare professionals' sociocultural awareness in perinatal mental health should be improved to empower women, their families and communities to optimise women's pregnancy journey. Healthcare professionals need to be equipped with adequate training to improve their mental health literacy. Evidence based healthcare pathways need to be developed within the Indonesian health system to meet the women's psychological needs during their perinatal period.

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List of Abbreviations

ADoH	Australian Department of Health
APGAR	American Paediatric Gross Assessment Record
BAPPENAS	Badan Perencanaan dan Pembangunan Nasional (National Plan and Development Board)
BDI	Beck Depressive Inventory
CS	Caesarean Section
EPDS	Edinburgh Postnatal Depression Scale
GNI	Gross National Income
HADS	Hospital Anxiety and Depression Scale
HICs	Higher Income Countries
HIV	Human Immunodeficiency Virus
ICM	International Confederation of Midwives
IMA	Indonesian Midwives Association
IMC	Indonesian Medical Council
IMoH	Indonesian Ministry of Health
ISB	Indonesia Statistic Board
PMH	Perinatal Mental Health
LMICs	Lower and Middle Income Countries
NICU	Neonates Intensive Care Unit
SHREC	School of Healthcare Research Ethics Committee
SRQ	Self-Reporting Questionnaire
UN	United Nations
WHO	World Health Organization

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Chapter 1 Introduction

Mental health is often perceived as a difficult subject to recognise and talk about. As a woman, mother, midwife and researcher I found myself increasingly drawn towards trying to better understand why that was the case. In my professional role as an educator, midwife and advocate for mental health services in Indonesia, I have used this thesis journey to explore aspects of mental health in depth. In particular, I have been interested in the issue of mental health assessment procedures during early pregnancy, as appropriate access to care can influence women's prenatal mental health. The subject of mental health assessment during pregnancy had attracted me as there is only a limited number of academic publications on this topic in my country of Indonesia. I have observed that in Indonesia subjects such as maternal mental health are rarely discussed by healthcare providers, including those working in the midwifery care services.

Based on the World Health Organization (WHO) the definition of 'perinatal' is from 22 weeks gestation of pregnancy to the seventh day after childbirth (WHO, 2016). There are variations in the definition of 'perinatal', as others suggest a period from 24 weeks gestation to either 7 or 28 days after birth (National Health Service/(NHS, 2011). However, it has been suggested that the impact of perinatal mental health could extend to the end of the first postnatal year (Alderdice et al., 2013). The topic 'perinatal mental health issues' refers to mental health problems experienced by women in their pregnancy and the first postnatal year (Sharp, 2009). Therefore, for consistency within this thesis, 'perinatal' period refers to pregnancy and the first postnatal year.

The focus of this study emerged initially from personal reflections on clinical practice and my concerns regarding perinatal mental health issues in Indonesia. The term 'mental health' is referred as a state of balanced development which enables individuals to cope with normal distress, work productively and contribute harmoniously within society (WHO, 2014b). In this study, the term mental health is used interchangeably with 'psychological health' as both terms are found in contemporary literature.

This chapter sets the scene by presenting the background, geographic and social contexts, and rationale for this PhD study. The clinical context of the current maternal mental health assessment in Indonesia is also described. Furthermore, the bio-psycho-social model of health and illness, as the overarching viewing lens

of this study, leads to the study's aim, its research questions and its objectives. The structure of the thesis is provided, together with a brief explanation of each chapter.

1.1 Background

Depression and anxiety are the most common mental disorders amongst women during their reproductive age. Both disorders have been widely reported to cause adverse outcomes during pregnancy and childbirth (WHO, 2011). The prevalence of depression and anxiety in the perinatal period in higher income countries (HICs) is 10% -15%, whilst its prevalence in lower and middle income countries (LMICs) was reported to be higher, ranging from 10% - 41% (WHO, 2008). In Indonesia, the most recent estimate of the prevalence of postpartum depression is 22% (Edwards, G.D. et al., 2006), yet there appears to be no data reporting the prevalence of antenatal depression and anxiety in Indonesia.

Antenatal depression and anxiety disorder have been found to be associated with spontaneous preterm birth, or birth occurring at less than 37 weeks (RR=2.32, *p*=0.015) (Rondo et al., 2003), as well as with preeclampsia (OR= 2.5 for depression and OR= 3.2 for anxiety, *p*=0.05) (Kurki et al., 2000). A study conducted in Australia reported that among 146 women, 34 were classified as having experienced anxiety disorder (Crandon, 1979b). Incidences of complications were higher in a group of pregnant women with anxiety when compared to those with no anxiety disorder symptoms. It was reported that more than 25% women with anxiety had preeclampsia, 47% had forceps delivery, and more than 25% experienced prolonged and precipitated labour (Crandon, 1979b). It has been suggested that antenatal depression was associated with an increased risk of epidural analgesia (RR- 2.56, *p*=0.05), and a *Caesarean section* delivery (*C-section*) (RR= 2.28, *p*=0.05) (Chung et al., 2001).

Related to neonatal outcomes, it was found that the risk of low birth weight (≤2500g) was higher in depressed and/ or anxious pregnant women than that in non-depressed and/ or non-anxious pregnant women (RR= 1.97, *p*= 0.019) (Rondo et al., 2003). Evidence suggests that neonates born to depressed and anxious mothers are more likely to be compromised at birth. For example, they are reported to have higher Neonatal Intensive Care Unit (NICU) admissions (RR= 2.18, *p*= 0.05) than that from mothers who did not show symptoms of depression and/ or anxiety during their pregnancy (Chung et al., 2001).

Given the various potential morbidities for both mothers and infants during the perinatal period caused by mental illness, early psychological health assessment, particularly during pregnancy is an important strategy to reduce risk. Psychological health assessment could promote well-being for both mother and child and is essential for women to be able to have a positive experience in their perinatal period (Alderdice et al., 2013). Recent evidence from a low and middle income country suggested that by performing screening for mental illness or assessing psychological health in pregnant women as part of their routine care, may help affected women to access prompt and effective treatment for their psychological illness (Honikman et al., 2012; Vythilingum et al., 2013).

A screening tool based on WHO involves a list of questions relating to associated factors, together with a scoring system, to determine whether a pregnant woman can be classified as typically high risk or low risk (WHO, 1998). The aim of the screening tool is to predict pregnant women who may be 'at risk' so that an effective action to optimise maternal and infant health outcomes can be delivered. The screening for mental health problems, such as depression, during pregnancy and the postpartum period is already a part of maternity care in many developed countries (WHO, 2008). For example, the United Kingdom (UK) established the first guidelines for antenatal and postnatal mental health in 2007 to improve the care given to women who experience mental illness during their perinatal period (NICE, 2014). Similarly, in 2008 the Australian government, together with the state and territory governments, started the national perinatal depression initiative (Australian Department of Health (ADoH, 2008)). This initiative included the provision of routine and universal screening to identify depression for all women during their perinatal period. The screening instrument employed was the Edinburgh Postnatal Depression Scale (EPDS); once during pregnancy and again about four to six weeks after childbirth.

Some risks associated with mental distress during pregnancy have been identified in LMICs. These risks include: i) a history of previous mental illness, ii) unwanted pregnancy, iii) exposure to domestic violence, iv) poor economic conditions, v) poor or no social support and vi) family conflict (Rahman, A. et al., 2003; Rahman, Atif and Creed, 2007; Karmaliani et al., 2009; Mariam and Srinivasan, 2009; Kim, B. et al., 2011; Ola et al., 2011; Akcali et al., 2013; Fadzil et al., 2013; Mall et al., 2014; Kirkan et al., 2015; Castro e Couto et al., 2016).

However, little concern seems to be given to pregnant women's psychological health assessment during their antenatal period in LMICs. This perceived omission

could well be related to the higher number of maternal and neonatal deaths in LMICs. Thus, maternal health programmes in LMICs are focussed on preventing maternal deaths. One example of such a programme is the 'Safe Motherhood Initiative' which was firstly launched in 1987 in Nairobi by the three (United Nations) UN agencies; United Nations Population Fund (UNFPA), the World Bank and WHO (Sai, 1987). This initiative has been implemented in many LMICs and aimed to reduce maternal mortality by 50% by the year 2000 (Mahler, 1987).

In 2008, the WHO published a report of maternal mental health, child health and development in LMICs. This report also provided a manual for the assessment, prevention, early intervention and treatment of mental health problems during the women's perinatal period; an initiative which can be relatively easily implemented in LMICs (WHO, 2008). The manual included an enquiry process using various validated instruments and validated questions to recognise symptoms associated with mental health problems being experienced during the woman's perinatal period. Subsequently, the WHO published "Thinking Healthy: a manual for psychosocial management of perinatal depression" (WHO, 2015). This document is a manual to guide training for community health workers and mental health non-specialists on how to support mothers with depression, including information to facilitate the management of perinatal depression. The manual is designed to help integrate mental health into maternal and child health care programmes in primary care settings. (WHO, 2015).

1.2 Research context

This section presents brief information about Indonesia, including its geographical, socio-demographic and economic conditions. The researcher's reflections on perinatal mental health service provision in Indonesia are also presented.

1.2.1 Geographical, social and economic conditions

Indonesia is a country in South East Asia, situated between the Asian and Australian continents, and extending between the Indian ocean and the Pacific ocean (CIA, 2018). Indonesia is the world's largest archipelagic country with 13,466 islands registered in the 2012 United Nations (UN) Conference on the Standardisation of Geographical Names (Hidayat, 2017). The five largest islands are Java, Sumatra, Borneo (shared with Malaysia and Brunei Darussalam), Sulawesi and Papua (shared with Papua New Guinea) with Java being the most densely populated island (CIA, 2018).

Indonesia is administratively divided in to 31 provinces, 1 autonomous province (Aceh), 1 special region (Yogyakarta) and 1 national capital district (Jakarta) (ISB, 2018). Based on the results of the Indonesia Population Projection 2010-2035, the Indonesia population in 2017 was 261.8 million (Indonesian Statistics Board (ISB, 2018). This number makes Indonesia the fourth most populous country in the world after China, India and the Unites States (UN, 2017). Indonesia is categorised as a LMIC with 3540 US$ per capita based on the Gross National Income (GNI) (UN, 2017; Bank, 2017). The criteria for assessing “LMICs and HICs” used the World Bank Country Classifications (Appendix A).

There are more than 700 languages used in Indonesia, with the official language being Bahasa Indonesia (CIA, 2018). Indonesia has the largest Muslim population in the world: with the belief populations distributed as follows: Muslim: 87%; Christian Protestant: 7%, Roman Catholic: 2.9% and Hindu: 1.7%. However, Indonesia is a secular country and therefore does not, at present, implement formal Sharia law. Nevertheless, religious values and beliefs strongly influence Indonesians’ culture and lives. The exemplar and discussion of the important role of religious values in Indonesians’ lives will be discussed in Chapter 7.

Indonesia is a multicultural, multilingual and multi-ethnic country. Historically, Indonesia’s culture, linguistic and religions have been shaped by people from India, China, Middle East, Europe (particularly Holland) and Austronesia as historically Indonesia was located along ancient trading routes (Forshee, 2006). The complex cultural mixture evident in Indonesia has been shaped as a result of the long interaction between indigenous beliefs and practices and multiple foreign customs. However, in some places, those beliefs and foreign influences interacted with mainstream religions resulting in unique cultural practices.

Figure 1-1: Map of Indonesia and its provinces

1.2.2 General information on Yogyakarta

This study was conducted in Yogyakarta special region (see the red circle on figure 1-1). This section presents information about Yogyakarta. This include the history of Yogyakarta as the Islamic Kingdom, the geographical and socio-economic condition.

Before the declaration of Yogyakarta as part of the Republic of Indonesia, Yogyakarta consisted of two principalities; the Yogyakarta Sultanate and the Pakualaman Principality. The Yogyakarta Sultanate was established in 1755 whilst the Pakualaman Principality was established in 1813. Under the occupation of the Dutch Government, The Dutch East Indies Government acknowledged the Sultanate and the Principality as two Kingdoms with the right to reign their own government. Yogyakarta is now the only autonomous region in Indonesia, being governed by the 'Sultan' (or King), with the Prince of Pakualaman in the role of Vice Governor. Yogyakarta has been recognised as an autonomous region because both the Sultan and the Prince declared their willingness to become part of the Republic of Indonesia soon after Indonesian independence was proclaimed. The Indonesian government's recognition as the special region also stemmed from its historical importance as the heir of the Islamic Kingdom in Java, namely Mataram, as well as the centre of the independence war against the Dutch colonisers (Sabdacarakatama, 2008).

Yogyakarta is also famous as a centre for Javanese traditional arts and culture and Indonesian higher education. It lies in the southern central part of Java, consisting of one municipality and four districts; Southern, Northern, Western and Eastern

districts. Further there are 78 sub-districts and 438 villages (ISB, 2018). Its capital region is Yogyakarta city. In 2017, Yogyakarta's total population was estimated to be over 3.7 million (ISB, 2018). Most Yogyakarta people live in the Southern, Western and Eastern districts which are categorised as rural areas, compared to the Northern district and the city which are urban.

Figure 1-2: Map of Yogyakarta Special Region

Due to Indonesia's geographical location, the country is vulnerable to earthquakes. On May 27th 2006, Yogyakarta was struck by an earthquake which registered 5.59 on the Richter scale, and caused more than 5700 deaths. The financial losses were also severe, totalling more than US$3.1 billion (BAPPENAS, 2006). The Southern district was the most affected, suffering a large number of damaged or destroyed homes and home-based industries (BAPPENAS, 2006). In 2010, the Merapi volcano, which is located in the Northern district, erupted. Nearly 400 people lost their lives and more than 300,000 thousand people were displaced; accommodated in refugee camps for months, and in some cases years, after the eruption (Surono et al., 2012).

Yogyakarta was selected for this study, in part for practical reasons as the researcher lives in Yogyakarta. The location was also selected as Yogyakarta is the

only province in Indonesia where there are clinical placements for psychologists in some primary healthcare centres. In these primary healthcare centres all pregnant women are given the opportunity to see the psychologist as part of their integrated antenatal care programme. This initiative will be briefly explained in section 1.4.2.

1.3 The integrated antenatal care programme

Based on the latest Indonesian government's Demographic and Health Survey (2012), the maternal mortality rate in Indonesia was as many almost 360/ 100,000 live births. Neonates' death rates were 31 per 1,000 live births and toddlers' (children under 5 year) mortality rates were 28 per 1000 live births (Indonesian Centre Bureau of Statistics (BPS, 2013)). In response to this data, various strategies have been employed by IMoH to focus on improving the quality of the maternal care (IMoH, 2013b).

In 2010 the integrated antenatal care programme was established nationally. As a result of this programme all pregnant women receive care from midwives, clinicians, dieticians, dentists and pharmacists in primary healthcare centres (Indonesian Ministry of Health (IMoH, 2010b)). Within this pathway of care, pregnant women who have national healthcare insurance could benefit from free healthcare, including times of pregnancy and childbirth. Details of the antenatal care pathway are presented in this section, based on the guidelines informing the integrated antenatal care programme (IMoH, 2010b).

1.3.1 Background of the integrated antenatal care programme

In general, factors contributing to maternal deaths in Indonesia can be divided into direct and indirect causes. Direct causes of maternal death are factors that relate to complications during pregnancy, childbirth and the postpartum period. In 2012 the main causes of maternal death were haemorrhage (30.1%), pre-eclampsia/ eclampsia (26.9%), infection (5.6%), obstructed labour (1.8%) and abortion (1.6%) (IMoH, 2014). The indirect causes of maternal deaths are factors which aggravate the pregnant women's condition, locally known as the 'Four Toos': i) too young, ii) too old, iii) too often and iv) too close to the pregnancy gap (IMoH, 2010b). The indirect causes of maternal death are also associated with delays or barriers to accessing care, described locally as the 'Three Delays': i) too late to recognise the emergency sign(s) and make a decision, ii) too late to reach the healthcare facilities and iii) too late to get emergency care and treatment (IMoH, 2010b).

In the guidelines of the integrated antenatal care programme, there are other influencing factors mentioned which can affect the health of a woman's pregnancy. Examples include pregnant women with: a) communicable diseases such as malaria, HIV/ AIDS, tuberculosis and syphilis, and b) non-communicable diseases such as hypertension, diabetes mellitus, mental disorder and malnutrition (IMoH, 2010b).

1.3.2 Aims of the care programme

The integrated antenatal care programme is so designed that all pregnant women are able to access good quality antenatal care services. Ideally, each pregnant woman should have a healthy pregnancy, safe delivery and be able to give birth to a healthy baby. Based on the guidelines of the integrated antenatal care, the programme has several specific aims.

1. To provide integrated, comprehensive and good quality health and nutrition counselling for pregnant women, counselling for family planning and breastfeeding.
2. To eliminate a 'missed opportunity' for women to access integrated, comprehensive and good quality of antenatal care during their pregnancy period.
3. To perform screening as early as possible to identify any illness/ complication/ disorder which might be experienced by pregnant women.
4. To provide appropriate treatment for illness/complication/disorder in pregnant women as early as possible.
5. To refer the women with specific conditions to appropriate healthcare facilities based on the referral system.

Table 1-1: Aims of integrated antenatal care programme

The programme involves all healthcare professionals in the healthcare centre to manage pregnant women's health. During the antenatal booking visit, the midwife conducts a history-taking exercise to obtain information about the previous and current health of the pregnant patients. Following the history taking, the midwife then examines the women's physical condition and then asks the patient to see the laboratory technician to have a complete serum screening. The screening includes blood type, HIV test, hepatitis B test, haemoglobin level check, syphilis test and blood glucose level. The urinary test includes confirmation of pregnancy and signs of urinary tract infection. Whilst waiting for the serum screening and urinalysis

results, pregnant women are asked to see the dentist and nutritionist. After the lab results are ready, the women will bring the results back to the midwife. A patient will be asked to see the general practitioner (GP) if there is a certain condition that needs to be investigated further or managed by the GP (IMoH, 2010b). Details of the process of an antenatal booking visit are illustrated in figure 1-3.

The suggested number of antenatal assessments that should be provided for pregnant women at the primary healthcare centre is at least 8. After the antenatal booking visit, (in the subsequent visits), the midwife will ask the GP to see the patient only if there is an indication of complications. In some primary healthcare centres, pregnant women can have at least one pregnancy ultrasound scan that will be performed by the GP. If a complication is found by the midwife or GP in the healthcare centre, and that woman needs to be referred to a tertiary hospital, she will not need to pay the service-fee as long as she is covered by the national healthcare insurance.

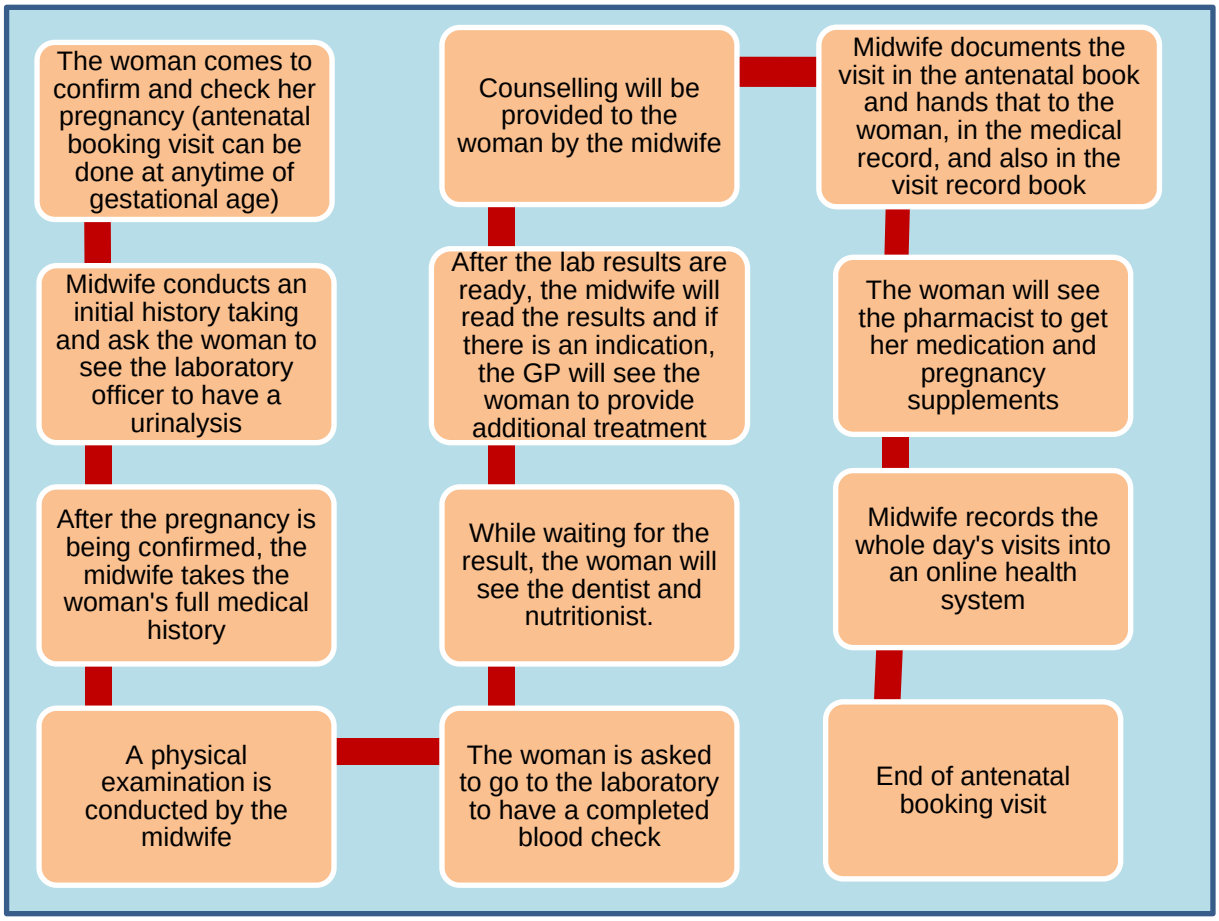

Figure 1-3: The process of antenatal booking visit in Setaman and Purwo Primary Healthcare Centre

1.4 Psychological health assessment in the integrated antenatal care programme

In the guidelines for the integrated antenatal care programme, psychological health assessment is categorised as one procedure that needs to be conducted during the antenatal booking visit. Pregnant women with the possibility of experiencing psychological distress should then be referred to mental health professionals (IMoH, 2010b). Unfortunately, details and guidance regarding this assessment and the technical processes and skills required to recognise psychological distress during pregnancy is not explained further in any manual of perinatal care. The details and analysis of this document's contents will be described in section 4.5.1 in table 4.3.

1.4.1 Healthcare professionals' roles and associated regulations

A GP is usually a team leader in a primary healthcare centre and has authority to perform an assessment and provide initial treatment for patients with perinatal depression (Indonesian Medical Council (IMC, 2012)). However, pregnant women would usually only have one opportunity to see the GP in their antenatal booking visit.

According to the International Confederation of Midwives (ICM), the main responsibility of midwives is to work professionally in partnership with their female clients to give support, care and advice during the perinatal period. The service offered includes providing care for the newborn infant and the detection of complications (ICM, 2013). In Indonesia, there are at least 9-11 midwives in charge of maternal and child health in every public health centre that is serving around 30,000 population in any one sub-district (IMoH, 2015a). In 2017, it was estimated that there were 980,000 women of reproductive age in Yogyakarta (IMoH, 2018). In total, there are 121 primary healthcare centres in Yogyakarta. On average, each of the primary healthcare centres serves around 8000 women of reproductive age (DoH, 2017).

In response to limited access to mental healthcare professionals (i.e. clinical psychologists, psychiatrists and mental health nurses) in the public health centres, midwives are expected to devote more attention to women's psychological health during the patient's perinatal period. This role is in accordance with the authority of midwives that is set out in IMoH Regulation Number 1464/MENKES/PER/X/2010 regarding the licence and provision of midwifery practice. It is stated that midwives

have authority to provide services including midwifery, caring for women's reproductive health and offering general public health services (IMoH, 2010c).

The Indonesian Midwives Association (IMA) sets the standards for the field of midwifery by addressing the following areas of medical care: a) general, b) antenatal, c) childbirth, d) postpartum and e) the management of obstetric and neonatal emergencies. In all standards, there is a statement that midwives should provide a good quality of care and conduct early detection of complication in each of the woman's pregnancy, childbirth and postnatal stages (IMA, 2005). However, there is no specific statement or prescription regarding the assessment, treatment or referral process of mental and emotional disorders during the perinatal period. The standard for the management of obstetric and neonatal emergencies refers solely to complications associated with physical conditions, such as: i) pre-eclampsia, ii) hypertension, iii) antenatal bleeding, iv) postpartum haemorrhage, v) placental retention, vi) sepsis puerperium, and vii) neonatal asphyxia (IMA, 2005). Until now, there has been no update addressing this field of caring.

1.4.2 Background to the study setting

Yogyakarta has the highest number of people with severe mental disorders in Indonesia (2.7‰) (IMoH, 2013a). This unwanted distinction is locally seen as a direct consequence of the 2006 natural disaster which devastated both the population and its economy. However, although the basic health research branch of the IMoH had investigated the prevalence of mental disorders in Yogyakarta's general population, there is no such data relating to women in the perinatal period. In addition, there is no national policy or programme established by the IMoH that addresses perinatal mental health (PMH); a missing initiative which has the potential to prevent the outcomes associated with poor maternal mental health conditions.

Meanwhile, most academic research related to perinatal mental health in Indonesia was found to be focused on postpartum depression (Edwards, G.D. et al., 2006; Andajani-Sutjahjo et al., 2007). Whereas, based on the researcher's literature review, pregnant women can experience mental health problems. Furthermore, psychological distress during pregnancy is also associated with mental health problems in a woman's postpartum period (WHO, 2008).

At the regional level, some provinces and districts hold a clinical placement for a psychologist in the local primary healthcare centre as part of mental health community-based services on offer. This programme was created in 2007 by the

Faculty of Psychology, Gadjah Mada University (UGM), Yogyakarta in collaboration with Department of Health in the Northern district. This initiative was designed to optimise the community's ability to access mental health services (UGM, 2010). Currently, this programme is implemented in other provinces including Jakarta, the capital city of Indonesia (Huda, 2018).

Currently in Indonesia a comprehensive PMH service and its delivery system are not in place. As such, there is very limited opportunity for pregnant women in Indonesia to receive an appropriate mental health service and / or psychological support from appropriately qualified healthcare professionals. In addition, psychologists and psychiatrists are not available in every primary healthcare centre. There are only 1.07 mental health professionals (psychiatrists, psychologists and mental health nurses) per 100,000 population (IMoH, 2015b).

1.4.3 Psychological health assessment in Southern and Northern district

In 2015 the Department of Health in Yogyakarta's Southern district introduced a new antenatal booking visit proforma, which is currently used by healthcare providers in the local primary healthcare centres in this district as a guide for history taking. The 2015 antenatal proforma includes several screening questions relating to symptoms of mental disorder which healthcare professionals can use when interviewing their patients. The questions address such issues as: a) feeling anxious, b) worried, c) fearful, d) agitated, e) socially withdrawn, f) talking to oneself, g) hallucinating, h) refusing to have shower, i) history of suffering from domestic violence and j) a history of taking psychotropic medications. A detailed analysis of this proforma will be presented in Chapter 4, section 4.5.1

Since 2016, clinical psychologists have provided services to pregnant women as part of the integrated antenatal care programme in the Northern district of Yogyakarta. These services allow pregnant women to see the psychologist once during pregnancy and thus, it is expected that in one session the psychologist could assess that pregnant woman's psychological health. The session with psychologist was usually called as a psycho-educational session. The more detail information about these psycho-educational sessions in the Northern district will be presented in Chapter 5.

1.4.4 The sociocultural context of mental health

In many Asian cultures, it is thought that people with mental health problems feel shameful and are less likely to disclose their feelings to others (Gilbert et al., 2007). Stigma associated with mental health problems can be found easily within Indonesian society and this is strongly related to generally accepted but misleading information about mental health (Hartini et al., 2018). Studies have highlighted the differences between Western and Eastern societies regarding the understanding of mental health problems. The differences included a variety of views, coping mechanisms, help seeking behaviour , the healthcare services and the health systems themselves (Cox, J. L., 1977). One possible reason for these differences between East and West may be due to specific social and cultural values which transcends amongst Asian (Cox, J. L., 1996). Sociocultural values such as gender roles, family's structure and economic conditions are likely to affect women's mental health. It is therefore reasonable to suggest that women's mental health issues should be considered and addressed when conceptualising their life difficulties in some cultures (Hsu et al., 2004).

Social aspects and cultural values are likely to shape pregnant women's psychological health and influence the way all Indonesians conceptualise any mental health 'problems' or issues they may feel they have. The following section presents a bio-psycho-social model of health and illness that will be used as the lens through which this PhD research is viewed.

1.5 Biopsychosocial approach in mental health

In 1977, George Engel proposed a new approach in health and illness, namely the biopsychosocial model. The model incorporates and synergises the influence of biological, psychological and social factors on health and illness. The biopsychosocial model emphasises that the body and mind are inseparable and the best way for healthcare providers to understand illness is by considering the person as a whole. The model also enables health and illness to be relational and socially constructed (Engel, 1977).

The biopsychosocial approach has surpassed the limitations of the former dominant biomedical model. The biomedical model's key limitations were that it disempowered sick people by mainly focusing on the role of clinicians to find pathogens and rectify illness (Saks, 1997). That traditional expert-focused model

also ignored social factors which could cause illness or disorder and the impact of psychology on an individual's health (Heawa and Hetherington, 1995).

In terms of understanding psychological problems through a biomedical lens, there is a consensus which suggests that mental health disorders and illnesses are biologically- based brain diseases. The main underpinning causes were identified as neurotransmitter and hormonal imbalance, genetic anomalies and brain malfunctions or abnormalities (Deacon, 2013). Consequently, the biomedical model focused on biological sources. For example, as early as a century and a half ago, the impact of spirochete of syphilis was found to cause damage in the frontal and temporal lobar cortex of the brain, thereby leading to the incidence of general paresis. The finding of the cause of general paresis gave hope to physicians that specific biological causes of other mental disorder would soon to be discovered (Oltmanns and Emery, 2012).

The biopsychosocial approach addresses the need for new and more holistic models of health and illness. Engel (1977) rejected the view of the 'reductionist' and 'exclusionist' in medicine. The reductionists only believed that physicochemical principles must be used to explain that any behavioural deviance was the consequence of a disease. On the other hand, the exclusionist insisted that everything that was unable to be explained using a biomedical approach could not be categorised as a disease. Engel also opposed the classical notion that fragmented the body between its behavioural and psychosocial aspects and processes.

From the service users' perspective, the biopsychosocial model suggests that the patient undertakes an essential role to provide relevant information to complete the service provider's knowledge. Thus, in this model, in order to establish an accurate diagnosis and achieve the best health outcomes, the healthcare professional's competence and the patient's experiences are expected to integrate and inform each other to contribute equally. These principles are in line with the ideal model of antenatal care service, where the person may need both 'cure' and 'care'. Care for others means doing one's best as a means of helping a person. Caring and curing are equally valuable and fundamental for healthcare professionals when approaching their patient (Kottow, 2001).

1.5.1 Biopsychosocial model of psychological distress

There are a number of biomedical markers associated with depression: the levels of serotonin and cortisol in particular (Quan-Bui et al., 1984; Burke et al., 2005). Lower

plasma oxytocin concentrations are also associated with depression in pregnancy and postpartum period (OR= 0.290; p<0.05) (Skrundz et al., 2011). From the psychological aspect, evidence suggests that individuals who have parents with a history of mental health problems are also at risk of developing mental illness (Weissman et al., 1984). Stressful life events related to social factors are also associated with depressive disorders (Kessler, 1997; Kendler et al., 1999). The details relating to biopsychosocial factors in mental health problems during pregnancy will be explained in Chapter 2.

The biopsychosocial model approaches the issue of psychological distress from a wider view. With this broader perspective, how health and illness are defined, has implications for the choice of treatment (Ayers and Ford, 2017). This perspective enables health care providers to be more flexible yet scientific when addressing a psychologically distressed patient. There is a need to make a thorough assessment of the patient's condition as well as being able to recognise the symptoms. Healthcare professionals also need to identify possible associated factors, as Engel's model acknowledged how non-biological factors may contribute to the development of psychological distress in a person.

Engel's biopsychosocial approach could help to explain the interconnections and interdependence of these three different aspects. However, rituals and taboos in the perinatal period, and the cultural context in which the pregnant woman is located, play an important role in setting up beliefs and behaviours about mental health. The influences of cultural context include: i) the choice of presenting symptoms, such as sad or emesis during pregnancy; ii) choice of healer (healthcare professionals or religious leader) and iii) choice of coping or treatment (counselling or religious coping) (Cox, J. L., 1996). These option or choice issues will be discussed further in Chapter 7.

1.6 Aim of the research

The aim of this study is to investigate and to explore the assessment of pregnant women's psychological health from the perspective of healthcare professionals and the female assessment recipients.

1.7 Research purpose, research questions and objectives

The purpose of the study is to investigate and explore the assessment of pregnant women's psychological health, from the perspectives of: a) healthcare professionals

and b) pregnant women in Indonesia. The research environment is two primary healthcare settings during the woman's routine antenatal booking visit. It is anticipated that the findings of this study will provide insights into best practice in order to inform the development of a perinatal mental health system in Indonesia.

1.7.1 Research questions and objectives of the study

Table 1-2 describes research questions and objectives of the study

Research Questions	Objectives
How do healthcare professionals explore women's psychological health during a routine antenatal booking visit?	1. To illuminate the practice of healthcare professionals in the assessment of pregnant women's psychological health 2. To describe the perceptions of healthcare professionals regarding the ways in which pregnant women's psychological health is assessed during a routine antenatal booking visit 3. To examine the style or approach exhibited by healthcare professionals when conducting the assessment of women's psychological health during a routine antenatal booking visit 4. To understand the service that is provided by midwives and other healthcare professionals in a primary healthcare centre for pregnant women with mood and/ or mental disorders
What are the factors influencing healthcare professionals' practice when conducting the woman's psychological health assessment during a routine antenatal booking visit?	1. To compare service delivery in psychological health assessment amongst healthcare professionals in an integrated antenatal care programme in a primary healthcare setting 2. To explore the influence of integrated antenatal care programme training for healthcare professionals upon their practice when conducting a psychological health assessment
How do pregnant women respond to healthcare professionals during a psychological health assessment experience?	1. To explore the experience of pregnant women during a psychological health assessment 2. To reveal the risk factors of mood variations (if any) amongst pregnant women

Table 1-2: Research questions and objectives of the study

1.8 Thesis structure

The thesis is divided into seven chapters, consisting of: i) introduction, ii) literature review, iii) methodology, iv) a group of three findings chapters and v) a discussion. **The first chapter** provides the background of the study, presents an overview of antenatal care and the process of mental health assessment in Indonesia. A brief

description about Indonesia and Yogyakarta as the study settings and the biopsychosocial approach as a theoretical lens is also described.

Chapter 2 explores key concepts of psychological health assessment during pregnancy based on information gathered from the literature review. It explains and debates how psychological health assessment is applicable in LMICs, particularly in primary healthcare settings.

Chapter 3 presents the research methodology including the study's aims and questions, the rationale of the research design in which a qualitative case study model was adopted. The methods of data collection, data analysis and ethical review are also explained.

Chapters 4 and 5 report research findings from the Setaman and Purwo Primary Healthcare Centres. In these two chapters, information relating to the two research sites, perspectives from pregnant women and healthcare professionals regarding the psychological health assessment process that were obtained during their antenatal booking visit, are presented and explored.

Chapter 6 presents findings from the cross-case analysis from the two study sites. Emergent interactions and patterns are examined, synthesised and key themes are presented. Chapter 6 connects the empirical chapters and the subsequent discussion chapter.

Chapter 7 provides a discussion of the key findings based on the themes from both study sites and patterns from cross-case analysis. Presented is a debate on how the practice and policy of mental or psychological health assessment from around the world is adopted, adapted and performed in Indonesia; with particular reference to two local community health centres. Chapter 7 also offers a conclusion stemming from the discussion of the key findings. The implications for practice and policy on mental health assessment for pregnant women in Indonesia, as well as the implications for future research, are also examined.

1.9 Conclusion

This chapter has presented background details underpinning the study. An overview of the Indonesian context for pregnant women's mental health assessment during antenatal care, focusing on Yogyakarta, has also been presented. Basic details of the geographical, social and economic conditions in Indonesia and Yogyakarta have been outlined. Background to the study settings,

including details of the antenatal care pathways in both study sites, were also presented. A bio-psycho-social model is explained which helps to set this PhD study in context. The study's aim, questions, purposes, objectives and thesis structure were also set out. The following chapter presents a literature review which: a) explores key concepts and aspects of pregnant women's psychological health, as well as b) revealing the information / knowledge gaps in the existing literature, which serve to demonstrate the need for this study.

Key Summary:

- Antenatal mental health problems are associated with poor outcomes for women during pregnancy, during childbirth and for newborns.
- Sensitive psychological health assessment could provide pregnant women with the opportunity to access appropriate care.
- A perinatal mental healthcare system is not in place in most LMICs, including in Indonesia.
- The aim of this study is to investigate and to explore the assessment of pregnant women's psychological health from the perspective of healthcare professionals and their pregnant clients in Indonesia.
- It is expected that this study could illuminate the real context of psychological health assessment in antenatal booking visits in Indonesia.
- The findings of this study are expected could inform the development of a perinatal mental healthcare system in Indonesia.

Chapter 2 Literature Review

2.1 Introduction

This chapter aims to identify and discuss empirical research which explore mental health assessment including screening for mental distress during pregnancy in LMICs. A brief critical analysis enables an understanding of the quality of literature, extent of knowledge the gaps in the evidence base.

2.2 Scoping review of healthcare professionals' assessment of pregnant women's psychological health in LMICs

Over the last few decades, a growing literature on mental health screening and psychological health assessment during the perinatal period has developed, particularly in higher income countries (WHO, 2008). However, literature on psychological health assessment during pregnancy in LMICs appears to be limited. A scoping review was conducted to underpin this study to identify the extent of research activity and examine the research gaps in existing literature within the topic of pregnant women's psychological health assessment by healthcare professionals with a particular emphasis in LMICs.

This type of review was aimed to map the field on the discussed topic and to investigate the gaps in the research area, thereby providing foundational information on future research (Arksey and O'Malley, 2005; Peterson et al., 2017). In contrast to a systematic review, a scoping review is used to provide a broader conceptual range, allows for a more general and topical information and thus it is not intended to assess the quality of the included studies (Arksey and O'Malley, 2005; Brien et al., 2010; Peterson et al., 2017). A scoping review was selected as an approach because initial searching showed limited evidence regarding pregnant women's psychological health assessment in the antenatal period in LMICs. The issue on quality assessment of the included literature had been raised as one challenge to interpret the results of scoping reviews (Brien et al., 2010). Meanwhile, Levac et al., (2010) argued that the impact of lack of quality assessment on the relevance of scoping review findings remained unclear and therefore further discussion is needed (Levac et al., 2010). However, to inform the quality of the studies in the topic conducted in LMICs, adopted from Arksey and O' Malley approach, this scoping review provides brief critical appraisal of the synthesised

literature. This also aims to enhance and to improve the development of methodology of this study.

2.2.1 Main aim of scoping review

To identify how pregnant women are assessed for psychological health in LMICs.

2.2.2 Objectives

This scoping review was conducted to identify the following in relation to mental health assessment during pregnancy:

1. How do healthcare professionals perform the pregnant women's psychological health assessment in LMICs
2. What factors influence healthcare professionals' practice in conducting the psychological health assessment in LMICs
3. What are pregnant women's experiences in psychological health assessment in LMICs

2.2.3 Methods

Arksey and O'Malley divided the stages of conducting a scoping review into five steps. The following section describes the way in which these stages were adopted for this scoping review of psychological health assessment during pregnancy in LMICs.

2.2.3.1 Identifying the question

The question was based on the aim of the scoping review:
"How are women assessed for psychological health during pregnancy in LMICs?"

2.2.3.2 Identifying relevant studies

To guide the search strategy, key parameters i.e. eligibility criteria, databases to search, search strategy and specific key terms were determined as guided by (Halas et al., 2015).

Eligibility criteria

Below are the inclusion criteria which were used for the searching and reviewing the papers:

- Published in English. Due to time constraints and limited access to funding for paper translation, thus this review only included papers written in English. Only articles published in peer-reviewed and Science Citation Index/ Scopus Journal included and thus no articles published in Bahasa Indonesia or other languages.

- Publication range time: January 2000- December 2018 because this is a reasonable practical timeframe. The time frame was selected because in 2000 the Millennium Development Goals (MDGs) were firstly established and all 189 United Nations member states committed to help achieve the eight international development goals which included improving maternal health.
- Studies that report either healthcare professionals or pregnant women's views and perspectives on screening for antenatal mental health problems or assessment of psychological health. This includes the associated factors for mental health problem during pregnancy period.
- Original, peer reviewed papers including primary research, review articles and reports.
- Studies which were conducted are limited in LMICs.

Exclusion criteria identified are:

- Opinion papers are excluded as the researcher aims to find empirical facts based on research activities around psychological health assessment in LMICs.
- Research related to the outcomes of mental health problems during pregnancy.
- Research related solely to the instrument used for screening (instrument validation).
- Research related to treatment or impact of treatment to certain mental health problems.

Databases

A comprehensive search was conducted from PsycINFO, Maternity and Infant Care, Scopus, Global Health, Medline, ASSIA and Embase electronic databases. These databases were selected as they have been used to find published studies which include PhD theses, journals articles, proceedings and research protocols. These databases were also selected as they potentially included studies in the topic related to pregnant women's psychological health assessment.

Search Strategy

Key search terms entered using Medical Subject Headings (MeSH) included: assessment, enquiry, screening, psychological wellbeing, psychological disorder, psychological illness, psychological distress, psychological health, mental disorder, mental illness, mental health problem, mental distress, anxiety, depression, depressive disorder*, pregnan*, prenatal, antenatal, and developing countr*, low-middle income countr* (Appendix B). Grey literature from

http://library.leeds.ac.uk/grey-literature, Google scholar and WHO website were also searched with the same keywords to explore relevant documents and reports.

Population	Exposure	Themes
Pregnancy OR Pregnan* OR Antenatal OR Prenatal	Assessment OR Screening OR enquiry	Psychological wellbeing OR psychological disorder OR psychological illness OR psychological distress OR psychological health OR mental health problem OR mental disorder OR mental illness OR mental distress OR anxiety OR depression OR depressive disorder

Table 2-1: Search terms of literature searching

2.2.3.3 Study selection

The combined search strategy identified 666 articles from the seven databases searched. Articles with obviously irrelevant titles were excluded as well as letters and book reviews. The remaining abstracts were retrieved and read by applying the inclusion criteria to identify the selected articles, which was:

1. The article provided information on the assessment or screening during pregnancy in any care setting.
2. The article provided information on the assessment of psychological or psychosocial wellbeing and/ or the screening for any mental illness/ mental disorder. This might include any instrument (but not solely), set of questions, or combination of instruments, applied during pregnancy either to assess women's psychological wellbeing or to screen any mental illness during pregnancy. This also included pregnant women and healthcare professionals' experiences in mental health assessment or mental health problem screening.
3. The study was conducted in LMICs. However, following the initial literature searching in some databases, some studies conducted in HICs in Asia were found. However, due to the cultural similarities, this paper was included as it provided the information on associated factors which some are similar in LMICs.

When there was possibility that an article might include sufficient information which was relevant to the objectives of this scoping review, the article was read in full. Sixty four articles were read in full and all of these studies were conducted in LMICs

and HICs in Asia. The articles reported mental disorder screening and psychological and social assessment during pregnancy.

Twenty nine articles were excluded because they did not meet inclusion criteria as they focused on the impact and treatment of mental health problems in pregnancy, the pattern of mental disorder during pregnancy and postpartum period and measurement of the validity of instruments for assessing anxiety and depression.

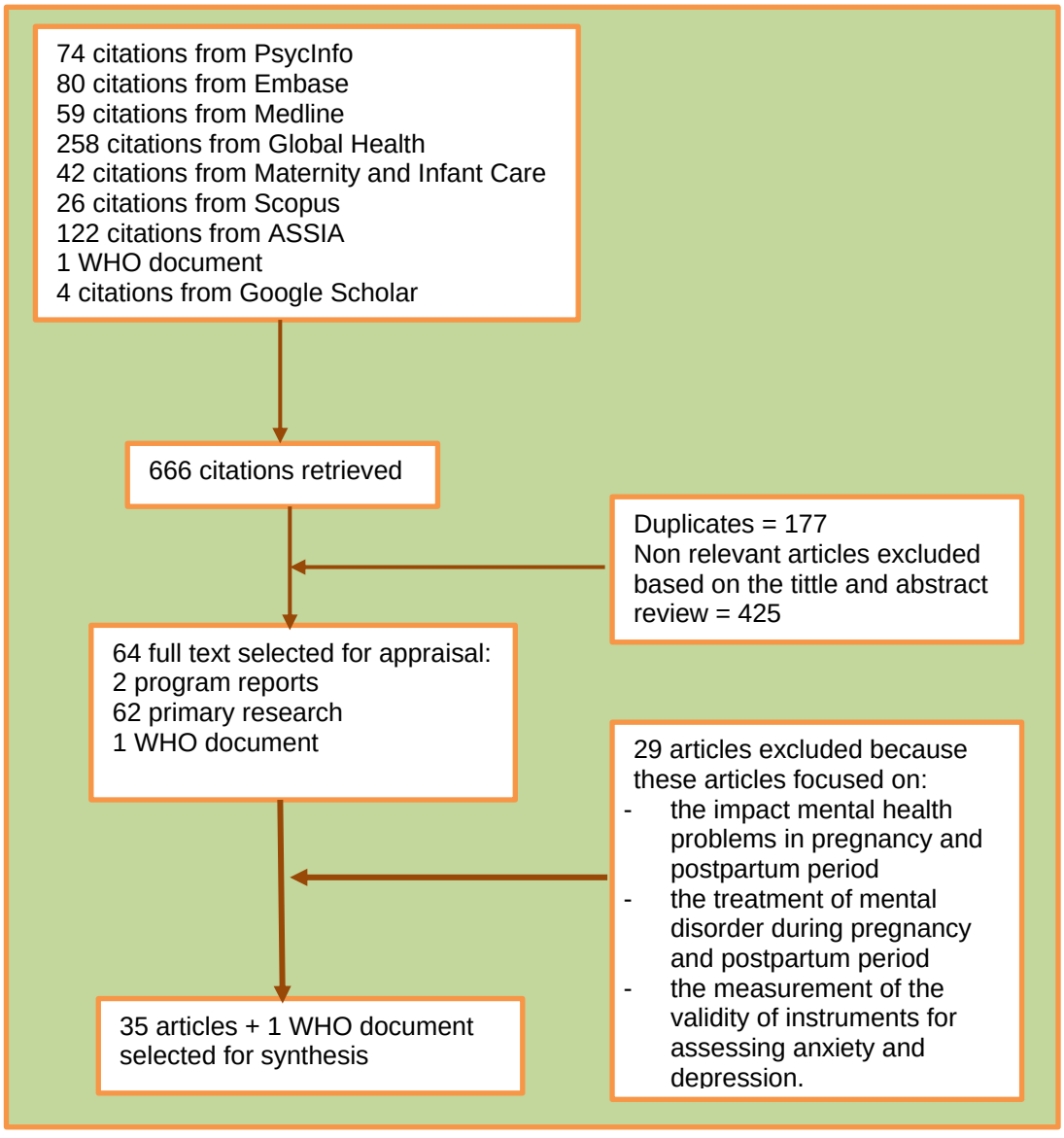

Figure 2-1: Flow diagram for selection of studies

2.2.3.4 Data charting

In total, 35 articles and 1 WHO document were included. Thirty three primary studies were included. These included three qualitative studies and thirty quantitative studies. Two articles were programme reports of Perinatal Mental

Health Project (PMHP) in South Africa (Honikman et al., 2012) and the integration of mental health screening in community based-health programme in Nigeria (Iheanacho et al., 2015b).

2.2.3.4.1 Quality assessment of the papers

As this scoping review aimed to find what is known in this study subject to examine gaps in the existing research literature, a quality assessment of papers was unnecessarily to perform. However, to better understand the quality of literature and chart data, the quality of included studies were appraised based on Hawker et al (2002) (Hawker et al., 2002) (Appendix C). Hawker's criteria for critical appraisal can be applied to review both quantitative and qualitative methods. The criteria consists of 9 categories:

1. Abstract and tittle
2. Introduction and aims
3. Method and data
4. Sampling
5. Data analysis
6. Ethics and bias
7. Results
8. Transferability or generalisability
9. Implications and usefulness

Following a suggestion from Peterson et al. (2017), there should be minimal or limited statistical information in a scoping review. Therefore, the detail summary result of the included papers are provided in a chart in Appendix D. Table 2-2 describes the papers based on research design and the country classification.

No	Author and year	Research Design	Score	Country	Country Classifications
1	(Biratu et al., 2015)	Cross-sectional study	31	Ethiopia	**Low Income Countries**
2	(Mahenge et al., 2015)	Cross-sectional study	25	Tanzania	
3	(Tefera et al., 2015)	Cross-sectional study	26	Ethiopia	
4	(Bisetegn et al., 2016)	Cross-sectional study	26	Ethiopia	
5	(Mossie et al., 2017)	Cross-sectional study	30	Ethiopia	
6	(Rashid et al., 2017)	Cross-sectional study	30	Malaysia	**Middle Income Countries**
7	(Rahman et al., 2007)	Prospective study	32	Pakistan	
8	(Babu et al., 2018)	Cohort study	30	India	
9	(Baron et al., 2015)	Prospective study	32	South Africa	
10	(Castro et al., 2016)	Cross-sectional study	21	Mexico	
11	(Faisal-Cury et al., 2009)	Cross-sectional study	26	Brazil	
12	(Faisal-Cury et al., 2017)	Prospective study	30	Brazil	
13	(Ferri et al., 2007)	Cross-sectional study	24	Brazil	

14	(Humayun et al., 2013)	Cross-sectional study	27	Pakistan	**Middle Income Countries**
15	(Iheanacho et al., 2015a)	Pilot study of a programme	28	Nigeria	
16	(Iranfar et al., 2005)	Prospective study	20	Iran, Islamic Rep.	
17	(Karmaliani et al., 2009)	Prospective study	30	Pakistan	
18	(Lovisi et al., 2005)	Cross-sectional study	30	Brazil	
19	(Lukose et al., 2014)	Cross-sectional study	30	India	
20	(Malqvist et al., 2016)	Cross-sectional study	27	Swaziland	
21	(Manikkam et al., 2012)	Cross-sectional study	28	South Africa	
22	(Manzolli et al., 2010)	Cross-sectional study	22	Brazil	
23	(Ghaffar et al., 2017)	Cross-sectional study	30	Pakistan	
24	(Mathibe-Neke et al., 2014)	Qualitative study	30	South Africa	
25	(Pereira et al., 2009)	Cross-sectional study	28	Brazil	
26	(Ravele et al., 2015)	Qualitative study	25	South Africa	
27	(Zhou et al., 2017)	Cross-sectional study	29	China	
28	(Akcali et al., 2014)	Cross-sectional study	28	Turkey	
29	(Fadzil et al, 2013)	Cross-sectional study	31	Malaysia	
30	(Couto et al., 2016b)	Cross-sectional study	31	Brazil	
31	(Ola et al., 2011)	Cross-sectional study	27	Nigeria	
32	(Honikman et al., 2012)	Programme report	30	South Africa	
33	(Andajani-Sutjahjo et al., 2007)	Qualitative study	30	Indonesia	
34	(Lee at al., 2007)	Prospective longitudinal study	29	China	
35	(Al Azri et al., 2016)	Cross-sectional study	31	Oman	**High Income Countries**

Table 2-2: Papers identified by research design and country origin

2.2.3.4.2 Critical appraisal

In order to explore the quality of the included papers and studies conducted in LMICs a brief critical appraisal is performed. To critically appraise the included studies, the scoring of papers based on Hawker's criteria for critical appraisal was used. It scored each categories ranged between 1 and 4 (Hawker et al., 2002).

Overall quality

In general, the literature scored well, with most studies scoring 27 or more out of possible score of 36. The detail of critical appraisal scoring is available in Appendix E. In average the score of the literature is 29 and the detail of quality assessment of the papers is attached in appendix D. Twenty one studies provided information on the prevalence of various mental disorders during pregnancy, particularly depression and anxiety [1-8,11,14,17,18, 21,25,27-31,34,35]. These papers also

revealed the associated factors of most common mental health problems during pregnancy in LMICs and HICs in Asia.

Nine papers reported specific factors which associated anxiety and depression during pregnancy with events such as unplanned pregnancy, violence, poverty and nutritional intake [9,12,13,16,19,20,22,23,26]. Two papers reported a perinatal mental health programme implementation in Nigeria and South Africa [15 and 32]. One paper reported the evidence on the existence of perinatal mental healthcare in Mexico [10].

There was one article that employed a qualitative study and focused on pregnant women's psychosocial assessment based on service providers' perspective in South Africa [24]. The other two qualitative studies discussed the associated causes of perinatal depression in Indonesia and South Africa [26 and 33]. There was also one additional document from WHO which provided some recommendations of mental disorder screening and psychosocial assessment.

Thirty papers included were quantitative studies which most of them employed cross-sectional studies aiming to find the prevalence of certain mental health problems during pregnancy and its associated factors [1-6,8,10-11,13-14, 18-23, 25,27-31 and 35]. Amongst this cross-sectional studies, papers [7, 9] had the highest score (32) with some limitations. Some of these are, relatively small sample size and the respondent came from only one sub-district [7]. Whilst in paper [9], the reasons of pregnant women declining the service were not investigated and logistical barriers were not performed. Meanwhile it might predict the reason why despite the high mental health service uptake, more than 40% pregnant women who were screened to have psychological distress declined the counselling session.

Some studies only secured verbal informed consent from the respondent [2, 14]. Written informed consent ensure the transparency and ethical data management. However, written informed consent might be problematic in some developing countries, particularly when illiterate populations are dominant (Onvomaha et al., 2006). Therefore, WHO suggested that variations on the process of securing verbal consent such as using video or audio recording to enhance the transparency of the study (Bhutta, 2004). Studies [2, 6, 12, 13] involved children and teenager but did not raise their concerns of this age issue. Parental consent is crucial in ethical issues to produce a high quality and valid research which involve children and adolescents (Tigges, 2003).

Paper [17] only categorised domestic violence into three categories: no abuse, verbal abuse only and physical and/or sexual abuse. Meanwhile there are other types of abuse, such as economic (Moe and Bell, 2004) and emotional abuse (Arias and Pape, 1999). Thus, the results of the study might not include those who experienced other types of abuse. Therefore, the validity of the results of the research might be affected. Paper [1, 29,30 and 35] had some limitations. Participants from papers [1 and 30] mostly had low socioeconomic background whilst paper [29] took place in a tertiary hospital and participants for paper [35] only involved pregnant women in the third trimester. Therefore, the results cannot be generalised into a wider population such as those who live in urban areas, visit a primary healthcare centre and pregnant women in early trimester. Meanwhile, generalisability is considered as the main criterion to evaluate the quality of a study (Polit and Beck, 2008).

Paper [10] and [16] had the lowest score and these were caused due to the papers potential bias. Paper [10] had potential bias in data collection as the researcher only used information from the unit chief to explore the availability of perinatal mental health care in Mexico. Measurement bias could occur in this study as there was no assessment for the instrument validity or reliability (Smith, J. and Noble, 2014). Whilst paper [16] which aimed to look at the association of unintended pregnancy and prenatal and postnatal depression did not explore other psychosocial factors such as support or women's relations with their families. In addition, depression was assessed 10 days after the childbirth when most postpartum women might still experience maternity blues which some experts considered it as a normal mood variation in perinatal period (Beck, C.T. et al., 1992). Therefore this study had a selection/ participant bias (Smith, J. and Noble, 2014).

Paper [24 and 33] had the highest score of qualitative literature included in this study. Paper [24] maintained its credibility trough using an independent coder and performed a member checking. Member checking is considered as one crucial technique for establishing credibility (Guba, 1981). Paper [33] did not provide detail of recruitment process, as no information given on how the researcher approach the potential participants. In addition, as the interview took place in participants' houses, no information on interview setting was provided as well as how the researcher maintain participants' and the researcher's safety. Meanwhile the transparency of data collection process will improve the credibility of a research (Bruce, 2007).

2.2.3.5 Data collation, summary and results

The following section reports the results of the scoping review. Four themes emerged from the synthesis of the studies included in this review. These are: 1. Mental health problems during pregnancy in LMICs and the screening tools. This theme reported the prevalence of the most common mental health problems during pregnancy and the instruments used to detect mental health problems in LMICs. 2. Associated factors of mental health problems which explained the biopsychosocial aspects as factors related to depression and anxiety during pregnancy in LMICs. 3. The practice of psychological health assessment which reported the provision of routine antenatal psychological health assessment during pregnancy. 4. Barriers towards psychological health assessment during the perinatal period which elaborated some aspects which influence a thorough and sensitive mental health assessment in the antenatal visits.

2.2.3.5.1 Mental health problems during pregnancy in LMICs and the screening tools

Based on the literature searched, the most frequent focus of research was reporting of depression during pregnancy. The prevalence varied in LMICs from 8.7% to 78.2% [1-8, 10, 14,17, 18, 21, 22, 25, 27-29, 34, 35] . Seven studies focussed on anxiety and non-specific common mental disorders (CMD). The prevalence range of anxiety disorder and non-specific CMD during pregnancy were 9.1% to 76.7% and 7% to 21.7% respectively [2, 11, 15, 17, 29, 31, 34].

There was wide variations in terms of the prevalence of mental health problems in LMICs. This can be explained because different instruments and different cut-off scores were applied in different studies. However, WHO reported that the number of mental health problems during the perinatal period in LMICs was higher than that of in HICs (WHO, 2008). In addition, in two studies which aimed to estimate the prevalence of anxiety and depression in pregnancy, anxiety has been found to be more prevalent than depression [29 and 34] .

The Edinburgh Postnatal Depression Scale (EPDS) was the most common instrument used to assess depressive symptoms during the perinatal period. As 12 out of 21 articles, which aimed to reveal the prevalence of mental health problems in pregnancy, used EPDS as the instrument. The EPDS is a validated short 10-question scale that is considered to be a gold standard in detecting the occurrence of postpartum depression (Cox, J. et al., 1987). It has been validated to be used for pregnant women in several populations (WHO, 2008). While Cox (1987) suggested

a threshold score of 12/13 to identify depression symptoms, some studies used different cut-off point, such as ≥9 [27], ≥ 10 [14], ≥ 11 [30]. Majority of the studies used cut off score ≥ 13 to categorise a positive. Based on the validation study of EPDS a cut-off point of 13 was recommended to depression symptoms [1, 9, 20, 21, 35]. Validation studies of the EPDS suggested a cut-off point of 13 for detecting major depression and a cut of point of 10 should be used for routine screening (Cox, J. et al., 1987; Hewitt et al., 2009).

As EPDS has been widely used to screen for depression, thus this most probably the reason why depression have become the most frequently studied mental health problem in perinatal period. As the consequence, other mental health problem such as anxiety have received less attention. Beck's Depressive Inventory (BDI) [5, 16, 30], the Hospital Anxiety and Depression Scale (HADS) [23, 29] and Kessler Psychological Distress (K-10) [8, 19] were also self-reported questionnaires which were commonly used to screen for depression and anxiety more generally including pregnancy.

Another instrument that has been used to screen common mental disorder or non-specific psychological distress during pregnancy is the Self-Reporting Questionnaire (SRQ-20) [3, 7, 12, 31]. SRQ-20 has potential to be used to assess non-psychotic mental health problems during perinatal period as it has better validity compared to EPDS (0.70 (95%CI 0.57 to 0.83) vs 0.62 (95%CI 0.49 to 0.76) (Hanlon et al., 2008).

Studies showed that there are many screening instruments to assess antenatal mental health problems that have been used in various setting in LMICs. Additionally, WHO recommended that the presence of psychological distress symptoms can be recognised through simple questions along with a careful behavioural observation by the healthcare professionals (WHO, 2008). The example of these simple questions are known as *Whooley Questions* which consist of two questions to explore whether the women have been bothered by feeling down or depressed or if they have lost of interest in doing things in the past one month (Whooley and Simon, 2000).

2.2.3.5.2 Associated factors of common antenatal mental health problems in LMICs

The majority of included studies aimed to explore associated factors of most common antenatal mental health problems in LMICs. In this section, the associated

factors were categorised into three domains; obstetric/ physical, psychological and social domain. The detail of the associated factors are described below:

Obstetric/ physical domain

This domain reports the physical aspect including obstetric-related factors. Pregnant women with current obstetric complications and serious physical illness were found to be more at risk of mental health problems [4, 11, 25]. Some of the complications and physical illness were antenatal bleeding, treatment for urinary infection, premature contractions and hypertensive disorders. Another study also found that pregnant women with anaemia and high blood pressure have higher risk of depression and anxiety during their pregnancy [8]. A history of poor pregnancy and childbirth outcomes were also associated to mental health problems in pregnant women. The factors include history of stillbirth, abortion and child death [3, 8].

Women with depressive symptoms in first trimester, were more likely to have experienced hyperemesis [19]. This study also suggested that symptoms of antenatal depression in the first trimester are more likely amongst urban Indian women. However, there were different findings in terms of the period of antenatal mental health problems. Two studies [29, 30] found that anxiety and depression were more prevalent in the first trimester. However study [4] reported that pregnant women in the third trimester were more likely to develop depressive symptoms than any other time of pregnancy. This was in line with the findings of systematic review conducted in developed countries (Bennett, H.A. et al., 2004).

Rofé et al (1993) suggested that women' s psychological health in the first trimester were influenced by physiological changes due to pregnancy. Whilst in the last trimester, emotional distress amongst pregnant women was more common and thought to relate to women's preparedness to the birth and their life-changing situation following the childbirth (Rofé et al., 1993). Even though Rofe's study was conducted in HIC, this might be consistent with the findings in LMICs. A study in Pakistan found that fear of childbirth was associated with antenatal depression [14].

Primigravida pregnant women were found to be more vulnerable to mental health problems as they might have no experiences in pregnancy [8]. In contrast, in some culture, it was evident that mental health problems were more common amongst women who were multigravida [7]. This is consistent with a study conducted in HIC which found that the number of previous pregnancy was associated with depression during pregnancy (Koleva et al., 2011). This might have related with the

socioeconomic factors which considered pregnancy as an added burden resulting in financial hardship. Thus, it underlined that perinatal mental health problems are complex and multifactorial.

Psychological domain

Most of the studies synthesised in this scoping review found that a history of mental health problems prior to the pregnancy contributed to the development of psychological distress and illness during pregnancy [4, 25, 28, 29, 30]. This also included history of antenatal depression during a previous perinatal period [12, 18, 21] and current mental health status [25]. In addition, a history of mental illness in the family also appeared to be a predictor of pregnant women's mental health status [3].

On the other hand, having low self-esteem also appeared to be an associated factor of mental health problems during pregnancy. The finding of this study also suggested that negative body image was related to pregnant women's self-esteem [34].

Social domain

There was a range of social factors associated with depression and anxiety during pregnancy in LMICs. The table below lists the social factors and authors of the papers:

Social domains	Authors
Poor Social support	(Andajani-Sutjahjo et al., 2007; Lee, A.M. et al., 2007; Rahman, Atif and Creed, 2007; Biratu and Haile, 2015; Tefera et al., 2015; Rashid and Mohd, 2017; Zhou et al., 2017)
Unplanned pregnancy	(Iranfar et al., 2005; Lee, A.M. et al., 2007; Karmaliani et al., 2009; Pereira et al., 2009; Manikkam and Burns, 2012; Fadzil et al., 2013; Akçalı Aslan et al., 2014; Biratu and Haile, 2015; Al-Azri et al., 2016; Bisetegn et al., 2016)
Marital conflict, marital satisfaction, separation from husband	(Lee, A.M. et al., 2007; Humayun et al., 2013; Al-Azri et al., 2016)
Poor financial condition	(Lovisi et al., 2005; Andajani-Sutjahjo et al., 2007; Rahman, Atif and Creed, 2007; Faisal-Cury et al., 2009; Karmaliani et al., 2009; Bisetegn et al., 2016; Malqvist et al., 2016; Mossie et al., 2017; Babu et al., 2018)

Lack of confidant relationship	(Lovisi et al., 2005; Rahman, Atif and Creed, 2007; Faisal-Cury et al., 2009)
Extended family	(Faisal-Cury et al., 2009; Manzolli et al., 2010)
Lower husband's education level	(Rahman, Atif and Creed, 2007; Babu et al., 2018)
Older age	(Faisal-Cury et al., 2009; Ghaffar et al., 2017)
Intimate Partner Violence (IPV)	(Lovisi et al., 2005; Ferri et al., 2007; Karmaliani et al., 2009; Ola et al., 2011; Akçalı Aslan et al., 2014; Castro e Couto et al., 2016)
Younger age	(Lee, A.M. et al., 2007; Humayun et al., 2013)
Unemployed husband	(Andajani-Sutjahjo et al., 2007; Karmaliani et al., 2009; Akçalı Aslan et al., 2014)
Lower education level	(Lovisi et al., 2005; Manzolli et al., 2010)
Single or divorce or unmarried or premarital pregnancy	(Lovisi et al., 2005; Andajani-Sutjahjo et al., 2007; Manikkam and Burns, 2012; Fadzil et al., 2013; Mahenge et al., 2015; Mossie et al., 2017)
Childcare difficulties	(Tefera et al., 2015)
Being a housewife / having a casual job	(Andajani-Sutjahjo et al., 2007; Mossie et al., 2017)
Number of female children	(Ola et al., 2011)
Chronic illness in the family	(Andajani-Sutjahjo et al., 2007)

Table 2-3: Associated social factors of antenatal mental health problems and the authors of the papers

Based on the findings of studies conducted in LMICs, poor social support, poor economic condition, unplanned pregnancy and history or current intimate partner violence were the most common associated factors of antenatal mental health problems. In Indonesia, premarital pregnancy was found as one of the causes of women experiencing depression during pregnancy and in the postnatal period [33].

There was variation regarding age as predictor of mental health problems amongst women during pregnancy. In some studies, the younger the woman (<20-35 year old) the higher the risk of perinatal mental health problems [14, 34]. Conversely, pregnant women older than 30 years were found to be more likely to experience psychological distress [11, 23].

In most LMICs, marital status could determine the women's social status. Thus, pregnant women who were unmarried, single or divorced were more likely to have psychological distress symptoms than those who were married during their pregnancy. In addition, studies also reported that poor support from the husband and family and marital conflict have been associated with psychological distress. Living in an extended family and shared responsibilities with other family members was also found to be associated with mental health problems during pregnancy in LMICs [11, 22].

2.2.3.5.3 The practice of psychological health assessment during pregnancy in LMICs

According to primary studies, assessment or mental disorder screening has not been routinely performed during the antenatal visit in most LMICs. Only one study addressed the infrastructure readiness for perinatal mental healthcare in a LMIC [10]. This study revealed that more than half of public obstetric units (n=135) in Mexico offer mental health care and less than 41% of the units have a protocol for screening of perinatal depression. However, there was different number of obstetric units which provided perinatal mental health services between the rural and urban areas (26.5% vs 76.7% respectively). This study emphasised the need for equitable distribution of resources to improve perinatal mental health service in metropolitan and rural areas.

Most of the included studies collected data during the third trimester of pregnancy. A systematic review about the prevalence of depression during pregnancy found that the rates of depression during the third trimester was the highest across all gestational age (Bennett, H.A. et al., 2004). However, WHO (2008b) recommended that psychological health assessment or mental health screening during pregnancy should be conducted at the first contact between pregnant women and a healthcare provider regardless of gestation. Meanwhile, in another study conducted in Hong Kong, both anxiety and depression were equally prevalent in the first and third trimesters [34].

This suggested that common mental health problems such as anxiety and depression can be experienced by women in any trimester during their pregnancy. Thus, a one-time assessment or screening during the antenatal visit would be insufficient to screen for mental health problems in pregnancy period. Therefore psychological health assessment should be included in the routine antenatal visit protocol to ensure that women are assessed and have access to appropriate care.

The utilisation of an assessment tool or screening instrument has not been a mandatory for healthcare professionals during antenatal visit in most LMICs. Based on the synthesised papers, a programme of Perinatal Mental Health Project (PMHP) in South Africa, an independent initiative for mental health services for pregnant and postnatal women based at the University of Cape Town South Africa has been implemented [9, 32]. WHO suggested that recognition of mental distress during the perinatal period can be managed by using simple, reliable and affordable tools that can be performed by trained healthcare providers (WHO, 2008). However, in order to perform an effective mental health assessment during pregnancy, healthcare professionals should be equipped with appropriate training and skill. Only one paper [32] mentioned training on perinatal mental health that had been taken by healthcare professionals. In the PMHP programme, a training for healthcare professionals was provided. The training included maternal mood disorder screening for women during the antenatal visits by the midwives and general health workers, training for sharing tasks and basic knowledge on maternal mental health, basic counselling skills and strategies for optimum care and referral system [32].

Honikman et al (2012) concluded that once mental health services have been integrated with perinatal care, it could improve mood of mothers who had been positively diagnosed with mental health problems. A universal screening of mental distress for pregnant women who visited the hospital was undertaken by midwives during routine history taking at women's first antenatal visit. The instruments used for this screening were the EPDS and RFA (Risk Factors Assessment) which consist of 11 risk factors for mental illness. The instruments were self-administered and midwives assisted women who had difficulties with the instruments. All women who had EPDS score of 13 and above and RFA score of 3 and above were referred to clinical psychologist to have counselling sessions in a subsequent antenatal visit. Psychiatrists were also involved in this program and liaised with the referring counsellor. Women counselled were followed up by telephone up to six week postpartum (Honikman et al., 2012).

This project started in 2002 and was able to involve the Provincial Department of Health in their initial development. This project can be an example on how to establish an integrated perinatal mental healthcare in maternity care services in primary level healthcare setting. From July 2008 to the end of June 2011, 5,705 women (90% of women attending the clinic) were offered screening. This screening was performed by the midwives and 5,407 (95%) agreed to be screened. Of the

5,407 screened, 1,751 women (32%) qualified for referral. As many as 832 women accepted counselling sessions with psychologists and at the end 20 women were referred to the psychiatrist. Some key factors that might attribute to the high coverage and uptake of the screening was the healthcare professionals' consistency to offer the service to the women and the training provided to the healthcare professionals (Honikman et al., 2012).

2.2.3.5.4 Barriers of psychological health assessment during perinatal period in LMICs

To prevent the adverse outcomes of perinatal mental health problems, the integration of mental health services into maternal and child health is suggested as a core strategy (Rahman, A. et al., 2013). However, there are challenges and barriers in order to implement this strategy in LMICs. One of the challenge is the inability of healthcare professionals due to lack of training to recognise and provide care for pregnant women who might have the symptoms for psychological distress.

WHO has identified some crucial requirements for healthcare providers in order to integrate mental healthcare and current maternal and child health policies and practices. By recognising psychological distress symptoms earlier during pregnancy, there are greater chances to minimise the adverse impact caused by the distress. Thus, healthcare providers' knowledge, awareness, attitude and behaviours during the assessment of pregnant women's psychological health are of fundamental for women to have optimum pregnancy's experience (WHO, 2008).

Only one paper disclosed about the barrier of conducting a psychosocial assessment from the midwives' perspectives in LMICs. A study found that midwives had been ill-prepared in performing psychosocial assessment and providing psychosocial care for pregnant women since they lacked experience and had inadequate training on psychosocial care [24]. They also reported that staff shortages and limited time impacted on their ability to provide effective psychosocial assessment and care to pregnant women (Mathibe-Neke et al., 2014). Thus, to meet WHO's recommendation, adequate education and training for midwives as well as staff resources is required.

This study also reported that most midwives only performed the psychosocial assessment when they noticed an indication or unusual behaviour from pregnant women during antenatal booking visit (Mathibe-Neke et al., 2014). This is a concern as in this scenario, healthcare professionals might have missed women who experience mental distress without obvious symptoms. As a result, they might not

get appropriate care for their mental health problems as there were no protocol or tools to recognise the symptoms and to assess risk factors available.

Based on an integrative review there were 19 studies which revealed the challenges and barriers of perinatal mental healthcare more generally based on the perspective of service providers in HICs (Bayrampour et al., 2018). Healthcare professionals, particularly midwives' poor knowledge, lack of confidence in undertaking assessment or screening and the need for adequate training seemed to be barriers in perinatal mental health care globally (Stewart and Henshaw, 2002; Ross-Davie et al., 2006; Jomeen et al., 2009; McCauley et al., 2011; Bayrampour et al., 2018). In addition, time constraint during the visit also appeared to be an obstacle for midwives in performing a thorough mental health assessment or mental distress screening (Edge, 2010; Jones, C.J. et al., 2012; Bayrampour et al., 2018).

The need for effective organisational systems and processes, such as policies, models of care were also barriers towards providing perinatal mental health services in HICs. There was an absence of formal policy regarding methods or tools for screening and unclear pathways of care (Fisher et al., 2012b; Buist et al., 2006; Kim, J.J. et al., 2009). In addition, midwives experienced difficulties in using the screening instrument even though a specific screening tools had been used to screen mental health problems during pregnancy (Fontein-Kuipers et al., 2014), It was also suggested that organisations needed to take responsibility to establish a clear pathway and to provide encouraging environments for exploring sensitive issues with women during their perinatal period (Chew-Graham et al., 2009).

Fragmentation of midwifery care was also mentioned as a barrier for implementing routine screening for mental health problems during pregnancy (Stanley et al., 2006; Edge, 2010). Rollans (2013b) also found that during the antenatal period, some midwives modified questions they perceived as sensitive or intrusive questions thus interfered with the psychosocial assessment related to mental health (Rollans et al., 2013b).

Meanwhile, studies suggested that even though pregnant women felt discomfort when retelling their distress experience, healthcare professionals' attitudes determined the women's openness and willingness to talk about their psychological health (Stanley et al., 2006; Rollans et al., 2013a). Pregnant women's reluctance to talk about their psychological health was also triggered by their worries over the negative stigma and discrimination. Pregnant women were afraid that they might have been labelled as bad mothers and this made them less likely to be honest

during prenatal mental health screening (Kingston, D.E. et al., 2015; Viveiros and Darling, 2018).

Other reason why pregnant women felt reluctance to talk about their psychological distress was because they tried to cope by themselves or they preferred to get support from the significant others (Kingston, D. et al., 2015). This was also rooted from their unknowingness that a psychological problem is a part of health matters (Kingston, D. et al., 2015). It appeared that pregnant women might consider that talking to healthcare professionals about their mental health was unnecessary.

2.3 Research gap

The scoping review has identified four key themes as related to antenatal psychological health assessment in LMICs. These are: 1. mental health problems in LMICs and the screening tools, 2. associated factors of common antenatal mental health problems in LMICs, 3. the practice of psychological health assessment during pregnancy in LMICs and 4. barriers of psychological health assessment during perinatal period in LMICs.

There is a gap in the literature around pregnant women's psychological health assessment in LMICs. Whilst most studies investigated the prevalence, risk factors and the outcomes of mental health problem during pregnancy in LMICs, there is no study explicitly reporting how psychological health assessment is undertaken by healthcare professionals found. Little is known about the pregnant women and healthcare professionals' needs in regards to psychological health assessment in LMICs. Therefore, the understanding of pregnant women and healthcare professionals experiences from the perspective of service users and service providers should be gained.

This thesis reports upon a study which aimed to illuminate pregnant women's psychological health assessment based on the perspective of healthcare professionals and pregnant women in Indonesia. In order to inform healthcare programmes, the views of both service providers and service users are gathered to illuminate the challenges and opportunities that may be encountered. This research could contribute to the development of perinatal mental health programme in Indonesia.

2.4 Conclusion

In this chapter, relevant papers related to pregnant women's psychological health assessment in LMICs, including the prevalence and associated factors of most common mental health problems during pregnancy have been presented. The synthesised literature on psychological health assessment including mental health problems screening and the most frequently used instruments have been presented.

The review of the literature gives some valuable insights in psychological health assessment in pregnant women in LMICs. Only one paper explored the midwives' challenges and difficulties in performing the assessment in a LMIC setting. Women's experiences and expectations on psychological health assessment in LMICs remains unknown. An explanation is that this assessment is not integrated in routine antenatal care programme. Meanwhile, the perceptions of pregnant women in psychological health assessment is also important to gain understanding on the women's needs. The next chapter, the methodology and research design in this study will be provided.

Key Summary:

- A scoping review was undertaken adopted a framework by Arksey and O'Malley (2005) to identify information related to the pregnant women's psychological health assessment in LMICs as well as to find research gaps in the existing literatures.
- Thirty five papers were found; most papers were quantitative studies focussing on the prevalence and associated factors of mental health problems during pregnancy.
- There was only one study found which reported mental health assessment from the perspective of healthcare professionals. None were found from the women's perspectives conducted in LMICs.
- Depression was found to be the most frequently studied mental health problem in pregnancy.
- The scoping review revealed that biopsychosocial domains are associated with antenatal mental health problems in LMICs
- Psychological health assessment in the pregnant population has not become a routine practice in most LMICs.
- Barriers of sensitive and appropriate antenatal psychological health assessment in literature found in LMICs and HICs were mostly related to the inadequate training for healthcare professionals, poor effective organisational support as well as social stigma about mental health problems.

Chapter 3 Methodology

3.1 Introduction

This chapter presents a detailed account of the study's methodology and research design. The choice of a case study paradigm as a method and design is explained. Details of the data collection methods and procedures are also provided, along with the data analysis methods. Furthermore, ethical considerations as well as discussions of the rigour, reflexivity and positionality of the research are presented in this chapter.

3.2 Research paradigm

Research paradigms are theoretical constructs that help us to understand ways of knowing, sources of knowledge and lines of enquiry; e.g. beliefs and practices which guide an inquiry to answer research questions and enhance understanding of phenomenon (Weaver and Olson, 2006). Such paradigms fundamentally influence researchers' views in seeing the world, choosing their perspectives, understanding the connections between *things* and how to select appropriate methodologies and methods (Crotty, 1998; Creswell, J. and Creswell, 2013; Denzin and Lincoln, 2008)). There are two dominant research paradigms commonly aligned to applied health research: a) positivist and b) post-positivist. Essentially, in the former there is belief that the world can be understood, measured and quantified using statistics. However, with the post-positivist paradigm there is more uncertainty and broader lines of inquiry designed to gain understanding; all informed by an element of scepticism (Grant and Giddings, 2002; Bryman, 2012). Ontology, epistemology and methodology are the three fundamental philosophical orientations in the research. The following section will explain the philosophical orientations which underlie this current study.

3.2.1 Ontology

Ontology can be understood as a focus on the nature of reality (Lincoln and Guba, 1985; Creswell, J. and Creswell, 2013). It refers to a belief system which reflects an individual's interpretation of a fact and is the basis from which to develop an epistemology (Grant and Giddings, 2002). Consequently, ontology and epistemology are inter-related. In the context of nursing and midwifery, individuals

are believed to develop their own subjective essential meanings to help them understand their experiences in health and illness (Bender, 2018). In this study women's and healthcare professionals' views are assumed to be subjective and multiple, as there is not one single perspective applicable to the social world or reality in the field of psychological health assessment. This belief is congruent with idealism as one of the ontological positions, which considered that reality is subjective, individual and multiple (Creswell, J. and Creswell, 2013). An implication for this study is that participants' quotations, phrases and words will show different perspectives of reality; thus reality will be based on the participants' views.

3.2.2 Epistemology

Epistemology refers to the nature of knowledge and is focused on the process of investigation and beliefs about knowledge (Lincoln and Guba, 1985; Silverman, 2011; Creswell, J. and Creswell, 2013). Epistemology embraces aspects of validity or transferability, the scope and methods of acquiring or producing knowledge (Moon and Blackman, 2014). Epistemology is important in this study as it influenced the researcher in framing this investigation. The study aims to explore both service users' and service providers' views of pregnant women's psychological health assessment in a real-world setting. Therefore, this research follows constructivism, whereby the understanding of their experiences by each individual is different as they, and this researcher, aim to understand a specific phenomenon (Lincoln and Guba, 1985; Creswell, J. and Creswell, 2013).

Constructivists believe that meanings are formed via unique and specific social interaction (Creswell, J. and Creswell, 2013). The researcher acknowledged that each individual may have different interpretations regarding the facts and phenomenon relating to pregnant women's psychological health assessment. Therefore, it is impossible to gain an in-depth understanding of the complex situation by quantifying the phenomenon and relying on the rigour of statistics, as usually applied by positivists through the perspective of quantitative studies. Thus, based on the philosophical assumptions above, this research employs a qualitative methodology. The details of the methodology will be explained in the following section.

3.3 Approaches of qualitative inquiry

Qualitative research is an information gathering approach that emphasises obtaining in-depth understanding about what, how, or why a phenomenon, process

or experience happens (Denzin and Lincoln, 2011; Green, J. and Thorogood, 2014). There are several models for qualitative inquiry. For example Creswell (2013) focused on five approaches: i) narrative research, ii) phenomenology, iii) grounded theory, iv) ethnography and v) case study. Nevertheless, several other approaches exist, including a) action and applied research, b) life history studies and c) participatory research (Denzin and Lincoln, 2008; Green, J. and Thorogood, 2014). Each approach has its own unique strategy to address the research questions. The case study model is the preferred approach to explore this study's three research questions:

1. How do healthcare professionals explore women's psychological health during a routine antenatal booking visit?
2. What are the factors influencing healthcare professionals' practice when conducting the woman's psychological health assessment during a routine antenatal booking visit?
3. How do pregnant women respond to healthcare professionals during a psychological health assessment experience?

Case study can be considered either as a methodology (Creswell, J. W. et al., 2007; Creswell, J., 2007) or a comprehensive research strategy of enquiry (Denzin and Lincoln, 2011; Yin, 2014). Creswell (2007: 73) defined a case study as:

"*a methodology, a type of design in qualitative research, or an object of study, as well as a product of inquiry… in which the researcher explores a bounded system (a case) or multiple bounded systems (cases) over time, through detailed in-depth data collection…*"

Yin (2014) promoted case study as a research strategy to answer the 'how' or 'why' questions. Case study has been chosen as the research approach in this study because it comprises of a logical design to explore contemporary events within real life contexts. It also provides flexibility where there is limited control over events (e.g. study in a real life situation of healthcare provisions) or where the topic of interest is little evident (Yin, 2014); for example mental health assessment in Indonesia. A variety of data collection techniques, potentially over a sustained period of time, can be used to gain appropriate data (Creswell, J., 2007; Yin, 2014).

The case study approach also enables the researcher to obtain rich and in-depth detail to enhance understanding within the context of study unit(s) (Denzin and Lincoln, 2008; Denzin and Lincoln, 2011). The choice of a case study approach was considered appropriate for this research initiative because this study has examined

real-life situations, where the assessment of pregnant women's psychological health occurs in the real-life setting of an antenatal booking visit in a primary healthcare centre. Thus, case study is appropriate for examining the richness and complexity of the interactions and behaviours of all participants. This research intends to explore the assessment of pregnant women's psychological health from the perspective of healthcare professionals and the female recipients in Indonesia.

Different research methods have been used to investigate antenatal psychosocial assessment and depression screening. These include mixed-methods (Stanley et al., 2006), descriptive qualitative inquiries (Mathibe-Neke et al., 2014) and ethnography (Rollans et al., 2013a; Rollans et al., 2013b). Other methodological approaches were also considered for this study; however, they were rejected for several reasons. A narrative approach would have been appropriate if the aim of the study was to explore the life of an individual, whilst this study explored the routine process of pregnant women's psychological health assessment during antenatal booking visit. A grounded theory approach was considered as an approach in this study, but this study is not aimed to generate any theory (Denzin and Lincoln, 2008). A phenomenological approach was considered inappropriate to answer the research questions as the nature of phenomenology is to understand the essence of the experience (Creswell, J., 2007). Additionally, since there is only limited knowledge regarding the assessment of pregnant women's psychological health in Indonesia, and healthcare professionals' perspectives in performing the assessment, a different type of approach to many of those mentioned above was needed.

There are some similarities between case study and ethnography in terms of flexibility around methods of data collection and their overall design. Also similarity exists in the way these approaches enable the gathering of rich and complex data that may give an in-depth understanding of a situation (Denzin and Lincoln, 2011; Creswell, J. and Creswell, 2013). Nonetheless, this study is not about a shared-pattern of a culture of a group and is not aiming to describe and interpret the works of a culture sharing group. The study provides a detailed analysis of one or more cases. Thus, the ethnographic approach is not appropriate for this study. Furthermore, the flexibility of the case study model enables the researcher to amend and develop initial theoretical propositions informed by data collection and data analysis processes. The development of a theoretical proposition depends on several factors including the literature read by the researchers, and other sources such a policies and reports (Yin, 2014).

3.4 Research design

Yin (2014) proposed five important components of case study research to help the researcher ensure that the data gathered actually addresses the original aims of the study. The components are: i) the case study questions, ii) its propositions, iii) its unit(s) of analysis, iv) the logic linking the data to the propositions and v) the criteria for interpreting findings. Adopted from these five components, which Yin considers are essential in case study research, the design for this study is explained below.

3.4.1 Unit(s) of analysis and study setting

This study was carried out in two primary healthcare centres in two different districts in Yogyakarta. These sites have been purposively sampled to reflect contrasting levels of healthcare service provision. One of the primary healthcare centres is located in the Northern district as all primary healthcare centres in this district employ at least one clinical psychologist and all pregnant women within this district have access to the psychologist and receive a psychoeducational and counselling session (further detailed on the session is presented in Chapter 5) at least once during their pregnancy. The presence of a psychologist in all primary health centres in the Northern district is the result of a lone national pilot programme, which has been created to provide an accessible mental health service to the community. The second primary healthcare centre is located in the Southern district; chosen because its services offer no access to a psychologist or other mental health professionals. The integrated antenatal care programme is implemented through the integrated practice of midwives, general practitioners, pharmacists and dentists, all located in the same primary healthcare centre.

The study examined how each healthcare professional (midwife, general practitioner and clinical psychologist) in the two selected primary healthcare centres assessed the psychological health of pregnant women and how pregnant women responded to and experienced the assessment. The units of analysis were: a) the Setaman Primary Healthcare Centre in the Southern district and b) Purwo Primary Healthcare Centre in the Northern district. Within the two units of analysis three key aspects enabled the development of theoretical propositions to answer the research questions:

1. The assessment process conducted by the following healthcare professionals: midwives, general practitioners and a clinical psychologist. A comparison between the two selected primary healthcare centres will be made.

2. The perceptions of healthcare professionals regarding the assessment of pregnant women's psychological health.
3. The responses and experiences of pregnant women regarding their psychological health assessment session.

3.4.2 Theoretical propositions

Initial propositions were developed to guide the researcher to answer the research questions; a procedure suggested by Walshe (Walshe, CE. et al., 2004). The development of propositions is inherently an iterative process that may change before, during and after data collection stages (Walshe, CE. et al., 2004; Walshe, C. et al., 2008; Yin, 2014). The initial propositions of this case study aimed to discover if:

No	Initial propositions	Sources
1	The performance of healthcare professionals in the assessment of pregnant women's psychological health was influenced by their knowledge and awareness in maternal mental health issues.	(McCauley et al., 2011; Noonan et al., 2017a)
2	The relationship between healthcare professionals and pregnant women affects the responses given by the women, as well as influencing healthcare professionals' behaviour when carrying out the assessment.	(Bacchus et al., 2002; Rollans et al., 2013a; Noonan et al., 2017b)
3	The role of each healthcare professional in the assessment of pregnant women's psychological health is affected by the culture and context of individuals, teams and the organisation within each primary health centre.	(Ayers and Ford, 2017)
4	The integrated antenatal care programme training contributes to healthcare professionals' knowledge and awareness of maternal mental health issues.	(IMoH, 2010b)

Table 3-1: Initial theoretical propositions

3.4.3 Cases selection and participant recruitment

In terms of the selection of cases and participants, Yin and Thomas both argued that the case study researcher should avoid the term 'sample' to define the person or subject who will participate in the study (Yin, 2014; Thomas, 2016). The use of 'sample' in the case study may increase the risks of readers' confusion by presuming that the size of the sample used in a case study can be generalised to a larger population. Yin (2014) makes the point that the purpose of a case study is to perform an analytic generalisation, not a statistical generalisation. In addition,

Thomas (2016) suggested that in a case study, the researcher make a selection of subjects without expecting the choice would represent a wider population, therefore it is not a sample.

This current study employed multiple case studies. Pregnant women's psychological health assessment during antenatal care in two primary healthcare centres in Southern and Northern districts were the focal cases for this study. A multiple case study design was selected to provide more compelling evidence than a single case study. There were two study sites, each of which constituted a case and a unit of analysis. Cases for this study were selected using the following practical criteria: i) primary healthcare centres in Yogyakarta, Indonesia, ii) located in two different districts, with iii) different of antenatal booking visit procedures ; a selection aimed at predicting contrasting results but for predictable reasons.

The healthcare professionals who were involved in the antenatal assessment of pregnant women attending a booking visit at either of the two selected health centres were invited to participate in this study. The study aimed to understand the context of the procedures associated with the assessment of psychological health during pregnancy. These procedures are taking place in the real-life setting of a community health centre. Considering the practicality and time plan of the study, the researcher planned to conduct in-depth interviews with 10 midwives, 2 GPs, a psychologist and 10 pregnant women. The researcher also planned to observe 10 antenatal booking visits. However, by the end of the research period in the two centres, a total of 11 observations of antenatal booking visits, and 26 in-depth interviews with participants (pregnant women and healthcare professionals) had been conducted. The details of the research participants and the data collection are reported in section 7.2 and can be seen in table 7-1.

3.5 Data collection

This study used four methods of data collection. The aim of using multiple sources of evidence is to perform data triangulation that will enhance the study's rigour (Creswell, John W. and Miller, 2000; Creswell, J., 2007; Creswell, J., 2009; Yin, 2014; Thomas, 2016). In addition, by employing a variety of data collection techniques the researcher could improve the level of the qualitative research's validity (Pannucci and Wilkins, 2010). The substantive data in this study is gained from the interviews. Data from non- participant observation, reflective field notes and relevant documents were translated and then transcribed from Indonesian to

English. The three data sources are scrutinised thematically, driven by analysis of the interview data. The aim of using supporting data, as a form of data triangulation, was to strengthen the findings from interviews. Below are details of the data collection methods employed in this study.

3.5.1 In-depth interviews

Interviews in research can be defined as a conversation between the researcher and the participants to apprehend and explore participants' beliefs and experiences (Creswell, J., 2007). In-depth interviews were employed in this study as they provided the opportunity to capture the participants' own views on experiencing a mental health assessment session during pregnancy.

Semi structured in-depth interviews with pregnant women, informed by the use of an interview guide, as well as interviews with healthcare professionals, were conducted following the antenatal booking visit. The interviews were all audio-recorded, with each participant's consent, to capture the data. This allowed the researcher to focus on the interview questions, participants' answers and subsequent responses, rather than taking notes during the interview which might cause the researcher to be unfocussed on the questions, as well as inhibiting the participants' responses (Doody and Noonan, 2013). A drink and snack were provided by the researcher and the interview was conducted in a separate, private room in the clinic.

3.5.1.1 Interview settings

In Setaman Primary Healthcare Centre, an interview room was provided next to the examination room. In this room, there was one gynaecologic bed, one drawer and two chairs which were separated by an office table. To create a more welcoming environment for the interview, the researcher moved the chair so she could be situated next to the participant. As a result, the researcher and the participant were sitting next to each other during the interview. By contrast, in Purwo Primary Healthcare Centre, the researcher was provided with an interview room in which there was a comfortable couch, a coffee table, a fridge and a fan. The couch was big enough for the researcher and the participant to sit next to each other during the interview session.

As suggested by Charmaz (2006), the structure of an interview starts with the initial open ended questions, followed by intermediate and then ending or concluding questions (Charmaz, 2006). An example of an open ended question is *'Tell me how you feel about…' 'Could you explain more about…'* is an example of a more

focused intermediate question. *'Is there anything that you would like to add?'* is an example of an ending or concluding question aimed to summarise, gain more in-depth 'thick' data from the participants and to allow the participants to give more information about any issues that had not been explored during the interview.

During the interview the researcher was aware that several pregnant women showed emotional distress by crying, when responding to questions about their life difficulties. The process of managing situations where research participants showed distress is explained in section 3.7. The interview guide was developed based on discussions with the researcher's supervisory team. Two sources were used to help the researcher to develop her interview guide. The first source was the findings by Rollans (2013) regarding women's experience of psychosocial assessment and depression screening in pregnancy and following birth. The second source was Mathibe-Neke's (2014) focus on midwives' perceptions regarding psychosocial risk assessment during antenatal care.

Two pilot interviews were conducted; one of which was an interview involving a couple. However, the researcher was aware that when a woman's partner was involved in the interview, the woman might have been unable or unwilling to express her true opinions, and thus such a situation would almost certainly affect pregnant women's responses to the questions in an inhibiting way. Therefore, in the following interviews, the pregnant woman's husband/ partner/ companion was not allowed to come to the interview room. As the pilot interviews showed that the interview guide could gather the data appropriately, no amendments to the interview guide were made. The interview guide is presented in Appendix F.

3.5.2 Non-participant observation

Non- participant observation during the routine antenatal booking visit, using an observation inventory, was employed to collect data in real time and helps to explain cases contextually (Yin, 2014). The observation tool used was based on work by Spradley (1980) which included 9 dimensions to describe and observe: i) space and ii) object (physical); iii) act, iv) activity, v) actor, vi) goal, vii) feeling (social); viii) event and ix) time period (temporal). These dimensions are inter-related and influence each other. The observation matrix is set out in Appendix G.

The researcher specifically chose overt non-participant observation as optimal for use in this study. Overt observation occurs when the participants were aware that they were being observed (Couchman and Dawson, 1995) and well-informed of the study's purposes (Sarantakos, 1998). Being subjected to overt observation could

increase the risk of the observed altering their behaviour. Yet, Bowling (1997) suggested that the ‘awareness effect’ on participants during observation reduces over time. This phenomenon will be explained further when the issue of Hawthorn effect limitation is addressed in section 3.4.2.2. The observations in both settings occurred primarily in maternal and child examination rooms where the midwives provided services to pregnant women during the women’s antenatal visits. These clinical rooms also provided a place to undertake daily routines such as history taking, physical examinations, counselling and documentation; activities conducted by midwives either manually or electronically.

3.5.2.1 Observation settings

During the observation of the antenatal visits, pregnant women and midwives were sitting face to face and separated by an office table. The researcher usually sat in a chair about 1.5 metres away from the midwife. When the midwives performed a physical assessment such as abdominal examination, the researcher followed the two participants and sometimes provided help to the midwives. For example, handing over the instruments that were used to carry out the examination, such as measuring tape and gel for the Doppler test.

In addition, two psychoeducational sessions provided by the clinical psychologist in Purwo Primary Healthcare Centre were observed. Before the observations were undertaken, the researcher obtained consent from the women and the psychologist. This process was required by the involved ethical committee in both Indonesia and the UK. Further details on the process of obtaining consent from women will be described in section 3.7 below. The midwife who provided the antenatal care services took the women to the psychologist’s room to have a psychoeducational session as part of the integrated antenatal care programme. This session consisted of psychological assessment mainly focusing on the woman’s readiness for her pregnancy and the effects on each woman’s physical and psychological wellbeing. The details of a psychoeducational session are presented in Chapter 5, which focuses on the findings from the Purwo Primary Healthcare Centre.

Some observations were made in the clinical psychologist’s room, in order to see components of the psychological health assessment of pregnant women, as conducted by the psychologist. Each observation period typically lasted between 15 to 30 minutes. Brief notes were taken during the observation sessions, and were then typed into fuller field notes within 24 hours. Observations were conducted

during the morning at both study sites, since the integrated antenatal visits were only provided from 8 am to 3 pm daily.

3.5.2.2 Limiting the Hawthorn effects during observation

The researcher recognised that during the observations her presence may have influenced participants, and particularly the healthcare professionals, to modify their behaviour; an example of the Hawthorne effect resulting from being observed by the researcher (Jones, S., 1992). Thus, to limit the Hawthorne effect, a six-stage strategy was implemented as proposed by Oswald et al. (2014) to help the observer engage and build relationship so that participants, potentially, are able to behave as naturally as possible. (Oswald et al., 2014) six stages are: i) gauge the person; ii) create a non-threatening perception; iii) introductions; iv) establishing rapport; v) relaxed signal and vi) linking to conversation area.

Gauging the participants was conducted by visiting the healthcare centres every Monday to Friday from 8 am to 3 pm for familiarisation. This process lasted for 3 weeks and the researcher considered that this period of time was sufficient to gain understanding of the setting and potential participants in order to become immersed within the study sites' environments and contexts. Gauging with pregnant women was conducted by having informal conversations in the waiting room with those women who had agreed to be involved in the study.

The researcher's essential task of creating a non-threatening image/persona was implemented through showing an approachable and friendly manner, in order to build positive relationships with the participants. The researcher also wore casual clothes in the local style, such as trousers or skirt and a shirt, when visiting the healthcare centres. Introduction of the researcher to all participants was an essential foundation to establishing rapport; an event which occurred before any interviews took place. When talking to all participants, the researcher used a non-formal Indonesian language, mixed with the 'soft' Javanese indigenous language when the participants expressed a preference for that option. In general, Javanese language has two levels of subtlety: the informal level which is usually used to talk with close friends or those who are at the same age. The second level involves 'soft' Javanese, which is used as a sign of respect to talk to older persons and those who are not well acquainted or who have only just met each other. As recommended by Smith et al. (2008), the use of local language in the interview is also aimed at minimising the risk of misinterpretation and to ensure meanings are

accurately captured by all parties involved in the research; particularly the researcher (Smith, H.J. et al., 2008).

Establishing rapport was achieved by using appropriate body language, and maintaining some eye contact with the participants. The researcher also used the participants' names in conversation. Some light-hearted comments and jokes also came from the researcher and pleasingly, also from the participants. This behaviour was part of giving out relaxed signals and occurred at some point during stage 4 during the establishing of rapport). In terms of stage 6 (link to conversation area), as this study employed a non-participant observation strategy, changing the topic of conversation to the researcher's interest area was conducted during the interview sessions.

3.5.3 Documentary analysis

Documentary analysis was undertaken to be able to report the process of each participant's assessment. Documents targeted included medical records, the pregnancy book, antenatal proforma and criteria for the educational module for integrated antenatal care training. The documentary data were collected by asking permission from the midwife supervisor. Where permitted, photographs of the documents or scans of hard copies were gathered, then saved and collated in one folder. Each electronic folder was named by the participant's code and initials to enhance security, privacy and confidentiality.

3.5.4 Reflective field notes

Reflective field notes were utilised to help the researcher record all information before, during and after data collection. This personal diary included the thoughts of the researcher and reflections on the researcher's feelings and experiences which might influence the way in which the researcher conduct the observation. Reflective field notes were also written in order to clarify subsequent reflexivity after the observation was conducted, thus enabling the researcher to probe the actions within the observation (Charmaz, 2006). A more detailed researcher's reflexivity of the study as a whole can be found in section 7.5.

3.6 The transcribing and translating processes

In this study, all interviews with participants were audio recorded and transcribed *verbatim*. All the transcriptions were conducted by the main researcher, as some of the conversations with the participants were conducted in the Javanese language.

This approach was in line with Easton et al. (2000) as he suggested that to minimise the possibility of transcription error, due to the use of jargon or language barrier, it is advisable for the researcher to be both the interviewer as well as the transcriber (Easton et al., 2000).

Language translation became a challenge in this research, particularly during data analysis stage, as English is not the researcher's primary/first language. Qualitative research is considered valid when there is a close distance between the meanings as experienced by participants and the meaning as interpreted; the closer the better (Polkinghorne, 2007). Therefore, to enhance transparency in the transcribing and translation processes, a number of quality assurance mechanisms have been implemented. Among these mechanisms was a series of back translations (Edwards, R., 1998).

First, the Indonesian versions of the transcriptions were translated by the researcher into English, then, the researcher asked a translator to translate a sample (3) back into *Bahasa* Indonesia. A professional translator was needed for back translation to avoid loss of meaning that might influence the credibility of the study (Van Nes et al., 2010). Both the researcher and the translator then compared and discussed the original transcript and those which had been translated from English to *Bahasa* Indonesia. The translator and researcher agreed that some words or terms in Javanese were difficult to translate into Indonesian language (*Bahasa* Indonesia) and English. Therefore, for some terms explanations were written in bracket to illustrate the meaning of the words. This approach was adopted from Halai (2007) who suggested using brackets in order to provide the closest translated meanings, together with some explanations of the words when an exact translation is not possible (Halai, 2007).

All transcripts were translated into English, which was a very time-consuming process. However, the translating was also a valuable exercise for the development of analysis, as it enabled the researcher to become more familiar and engaged with the data gathered from the two health centres. Each transcription took approximately six to seven hours to complete, as well as translating them into English. As the coding process was conducted in English, this process was very helpful for the researcher, as it facilitated the discussions with her supervisors.

3.7 Data analysis

Using a case study approach, this study relied on theoretical propositions and an inductive strategy, by working from the ground up. Initial theoretical propositions can change along with further data collection and the development of a researcher's analytical insights (Yin, 2014). These two general analytic strategies, relying on theoretical propositions and working from the ground up were adopted by Yin (2014) and were appropriate to help the researcher connect the data to the concept of interest, which will lead to 'a sense of direction on analysing the data'.

At the beginning of the process of data analysis, the researcher considered using computer assisted qualitative data analysis software (CAQDAS), such as NVivo 10, as a tool to help manage the data. CAQDAS is very useful to help a researcher with their data management; such a tool could be used to establish a chain of evidence to track data, which in turn will enhance the rigour of the study (Dainty et al., 2000). However, as of today, CAQDAS can neither replace the need to make human judgments nor replace the researcher's intuition as the key characteristics of qualitative research and its associated data analysis (Blismas and Dainty, 2003). Therefore the data analysis was carried out manually by employing the thematic analysis model offered by Braun and Clarke (2006). Initial codes in NVivo were then moved to Microsoft Word and Excel to enable the next stage of data analysis (searching for themes) to develop.

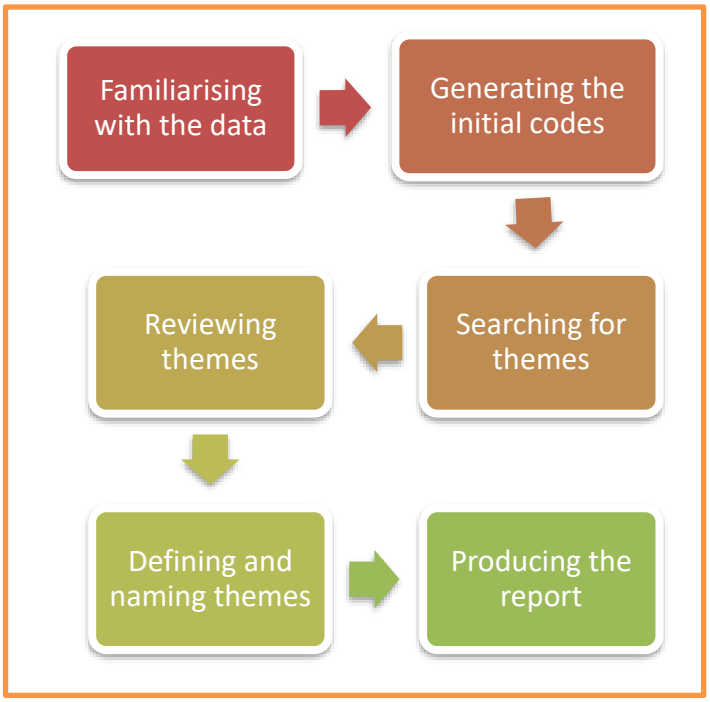

Figure 3-1: Six steps of thematic analysis by Braun and Clarke (2006)

Interview data from each study site were analysed separately, prior to cross-case analysis. Thematic analysis involves 6 steps of data analysis, as presented in figure 3-1 (Braun and Clarke, 2006). First, the interview transcripts were read and re-read by the researcher. Notes were added to the data in order to generate initial codes. These codes were then grouped and initial themes developed. The themes were then reviewed and challenged by the researcher's supervisors as were labels/ titles. The interpretation of each theme was then begun and developed. The final analysis stage of a single case involved an interpretation of all subthemes in order to further develop their relationships. Interpretation was supplemented by data from non-participant observations, reflective field-notes and documentary analysis. The process and direction of the data synthesis is illustrated in figure 3-2 below.

The analytical map and narrative were then produced; the themes and sub-themes from each of the two study sites were clustered in order to be analysed across-cases in the next stage. The example of coding, organising and development of themes can be seen in Appendix Q.

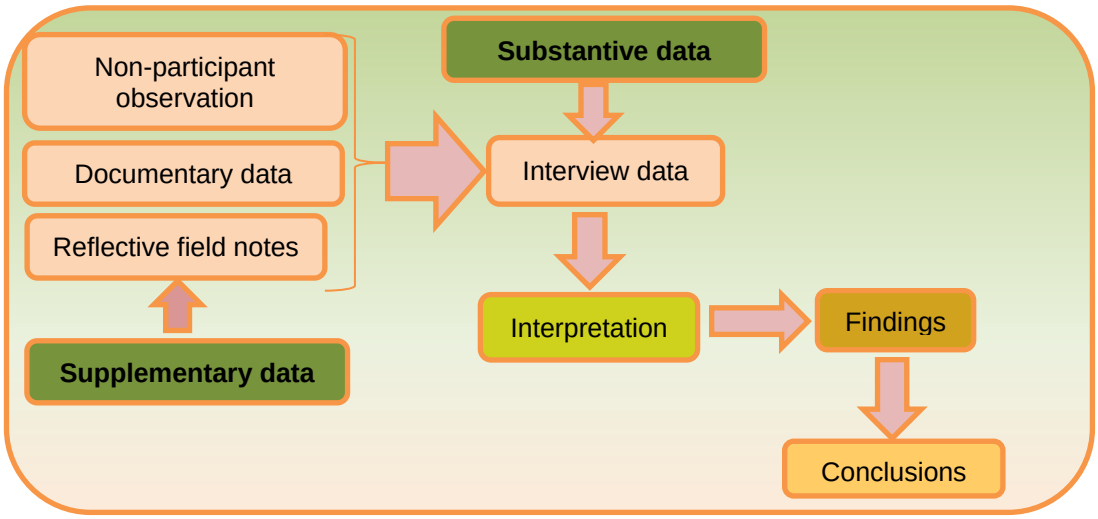

Figure 3-2: Data synthesis process

Following the data analysis in each site, a cross-case analysis was then applied. This technique is relevant if there are at least two cases in a case study, as themes can be analysed for each individual case as well as across different cases (Stake, R., 2006; Creswell, J., 2009; Yin, 2014). Cross-case analysis was conducted to enhance the transferability of the study's findings and to provide deeper explanation and understanding of those findings. It is expected that cross-case analysis could help in establishing whether the findings would be applicable to other similar

settings beyond this specific case study. Findings from research involving two or more cases are likely to be more robust than from research which only involves a single case (Miles and Huberman, 1994; Yin, 2014). Pattern matching (Yin, 2014) with mixed strategies that are case and variable oriented are implemented (Miles and Huberman, 1994). The details of the cross-case analysis are presented in Chapter 6. Figure 3-3 below illustrates the phases of data analysis in this study.

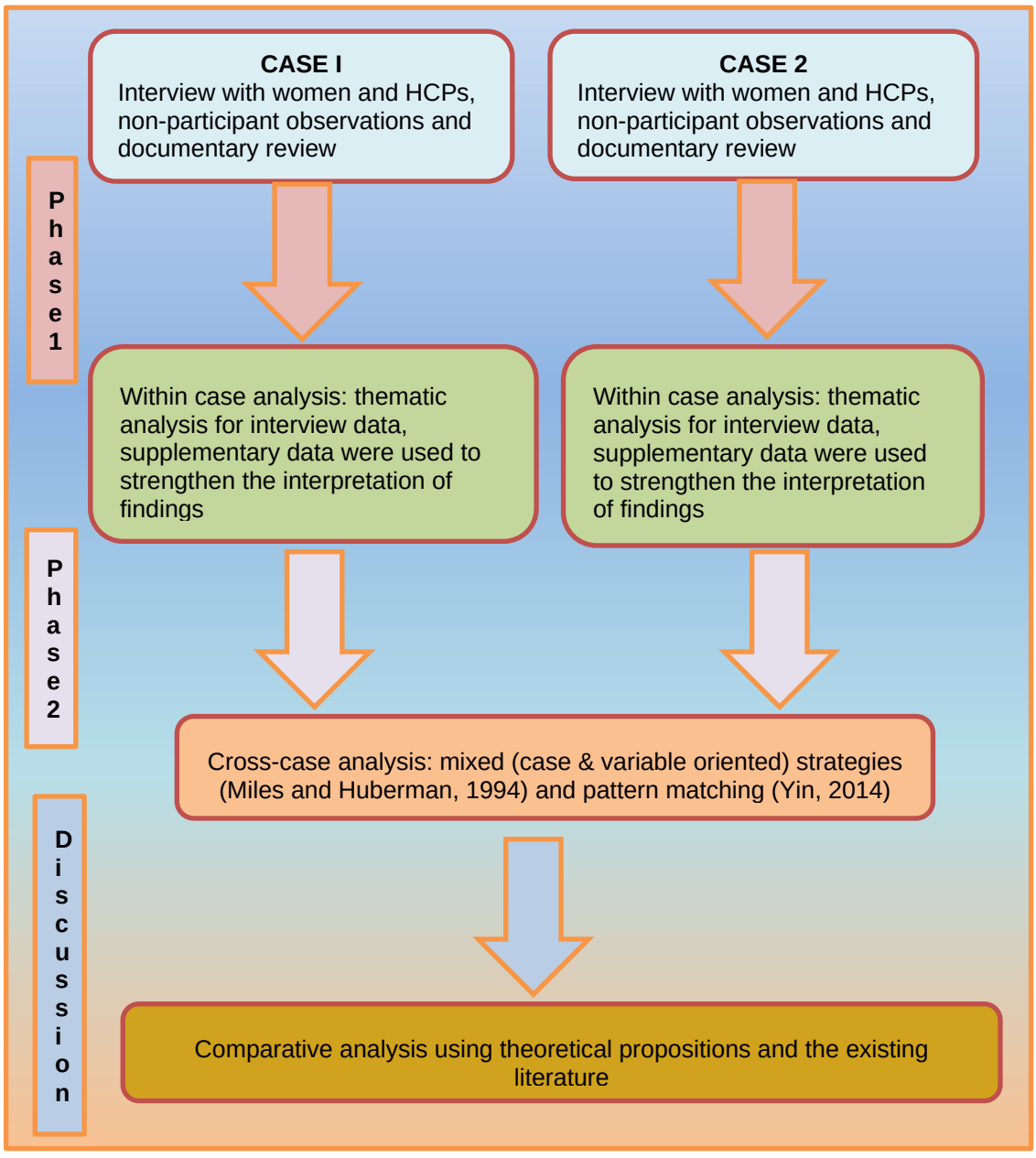

Figure 3-3: Phases of data analysis

3.8 Ethical issues

Ethical approval was secured from the School of Healthcare Research Ethics Committee (SHREC), University of Leeds before data collection in Indonesia could begin (Appendix H). In addition, access was approved from each primary healthcare centre via the Regional Licensing Agency for each district where the study was conducted. All participants, both pregnant women and professionals, involved in the study were provided with a Participant's Information Sheet (PIS).

To meet ethical research principles of justice and autonomy, all potential participants had been informed about the study. They were treated equally, regardless of characteristics such as education, working experience and positions in the healthcare centre for healthcare professionals; and parity, age and socioeconomic status for the pregnant women who were taking part. The researcher provided an information session and gave detailed information letters regarding the study to potential participants. The information was given to all healthcare professionals in the two primary health centres involved in this research. Healthcare professionals who were interested in participating in the study were given the researcher's contact details to allow those professionals to confirm their availability for observation and interview.

With regards to the recruitment pregnant women as participants in the research, an information standing-banner was provided in the waiting room to inform the women about the study. A receptionist also provided pregnant women who came for an antenatal booking visit with a leaflet to communicate initial information regarding the study. The midwives who had agreed to participate in the study in each clinic informed the women about the study and offered an opportunity to meet the researcher who was sitting in the clinic waiting area. Pregnant women who potentially participate in the study were offered to receive more detail, ask questions and consent if appropriated. The participating midwives identified potential participants through the women's medical records. When the midwives found a woman who had come for an antenatal booking visit, she called the woman and asked to talk to her in private in the interview room. The midwives and the researcher emphasised all pregnant women were free to withdraw from the study at any stage of data collection, and there would be no consequences regarding their medical care. The researcher also emphasised to all participating healthcare professionals that they were free to withdraw from the study. This point was

emphasised in order to ensure that participation in the research was entirely voluntary (Hayman et al., 2001).

With regards to beneficence and non-maleficence, it is undeniable that the researcher received direct benefit from the study. Healthcare professionals participating in the study received an executive summary of results which provided new information and insights of benefit, related to the researched topic, which in future could inform healthcare professionals' practice. Women might have enjoyed taking part in the study, but there was the potential for some women to become upset, and as a result would need a break during their interview or observation; or in certain cases would wish to stop their participation. In such situations, it was planned to offer help from healthcare professionals to help those women so affected to talk through their feelings, have a break or establish whether they would agree to continue at another time.

A distress protocol was prepared which the researcher adopted from Draucker et al. (2009) (see Appendix I). Additionally, if there were any signs or risk factors of mental distress found in participating pregnant women during the interview, the researcher would pass the information to the healthcare professionals. This procedure was conducted with the women's consent; thus the women were expected to be able to get access to immediate care in an urgent or emergency situation.

To protect each participant's privacy and confidentiality, all collected information including paper documentation involving the participant's details, field notes, documents and data transcription were scanned, anonymised and saved temporarily in the researcher's personal password protected computer. All files were saved in a password protected file and moved as soon as possible to safe storage in the University of Leeds M drive. The above security related practices were based on the University of Leeds' data management policy.

3.9 Rigour of the research

According to Silverman (2006), to enhance the quality of a qualitative study, the researcher must consider the rigour of that research (Silverman, 2006). There are four main variables to demonstrate the trustworthiness and authenticity of qualitative research: i) credibility, ii) dependability, iii) transferability and iv) confirmability (Lincoln and Guba, 1985). The following section provides an

explanation of the four techniques adopted by the researcher to attain rigour in this study.

3.9.1 Credibility (internal validity)

Credibility referred to the extent to which the researcher assesses a real situation during the data collection (Silverman, 2006). To maintain the credibility of the study, the process of interview was audio-taped and transcribed verbatim. In addition, as all transcriptions were translated into English, the supervisory team had a role as independent analytical coders for a sample of data. The peer review process was managed fortuitously because the study was supervised by two experts in qualitative research methodology. Both had midwifery backgrounds and both supervisors constantly and routinely offered comments during data analysis. This peer debriefing process was aimed to verify the interpretation of the data and to prevent any distortion from researcher bias (Lincoln and Guba, 1985; Beck, C., 1993).

The open-ended interview guide was developed based on discussions with the supervisory team(s), as well as being informed by the literature. Prior to conducting interviews to gather qualitative data, the researcher undertook both training and courses to boost her research skills and potentially enhance the credibility of the instrument used in the study (Creswell, John W. and Miller, 2000).

By employing a variety of data collection techniques, a researcher can improve the credibility level of their qualitative research project (Pannucci and Wilkins, 2010). This researcher has employed observation during each participant's antenatal booking visit in order to examine the real situation during the process of that woman's mental health assessment session. In addition, before a factual observation was conducted, the researcher followed the suggestion offered by Lincoln and Guba (1985) to have a prolonged engagement with the study settings. The observation instrument was used to observe and adopted from Spradley' Descriptive Question Matrix (1980). As Spradley's nine dimensions, cited above, could capture the physical, social and temporal characteristics of participants and the research settings, the instrument, therefore had implications for understanding the inter-relationships of each dimension (Elgas et al., 1988). Furthermore, the credibility of this study was strengthened during data collection, as the researcher wrote field notes about issues such as her actions, interactions and subjective states (Beck, C., 1993).

3.9.2 Transferability

Transferability referred to the extent to which the findings are transferable or applicable in other settings (Pope and Mays, 2006). The transferability of this study was enhanced by conducting the study in two different sites; one is a primary healthcare centre in a rural area, and one is a primary clinic located in an urban area which have different pathways of antenatal visit. As suggested by Beck (1993) to make sure that the study resulted in a range of participants, midwives, a GP, a psychologist, as well as pregnant women, were contributing participants in this study. To enhance the transferability of the study, the researcher also provided thick and detailed descriptions to ensure that the findings are transferable within the specific context, particularly in LMICs setting (Guba, 1981; Stake, R.E., 1995). Furthermore, the cross-case analysis was also performed to capture commonalities, differences and patterns of the findings in two different study sites. This, cross-case analysis informed the fittingness of the study findings which the researcher made explicit patterns in a certain context (Holloway, 1995), i.e. in LMICs where perinatal mental health system is not in place.

3.9.3 Dependability (reliability)

Dependability refers to the consistency of the findings over time across researchers and methods (Lincoln and Guba, 1985; Miles and Huberman, 1994; Golafshani, 2003). Dependability in this study was attained by recording labels and descriptions of the codes and the process of theme development. This strategy is crucial to provide information in a traceable data analysis process. In addition, the researcher also conducted regular and intensive supervisory meetings, particularly when discussing the transcriptions, in order to build the initial themes and subthemes. An example of theme developing is offered in Appendix Q. Written records were made following each supervisory meeting. An audit trail was developed by presenting quotes from interviews with participants, data from non-participant observations and reflective field notes. The quotations enabled the researcher to provide coherent interpretations and arguments which explain the context of the psychological health assessment procedure in primary healthcare setting in Indonesia.

3.9.4 Confirmability (objectivity)

Confirmability of the qualitative study required the researcher to provide clear and accurate data (Pope and Mays, 2006). Confirmability also refers to neutrality, where the findings of the study are free from any researcher bias and are shaped solely by the participants (Lincoln and Guba, 1985; Miles and Huberman, 1994).

Confirmability was attained through a routine and intensive discussion with supervisory teams. As all data were translated into English, supervisors were able to ensure the objectivity of the interpretations. During the supervisory meetings, initial arguments, assumptions and interpretations were challenged. This stage essentially provided a central point as a form of openness to new/alternative ways to view the data. Peer feedback was also given to the researcher during seminar and conference presentations. Details of dissemination of the study are provided in section 7.8. Excerpts from participants were used to assure the readers that the findings from this study reflected the participants' views and experiences.

3.10 Reflexivity

Reflexivity refers to the attitude and awareness of the researcher that she could influence the study and therefore must acknowledge potential bias existing at every stage of the research (Creswell, John W. and Miller, 2000; Malterud, 2001). Malterud (2001) noted: "*Preconceptions are not the same as bias, unless the researcher fails to mention them*" (p. 484). Reflexivity was performed by having a routine supervisory meetings to discuss the aims, objectives, methodology and methods of this study. The University of Leeds' transfer review process was conducted to confirm that the researcher was eligible as a PhD candidate in the first year of the study. This transfer stage involved two independent reviewers who had roles as 'outsiders' to enable them to assess the study proposal.

In order to secure ethical approval for data collection, SHREC gave some input and suggestions regarding ways to identify any possibilities of potential researcher bias. This input included some issues relating to possible psychological distress and dealing with sensitive/ upsetting subject-matter. Details on how to minimise this potential bias can be found in section 7.5. A set time, 30 to 60 minutes, was given for the women to decide about participating in this study. Any potential bias in recruitment was minimised by: a) providing an information leaflet to every enquirer, b) erecting a standing banner in the centres and c) asking the midwives to approach the women. Details about methods used to prevent the women from experiencing coercion were covered in section 3.7.

The Hawthorne effect, or the observer effect, was unavoidable when carrying out overt observation of human subjects. Yet, to minimise and control the influence of the researcher's presence during data collection, strategies were implemented as described in section 3.4.2.2. The researcher also completed training on qualitative

data analysis to minimise any bias in the data analysis process. Potential bias during data analysis and findings' presentation were minimised through the involvement and critical appraisal of the supervisory teams.

3.11 Positionality

During data collection, I was aware of my multiple roles. Positionality represents the researcher's acknowledgement of her multiple overlapping identities; a circumstance which might influence how the researcher approached the study settings and engaged with the participants (Kezar, 2002; Bourke, 2014). Therefore, before interviewing the women the researcher emphasised that even though I am a midwifery lecturer at the local university, I was not part of the primary healthcare centre's staff, nor did I have a role as a midwife at that time. This purpose of this clarification exercise was to emphasise that I was an 'outsider' who happened to be conducting research in the healthcare centre. As a gesture to confirm my position as an outsider, I wore casual clothing instead of formal dress or midwifery uniform. In addition, even though the interviews took place in a private room in a primary healthcare centre, all participants were offered snacks and drinks as a means of hospitality.

Nevertheless, at the end of the interview with the healthcare professionals, particularly the midwives and the GPs, most of the participants asked me for information. They were especially concerned about the 'proper way' to conduct a mental health assessment for women during their perinatal period during the antenatal or postpartum visits. The healthcare professionals seemed to consider me to be an expert in this field. Usually I would then restate the aim of the study, which had been designed to improve the quality of Indonesian women's antenatal care, with a particular focus on finding the most appropriate ways to assess pregnant women's mental health.

As there was no instruments were employed with, or specific questions asked of, the pregnant women patients, unlike in the Setaman Primary Healthcare Centre, some healthcare professionals in Purwo asked about mental health assessment. For healthcare professionals in the Purwo Primary Healthcare Centre, those who were curious about mental health assessment and mental health problem screening were introduced to the Whooley questions (Whooley and Simon, 2000).

3.12 Summary

In this chapter, the study methods are presented. A qualitative case study was chosen as a strategy to answer the research questions and key aspects of the chosen model were explained. A detailed description of the data collection methods was also employed as a form of data triangulation. A series of back translations were conducted to enhance the quality of the study. In addition, ethical issues as well as the rigour of the research, including the researcher's reflexivity and positionality, were also described in this chapter. The following chapters (4 and 5) will present the study's findings based on the data obtained from the two research sites.

Key Summary:

- This is the first study in Indonesia to explore how healthcare professionals assess women's psychological health during each woman's routine antenatal visit, with the data filtered through the perspectives of pregnant women and healthcare professionals.
- A qualitative case study was chosen as the research model to illuminate a real life situation of psychological health assessment in antenatal visit.
- Multiple data collection methods, including semi-structured in-depth interview, non-participant observation, documentary analysis and reflective field notes were employed to answer the research questions.
- Thematic analysis was used to deal with the interview data and interpretations were strengthened with data obtained from non-participant observation, documentary analysis and field notes.

Chapter 4 Case 1: Findings from Setaman Primary Healthcare Centre

4.1 Introduction

This chapter presents findings from case 1: the Setaman Primary Healthcare Centre. Within this chapter, detailed information about the setting, and the characteristics of participants are provided. In addition, findings from interviews with pregnant women, midwives, GP and the documentary analysis of the proforma are presented. Observational data and field notes are narratively written to help expand and explain interpretations of interview data. Field notes are written in *Lucida calligraphy handwriting font*. Information gained from non-participant observations are presented within a blue box.

4.2 Research setting site: Setaman Primary Healthcare Centre

Setaman Primary Healthcare Centre is one of 27 public primary clinics in Yogyakarta's Southern district, with a coastal area location. Setaman clinic provides services for 5 villages. The coastal area is also an area used as a location for sex workers. Hence the Prevention for Maternal To Child Transmission of HIV/AIDS (PMTCT) and sexual transmitted infection prevention programmes were considered as the two essential programmes in this healthcare centre. Within the clinic service provision includes: a) emergency care, b) childbirth, c) general health check services, d) physiotherapy, e) sexual transmitted disease clinic, f) dental examination, g) laboratory services such as urinalysis, haematology for screening of anaemia, dengue fever, hepatitis B and HIV and h) several consultation and counselling services such as nutrition and child development.

The healthcare professional staff include 15 midwives, 3 GPs (one of whom is the director of the healthcare centre), a dentist, a physiotherapist and 12 nurses. The average number of antenatal visits was 15 per day. In December, 2015 an integrated antenatal care service was implemented; the details of which are explained in Chapter 1, section 1.3, above.

4.3 Recruitment process and characteristics of participants

To aid the recruitment process, 100 leaflets (see Appendix M) were prepared and located with clinic reception. Pregnant women who came for antenatal booking visits were offered a leaflet by the receptionist. The researcher also provided a display poster to attract the participants to take part in this study. However, the role of the midwives to approach pregnant women to take part in this study was crucial. Midwives not only had roles as participants but also in helping the other participant (pregnant women) feel comfortable throughout the research process, in particular if they declined to participate. Pregnant women might well have made different responses if the 'unknown' researcher had approached the women directly.

The receptionist gave the leaflet to 61 pregnant women. Twenty seven women were approached by participating midwives and 17 of them received detailed information about the study from the researcher. Ten pregnant women declined to take part in the study as they did not want to be interviewed due to time constraints. One woman and a male-female couple participated in a pilot interview. As was explained in section 3.5.1.1. (page 48), data from pilot interviews were excluded. Fifteen midwives and a GP were present during an information session which presenting the detailed of the study and said that they agreed to participate. The information session was conducted after the Primary Healthcare Centre accreditation routine meeting. Yet, 9 midwives did not return the consent forms.

In total, there were five pregnant women, six midwives and a GP involved as participants in the research setting. All pregnant women came for an antenatal booking visit, with most in their first trimester. The five midwives who were providing services to the women participants in the study were also interviewed. A coordinator midwife and the GP were also included as participant in the research. Profiles of the participants can be seen in tables 4-1 and 4-2. Parity is not included and pseudonyms were used to maintain anonymity and confidentiality for protection of the participants in this study. Pseudonyms were also used to help the researcher in the data analysis process.

Women/ Age (years)	Gestation Age (weeks)	Descriptions
Ari (39)	6	She had an unintended pregnancy.
Ani (35)	10	She had an intended pregnancy.
Sari (39)	6	She had a wanted but an unexpected pregnancy.
Dian (24)	12	She had an intended pregnancy.
Puspa (39)	7	She had an unintended pregnancy.

Table 4-1: Profile of women participants

Healthcare professionals/ Age (years)	Education/ Working experiences (years)
Midwife Rita (32)	Diploma 3 of midwifery (10)
Midwife Sani (30)	Bachelor of midwifery (8)
Midwife Suli (45)	Diploma 3 of midwifery (21)
Midwife Mia (48)	Diploma 3 of midwifery (31)
Midwife Andri (32)	Diploma 3 of midwifery (10)
Midwife Rara (46)	Bachelor of midwifery (22)
GP Neti (37)	Medical doctor (14)

Table 4-2: Profile of healthcare professionals

4.4 Emerging themes from participant interviews: Setaman Primary Healthcare Centre

In response to the coding process, the themes were divided into two categories: a) from the pregnant women's perspectives and b) from the healthcare professionals' view. The division of the categories was also based on the objective of this study which aimed to examine issues relating to the mental health assessment procedure during pregnancy from the perspectives of both the service users and service providers. During the thematic analysis, two overriding themes emerged from women's data. The first theme was "Me and my early pregnancy", focusing on the women's initial emotions, their responses regarding their pregnancy and their life difficulties, as well as their coping strategies. "Listen to me" was the second theme, making it clear that women wanted to be heard; they expected to be given appropriate time and opportunity to talk to the healthcare professionals about the issues that were important to them.

Two key themes also emerged from the healthcare professionals' data. The first theme was "This is how we do it" presenting data about the healthcare professionals' awareness, knowledge and their routine practice in performing psychological health assessments. The second theme was "It is never easy to ask about mental health" which revealed the obstacles to conducting a sensitive, confidential and thorough psychological health assessment. Figure 4-1 illustrates

the four synthesised themes that were identified at the Setaman primary healthcare centre.

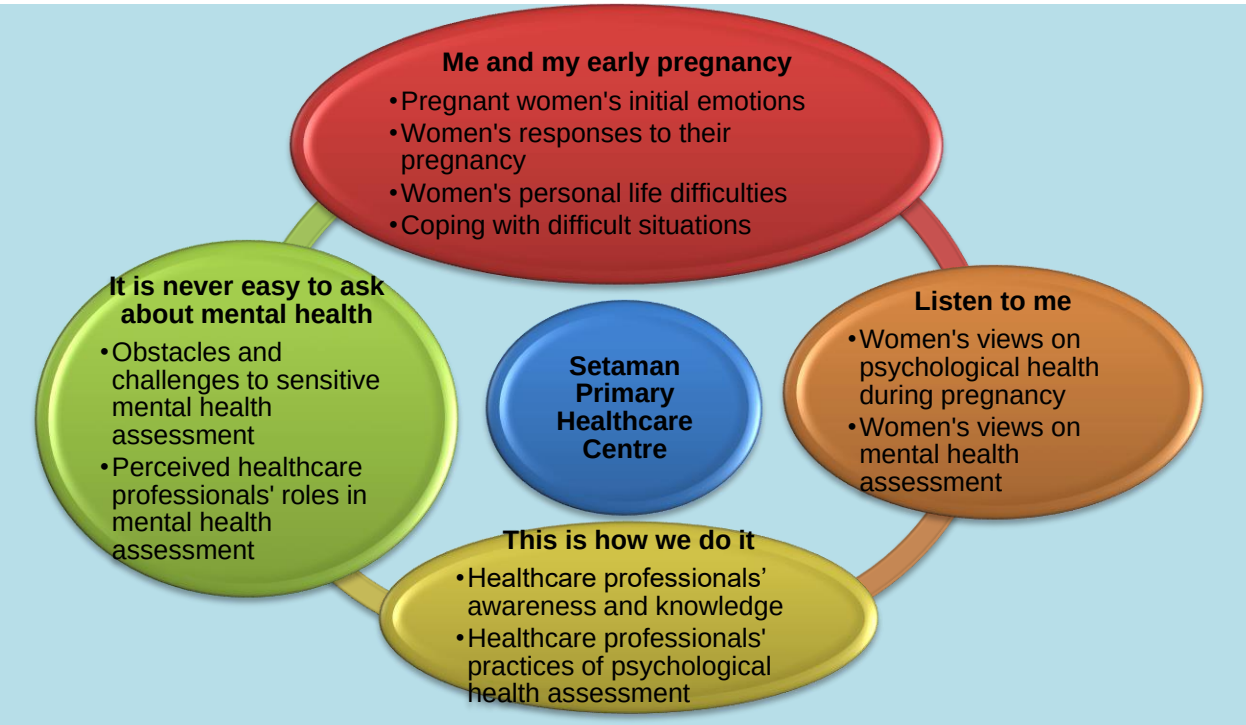

Figure 4-1: Themes from Setaman Primary Healthcare Centre

From pregnant women's perspectives

4.4.1 "Me and my early pregnancy"

This theme is focused on the experiences and emotions that pregnant women reported during their early pregnancy. Most pregnant women in Setaman came to the healthcare centre at their early pregnancy period (trimester 1). Some women had mixed feelings about their pregnancy which appeared to be influenced by several aspects: i) an unplanned pregnancy, ii) personal life difficulties, iii) previous traumatic pregnancy and childbirth. Meanwhile, some factors appeared to offer protective factors against psychological distress during their early pregnancy. These included religious and cultural beliefs, support from their husband, and previous experiences of pregnancy and motherhood.

All participants in this study site visited Setaman healthcare centre for their first antenatal booking visit in their early first trimester. Emerging themes encompassed their past experience of pregnancy and childbirth, as well as previous and current

difficulties (both health and social- related) that in combination have contributed to their initial feelings towards their pregnancy. In addition, protective factors towards psychological distress and each woman's response towards her pregnancy, as described during the booking visit, are illuminated in this theme.

4.4.1.1 Pregnant women's initial emotions

Pregnant women reported a range of emotions in their antenatal visit, when they participated in their interview with the researcher. Prior to attending their first booking visit, some women said that they initially felt happy whilst others reported that they were upset and worried. Generally women had mixed feelings towards their pregnancy, as was illustrated in the following quotes:

> *"I am really happy with my pregnancy" (Dian, 24, 1st pregnancy)*
>
> *"Well, (there is) joy and fear as well, because I am 39 already. It is a vulnerable age to get pregnant" (Puspa, 39, 3rd pregnancy)*
>
> *"I am happy* mbak [Javanese- for older sister, a calling name which is used when talking with an older person, or is used in conversation with someone who is not too close as a means to respect] *(ahahaha-laughing). I felt surprised as well at the beginning, but I also thought that I am 35 now, so... I want to have more child*" *(Ani, 35, 2nd pregnancy)*

Women having an unintended pregnancy said that feeling surprised and fearful appeared as their initial emotions. Sari stated:

> *"I feel surprised, Mbak… Well, because actually I don't have a plan (to get pregnant)… after waiting for 7 years and it seems like I haven't been able to conceive… now I feel like I can't believe it… I am happy and worried at the same time because the 1st and the 2nd (of my pregnancies) were really tough and full of risks (sobbing)." (Sari, 39, 3rd pregnancy)*

Both Puspa and Sari had mixed feelings towards their unintended pregnancies as they were concerned about their age and secondary infertility. Mixed emotions were also experienced by those who had a planned pregnancy, as was reported by Dian:

> *"I am happy… well… last time I had been diagnosed to have haemolytic anaemia. Sometimes, it makes me worried, what happen if my haemoglobin level dropped. Will it affect the baby?…" (Dian, 24, 1st pregnancy)*

At first, it was clear that Dian reported her happiness. Nevertheless, she also expressed an undercurrent of anxiety following her physical illness. The reason for this concern might be relating to her inexperience in pregnancy and childbirth. In

addition, she was fearful that her pregnancy might be poorly affected as she had anaemia.

Women's initial emotions toward their pregnancy appeared to influence their response to their pregnancy. Some women reported that they were overwhelmed with their pregnancy, as reported by Sari who had a perinatal loss in her first childbirth:

> *"…until now I still feel surprised. I need to prepare myself, my mind… I haven't prepared myself to express my happiness. As I said, I am worried, I am scared that the same thing (complication and perinatal loss) will happen in this pregnancy" (Sari, 40, 3rd pregnancy).*

From Sari's quote, it appeared that she was aware that she had complex emotions. Surprise and excitement as she was no longer infertile mingled with her fear of loss and complication. As a result, her trauma held her back from becoming overexcited and thus her full response to the pregnancy might take some time emerge.

Both the women with planned and unplanned pregnancies had mixed feelings towards their pregnancy; moods which seemed to be influenced by their current physical health, pregnancy intention and their previous experience of pregnancy and childbirth. The following section presents women's responses to their pregnancy.

4.4.1.2 Women's responses to their pregnancy

Women who were planning to conceive, showed an active and positive attitude during their booking visit. They did not show any hesitation about expressing their happiness. That emotion was shown by their enthusiasm when they met healthcare professionals. They had acknowledged and identified things to be concerned about during their pregnancy. For instance, those who had suffered from physical illness tried to obtain information to prevent complications during the pregnancy that could be triggered by their illness and which might have an effect on their baby. Dian reported:

> *"I have searched the information about haemolytic anaemia from the internet. I have asked the GP too, so I know about it briefly… Now I am planning to pay more attention to my diet; the nutritional content and the ingredients... Also things that I am going to use or put on my daily basis, such as cosmetics. It needs more attention (regarding its safety)" (Dian, 24, 1st pregnancy)*

Dian was excited about her pregnancy and had searched many useful sources related to her pregnancy and physical illness, either from healthcare professionals or other sources, such as from the internet. Her concerns also included issues that were rarely asked by the healthcare professionals, such as the safety of wearing makeup and certain skincare products. This concern might indicate that some women are being cautious and careful when they are expecting a baby.

Other positive attitudes towards pregnancy included the women's intention to manage any potentially negative emotions in order to have an optimum pregnancy journey. Ari and Ani stated about their commitment to cope well with their life difficulties:

> *"... well this is my fourth pregnancy, you know, (I will have) 4 children and some people will say that I have too many children…that is why I am a bit concerned. I am afraid my neighbours will say something about my pregnancy… Well, my husband said that he's ready (for having the 4th child), so I need to be ready too. What will be said by the people, I'll accept, I am the one who experiences this…" (Ari, 39, 4th pregnancy)*
>
> *"In this pregnancy, I don't want to think about conflict with my in-laws, I just want to go with the flow. I don't (want to) hear any offensive words from them, I'll just ignore them" (Ani, 35, 2nd pregnancy)*

From the quotes above, both Ari and Ani seemed to decide upon a positive commitment to ignore any negative comments from others; specifically neighbours and / or in-laws. It appeared that these two participants were anticipating personal life difficulties. Ari was concerned about her neighbours' thoughts about her 4th pregnancy, whilst Ani had a conflict with her in-laws. Details on the pregnant women's personal life difficulties will be described in the following section.

4.4.1.3 Women's personal life difficulties

All pregnant women expressed personal difficulties in their lives; a circumstance which could contribute to their levels of psychological distress. Most of these difficulties related to socio-cultural factors which involved their husband, family, neighbour and financial- related issues. Some social- related issues included women's roles in society and their responsibilities in an extended family. These difficulties seemed to be an added burden during their pregnancy.

It was evident that women experienced psychological distress as they were juggling with many issues in their daily lives. Examples of stressors are illustrated in the following quotes:

> *"…it is (indeed) stressful… well I (still) live with my parents-in-law, so it is my burden… Because, I have to take care of my father-in-law. He (father in law) is sick, he has a kidney stone. In addition, I do not only live with my father-in-law, but also (I live with) my sister-in-law…" (Ani, 35, 2nd pregnancy)*
>
> *"…(paused- the woman showed teary eyes). I have been one year living here. One of my children is with me and the other one is at the boarding school. My husband is still working in Jakarta…My father is old already. So my husband asked me to go back to Jogja and take care of my father. But, you know, as a family, I want to be together (with my husband)" (Puspa, 39, 3rd pregnancy).*

The quotes suggested that Ani and Puspa could not avoid their indispensable duties that are attached to married women. Duties included their responsibility to take care of their father and in-law's family and to comply with their husband's wishes. Nonetheless, sometimes other life difficulties occurred as the consequences of carrying out their obligations.

As women had to take care of their parents and parents-in-laws, living in an extended family became unavoidable. In this study, living in an extended family appeared to contribute to other life difficulties, such as conflict with in-laws. Conflicts also possibly involved other family members and neighbours. The quotes below illustrate verbal abuse from Ani's father-in-law and accusations of infidelity from the neighbours that were experienced by Puspa:

> *"…But my father in-law, when he talks to my child, his words just beyond the limits, exaggerating… He said my child is useless and is very naughty…(Stopping, sobbing, and taking a deep breath)… I feel so sad, those words are just hurtful, very painful (stopping, sobbing, taking a deep breath again)" (Ani, 35, 2nd pregnancy).*
>
> *"Well… I have a problem with a neighbour… She has a husband. We were best friend. Her husband, he usually visited my house. Eventually, it became a gossip. They said that there was an affair between me and her husband… But then I was accused, she didn't talk to me, but she told other people at our village (sobbing)" (Puspa, 40, 3rd pregnancy).*

In Puspa's case, she had to live separately from her husband, obeying her husband's wishes to take care of her father. Having no husband living with her seemed to make her prone to stigmatisation from the neighbouring community. The situation might be different when/if she and her husband were living together. She also experienced a harassment by her neighbours following the infidelity accusation:

> *"My (other) neighbours, other men, had asked me for dating, to go out with them" (Puspa, 39, 3rd pregnancy).*

The dominance of patriarchal society was evident in Ani and Puspa's quotations. Taking care of the parents was considered as a part of child's culturally prescribed responsibility. That duty was also rooted in Islamic teaching, the majority religion in Indonesia. Hence taking care of their parents and parents-in-law might be considered as a form of their devotion to their parents and husbands. As a consequence, they seemed reluctant to reject their husband's wishes:

> *"I just want to get out from the house, but my husband wants me to stay here, so, yes my burden is my father-in-law… My family said that it's good for me to just move out (to other house), but my husband wants me to live there with his father" (Ani, 35, 2nd pregnancy).*

Ani said explicitly that caring for her elderly father-in-law while she was pregnant was an added burden for her. Thus, she said she was able to manage herself during her pregnancy after her father had died:

> *"…(the spacing between) my first and second pregnancy was close, my father-in-law had a stroke and my husband was the one taking responsibility for his parent…But then on my third pregnancy, I was able to manage myself, as my in-law had already passed away, so I had lost one of the burdens" (Ari, 39, 4th pregnancy).*

Difficulties not only related to sociocultural contexts but also to women's experiences in previous pregnancies and childbirth; experiences that also influenced their emotions during their early pregnancy. Sari had a perinatal loss following her first childbirth and complications during her second pregnancy. These previous traumatic experiences may have contributed to her ambivalence towards her current pregnancy:

> *"…my first child had died when he was 3 days old. His tummy was so big and he died…While during my second pregnancy, I experienced hyper-vomiting. It was a very cranky pregnancy as I was hospitalised several times" (Sari, 40, 3rd pregnancy).*

Similar to Sari, Ari also experienced a traumatic birth on her previous pregnancy:

> *"I can still remember, it was raining and there were thunderstorms that night before my second childbirth. On Sunday night I was bleeding… It was actually a low-lying placenta…" (Ari, 39, 4th pregnancy)*

Ari could still clearly remember the situation and the moment as she explained her previous labour process to the researcher. It seemed like her traumatic birth left imprints on her memory. However, it was apparent that women's negative experience could also be related to the provision of care from healthcare professionals:

> *"I feel scared… for the childbirth… I felt stressed like… the care providers, the doctor, nurses and midwives in the hospital, they are quite fierce. So since the beginning of the childbirth I felt pretty tense… (I feel) traumatised… (cough), fierce midwives, and I had an induction. It really hurt." (Ani, 35, 2nd pregnancy)*

> *"I was confused, during my pregnancy, I had antenatal visits in the healthcare centre and the midwife always said that it went well, it was good, the baby was healthy and the midwife never said that there was a sign of low-lying placenta!" (Ari, 39, 4th pregnancy)*

The quotes above implicitly revealed that women were unsatisfied with the service provided by healthcare professionals during their previous pregnancies and childbirths. Their dissatisfaction included the healthcare professionals' less-than-sympathetic attitudes and their skills that appeared not to have recognised dangerous signs of pregnancy and childbirth. Their dissatisfaction towards healthcare professionals also included the service delivery either in the primary level or tertiary level healthcare centres.

Pregnant women's personal life difficulties were mostly rooted in their additional roles within their family. Some pregnant women also had a traumatic pregnancy and childbirth experience which was caused by insensitive and inappropriate care from their health service providers.

4.4.1.4 Coping with difficult situations

Women had several strategies to help them cope with and/ or solve their problems and difficulties that had made them feel worried and anxious. Those who were actively supported by their husband and family, through good communication and practical help, had a strong commitment to find a solution to their problems. This style of coping was reported by Puspa when talking about her conflict with her neighbour:

> *"…my father and my husband said that I can't be bothered with the infidelity accusation… My husband said that I need to focus on my pregnancy. If I get stressed, the baby's health will be affected" (Puspa, 39, 3rd pregnancy).*

On the other hand, Ani was disappointed and frustrated towards her husband's response, as she wished for the difficulties to be addressed by moving out from her father-in-law's house. Unexpectedly, her husband asked her to bear with the problem and asked her to have 'patience' whilst living with her in-laws. Thus, instead of taking action, she chose to remain silent every time she was verbally abused by her father-in-law:

> *"But I could only remain silent, silent (sobbing), my husband, he just said… it's okay, you just need to be patient… And I just keep quiet, quiet and quiet. Actually I want to talk to my husband's family, I am afraid if I talk about it, then the problem may get worse, (there will be) misunderstanding, so I don't want it to be complicated." (Ani, 35, 2nd pregnancy).*

A sense of desperation was also captured from Ani's quote as she repeated the word 'silent' and 'quiet'. Ani actively avoided talking to her father-in-law and felt unable to solve her problem since she was afraid that this may lead to further conflict with her husband.

Not surprisingly, traumatic events in pregnancy and childbirth were related to the expression of emotional distress from women during pregnancy. Sari and Ari were traumatised by their negative experiences during their previous pregnancy and childbirth. Thus, they both had their own preventive plan to seek reassurance from healthcare professionals. The following quotes illustrate their strategies to prevent complications in their current pregnancy:

> *"…after the death of my first child, in my second pregnancy, I visited 3 healthcare professionals in a month. I went here (to the healthcare centre), to the PKU hospital to see the obstetrician and to the midwife (private practice)… So in this pregnancy, I plan to see other healthcare professionals too, because I am afraid of any complications" (Sari, 39, 3rd pregnancy).*
>
> *"I don't want bad things happen to me. That's why I talk about my condition and my physical discomfort…I had planned to ask about (my backache) since at home" (Ari, 39, 4th pregnancy).*

From the quotations above, it was found that having a traumatic experience and childbirth led the women to be more cautious towards their pregnancy. In addition Visiting more than one healthcare professional, actively asking, talking and looking for information about their pregnancy were strategies to help them cope with their concerns and anxieties.

Pregnant women also involved others when they coped with difficult situations. Support from their husband and family members were noted as one important key

which influence pregnant women's psychological health. Their husband and family helped them by giving practical support, such as doing some of the daily chores and cooking meals. The women participants also reported that their husbands supported them emotionally by conveying empathy and listening to their wives:

> *"My husband helped me with the household chores, washing clothes, or cooking, well even though the food isn't tasty (laugh)…" (Ari, 39, 4th pregnancy)*
>
> *"My husband and my family take care of me… They are concerned about my diet, like asking whether I have eaten, drink milk or anything" (Dian, 24, 1st pregnancy)*
>
> *"…Now I am pregnant and my husband always said to me that I don't need to think about the problem, no need to think about others. Now the most important is us. I need to focus on my pregnancy…" (Puspa, 39, 3rd pregnancy).*

Those who had a child (or children) also learned from their previous experience on how to go through the pregnancy, childbirth and deal with motherhood which led them to feel both confident and optimistic. For instance, Ari reported:

> *"I have experience with three children from my previous pregnancies… It is important for me to be always relaxed. I believe that there is a way for every problem,… then InsyaAllah (if God allows), if we discuss it (with our family) there will be a way out (of our problem)" (Ari, 39, 4th pregnancy)*

From Ari's quote above, there is another aspect was considered as a supporting factor for pregnant women's psychological health. This aspect was religious beliefs, as captured in Ari's quote when she said: *"InsyaAllah". 'InsyaAllah'* is Arabic which is interpreted as a form of submission to God's will, showing an individual's belief in God's influence over their destiny (*Allah's* will).

It was also found that pregnant women believed that God had the best plan for their life. Thus, even though they had an unplanned pregnancy and physical illness that might affect the pregnancy, none of the participants revealed an intention to terminate their pregnancy. They also considered that a child is a mandate and a gift from God to be taken care of. Thus, they said they felt obliged to take care of the child even though they did not expect to get pregnant:

> *"Happy, I am happy since Allah (God) put His trust in me to carry out this* amanah *(Arabic- mandate from God)… I feel optimistic, because everything has been planned by God, I believe that everything happens because of God's will" (Ari, 39, 4th pregnancy)*
>
> *"well,.. God still believe in us, so hopefully I will have a smooth pregnancy, I don't expect anything to happen… but this is God's will…" (Puspa, 39, 3rd pregnancy)*

Dian who had a haemolytic anaemia also mentioned about the submission to God's plan when thinking about her illness:

> *"In regards to my illness, I am worried, but not really, just (a bit) worried. Sometimes I think about my illness. However it is a* taqdir (Arabic- something happened is believed has been destined by God) *from Allah" (Dian, 24, 1st pregnancy)*

In Indonesia, there is a cultural belief that the presence of a child can bring good fortune for the parents and family. There is an old Javanese proverb which says: *"The more children, the greater the luck for the family*". Though the meaning behind this proverb is that every child has their own fortune and fate, there are many people who believe the proverb's literal meaning; 'the more children, the greater the good fortune and luck'. It turns out that this 'fortune' was interpreted to be more like a 'financial stability', as was expressed by Puspa:

> *"Who knows (by getting pregnant) my husband will be able to get job here, because of the baby's fortune. We will be able to live together again. Who knows…" (Puspa, 39, 3rd pregnancy)*

In general, the pregnant women felt mixed emotions towards their pregnancy. Women's initial feelings influenced their responses to their condition. Their emotions were strongly influenced by their past and current difficulties. Some of these difficulties were rooted in a sociocultural context. Pregnant women coped with their difficult situations in several ways. Some of them tried to bear with and endure the problems, some came with preventive strategies and others were supported by their family and husband. It appeared that most women also used a religious approach in dealing with their difficult situations. A further discussion about sociocultural and religious beliefs is presented in section 7.3.

4.4.2 "Listen to me"

This theme presents women's' views on psychological health during pregnancy. It also illuminated that pregnant women were aware that they need to express their emotions and talk to other people about their difficult situations. They expected that healthcare professionals would give them an opportunity to talk and would listen to them during their antenatal visit. Yet, they also noticed that the circumstances surrounding the antenatal visit were lacking any sense of 'real' privacy. Midwives'

responses, when these were unhelpful, were also cited as the reason why pregnant women felt hesitant to disclose their emotions and share their life difficulties.

4.4.2.1 Women's views on psychological health during pregnancy

Most women in Setaman acknowledged that psychological health is as important as physical health in pregnancy. Therefore, they were in agreement that healthcare professionals should ask pregnant women about their feelings:

> *"…ya, that is important for the health of the women" (Ari, 39, 4th pregnancy).*

They articulated that psychological conditions such as, distress and anxiety could influence the health of the mother and the baby. The women also recognised that during pregnancy, they would experience both physical discomfort and psychological distress, such as stress and feeling oversensitive:

> *"Yes, it is important, so that I could share things with them, because more or less psychological condition could influence the health of the mother and the baby" (Dian, 24, 1st pregnancy)*
>
> *"…Because if I get stressed, I am afraid there will be problems with my pregnancy" (Ani, 35, 2nd pregnancy).*

As a result, women were expecting to talk and experience sensitive support during their pregnancy. Puspa and Sari reported:

> *"Yes… we do not only have physical discomfort, sometimes our mind concerns (psychological) also need to be shared with others" (Puspa, 39, 3rd pregnancy)*
>
> *"… you know, when we are pregnant it is very common to be more sensitive, sometimes we need (to be treated) gently…" (Sari, 39, 3rd pregnancy)*

The importance of asking about their feelings had emerged when pregnant women had experienced life difficulties and wanted to share and talk about those difficulties to healthcare professionals. Women were also fearful of experiencing psychological distress. In addition, during the interviews, some women showed symptoms of psychological distress, such as being tearful and sighing frequently. This was captured in the following research field note:

During interview with Ani, she started to be tearful when talking about her relationship problems with her father-in-law. She showed hopelessness as she could not rely on her husband. She held back her anger and took a deep breath. I offered her a drink and asked her if she wanted to stop the interview. She sighed heavily and shook her head. There was a brief silence before she continued to talk. But I can hear her voice trembled with emotions.

(Field notes 15th September 2016)

However, one woman held a different viewpoint. Ari believed that those who complain about having a difficult life during pregnancy were women who lacked management and coping skills. Such a view was based on her personal experience:

> *"In my opinion, that a woman with psychological distress could not manage herself, maybe she has too many works or things to do, then she thinks too much about it, maybe it's just like that, so she becomes stressed out" (Ari, 39, 4th pregnancy).*

Women in Indonesia were expected to be able to deal with their domestic tasks, as well as taking care of their husband and children, whilst their husband has just one role, as the breadwinner. Therefore, those who complained about the difficulty of doing their domestic duties would have been considered to be unable to carry out her duties as wife and mother by Indonesian society. Further discussion on sociocultural values are covered in section 7.3.

4.4.2.2 Women's views on mental health assessment

During the history taking session, some pregnant women in Setaman were asked about their mental health (see section 4.4.3). Yet, they expected a better service from healthcare professionals, particularly from the midwives.

During the antenatal booking visit most women agreed that they felt reluctant to talk about their difficulties or to express their emotions freely. It appeared that a lack of privacy and adequate personal space became the main issue, as Puspa mentioned:

> *"This is my first experience coming to this healthcare centre. Well, so far, everything is fine…except… maybe too many midwives in the room" (Puspa, 39, 3rd pregnancy).*

Other women mentioned that the midwives were in such a rush. As a result, pregnant women were not given any or sufficient opportunity to disclose their personal feelings during their antenatal visits:

> *"I expect that there would be more time for us, so we can share many things in detail regarding my health, the lab results and the needs of the patients… I expect they would give me more in-depth suggestions" (Dian, 24, 1st pregnancy).*

> *"Well, because… It seems like the midwife was in a hurry, and at the (examination-maternity) room, there are many people in it, so I feel hesitant to talk to her" (Ani, 35, 2nd pregnancy).*

The following observation note reported that when pregnant woman gave some 'hints' that they experienced life difficulties, the midwife did not ask anything more or assess further. Nevertheless, the history taking had taken place in a private room.

Observation: Ani, 35, 2nd pregnancy, met Midwife Sani

Date: 15th September 2016

Ani was asked to move to a more private room (next to the examination room) where the midwife would do the history taking. During the history taking, Ani's physical health was assessed. This assessment included the question whether Ani had urination problems. Ani said sometimes she felt a burning sensation. The midwife made a note in the proforma and suggested to Ani that the cause of burning sensation will be known after she had the urinalysis. Then the midwife started to ask the questions about mental health and ask whether she felt worried or anxious. Ani then answered that she had a traumatic childbirth due to an induction procedure and rude healthcare professionals in the hospital.

Instead of focusing more on Ani's traumatic childbirth, the midwife avoided the conversation by suggesting that Ani should not think about the past. In addition, the midwife normalised rude behaviour of the healthcare professionals in the referral hospital. The midwife said that many people know about the service providers in the hospital. When asking about pregnant women's mental disorders symptoms and history, the midwife avoided eye contact with Ani; particularly when Ani said that she had a painful birth due to the labour induction. She said she was traumatised by the harsh attitudes from the healthcare professionals in the tertiary hospital. When Ani mentioned the name of the hospital, midwife Sani responded by saying, "Well, I can understand that, so many people complaints about it (harsh attitude of healthcare professionals in the hospital)".

The midwife also asked about Ani's relationship with her family. Ani answered the question with normative answer by saying, "well, it's normal for a daughter-in-law to have some conflict with her parents in-law, isn't it?" and she smiled wryly.

The midwife did not respond to or follow up Ani's answer. The session for history taking lasted for about 10 minutes. Then Ani was asked to go to the lab for her blood and urine test. However during the debriefing session (after the lab results had been ready), Ani was then invited to come to the maternity room. The midwife only explained about her having cystitis and told her to drink plenty of water. The midwife did not mention anything about her traumatic birth or the conflict with her in-laws.

(End of observation)

From the observation note above, it was evident that though the midwife had maintained the woman's personal space, apparently, it was not enough to make Ani talk openly. Meanwhile, Ani had given some responses about her personal life difficulties. At the end, the midwife failed to address any of Ani's psychological health issues. The short process of the history taking and the attitude shown by the midwife seemed to hinder Ani from talking about her psychological health and her difficult personal social situation.

The following quote indicates that Ani expected to be given opportunity to talk about her life difficulties and express her feelings:

> *"…it would be very good if I can talk to the midwife like we are doing now (referred to the interview session), to share our mind with the midwives like this, so I feel relieved after talking about this problem… Well maybe there won't be a real way out (provided by healthcare professionals), but at least by talking and sharing about my problem, it could help me to comfort my soul and my mind…" (Ani, 35, 2nd pregnancy).*

From Ani's quote above, it was evident that pregnant women were aware that they only wanted to be listened to by healthcare professionals. Ani realised that healthcare professionals probably could not help her in solving her difficult situations. She believed that talking about her unhappiness and problems with someone else, made her feel relieved. In addition, a sense of trusting the midwife was also captured from Ani's quote.

Despite the age gap between the patient and the midwife, Ari reported that she trusted and was comfortably talking to the midwife:

> *"…after I saw the midwife, she made me comfortable to talk to her, to share though maybe she is younger than me, but, yea… I could share things to her" (Ari, 39, 4th pregnancy)*

Ari's perception regarding the process of her antenatal booking visit might have been affected by the midwife's communication skills. The midwife who was described as having effective communication skills appeared to enhance the process of trust building between healthcare professionals and the women in this study.

Trust could possibly be built after some period of contact. It was evident that those who had visited the healthcare centre and knew the midwife personally, felt welcomed during the visit. Sari stated:

> *"I feel like the healthcare professionals are welcoming us, so I feel safe… because I usually have contact with them at the community…" (Sari, 39, 3rd pregnancy)*

Sari shared that she would talk openly to the midwives whom she had known. This finding suggested the value of continuity of midwifery care, as the service given to the women would be provided by the same midwives whom they could grow to know and trust

The theme 'Listen to me' illuminated the importance of pregnant women's psychological health assessment during the antenatal booking visit. Underlined were the women's factual-based needs to talk to, and to be heard by, healthcare professionals. The theme also highlighted the importance of the midwives' and other healthcare professionals' attitudes and responses that provide the foundation for building trust during the antenatal visits.

From the healthcare professionals' perspective

4.4.3 "This is how we do it"

This theme reports the responses of participating healthcare professionals on the assessment of psychological health during the antenatal booking sessions at Setaman Primary Healthcare Centre. Issues included are; a) information about healthcare professionals' knowledge in perinatal mental health, b) their perceptions of the most common mental health problems amongst women during their perinatal

period, c) potential associated factors based on their views and d) how they performed the assessment.

The theme ‘This is how we do it’ suggests that healthcare professionals were aware of some biological and social factors which might be relating to psychological distress during pregnancy. This theme also indicated that there was an inconsistent practice in healthcare professionals’ performance in pregnant women’s mental health assessment during the antenatal booking visit in Setaman Primary Healthcare Centre. Whilst some midwives focused on the query about potential associated factors, the GP mostly focused on the symptoms of psychological health problems and cases of women’s physical discomfort. However, healthcare professionals’ decision to further investigate depended on each woman’s attitudes and responses shown during their visit.

4.4.3.1 Healthcare professionals’ awareness and knowledge

Healthcare professionals were aware that poor psychological health during pregnancy could affect not only the mother, but also her child. Psychological distress in pregnancy could lead to poor outcomes in the postpartum period and cessation of breastfeeding. In the following quotations, Midwife Sani and GP Neti argued that the outcomes of psychological distress would cause negative social effects in women’s relations with their husband and family:

> *“…problems during pregnancy may lead to other problems during the postpartum period. It may cause postpartum blues and untreated blues may end up as postpartum depression. So mental problems will affect both psychological and physical factors, influencing how a woman would take care of her child. It includes how she breastfeeds her baby. It definitely would have an impact on her relations with her husband and her family- not only (effect to) herself” (Midwife Sani).*
>
> *“Actually, it (psychological health) is very important. Because the education of the child is started during pregnancy. It is very important particularly for those who have their first pregnancy” (GP Neti).*

From the quotes above, it was noted that healthcare professionals agreed that pregnant women’s psychological health was as important as their physical health. However, the GP suggested that pregnant primigravida women were more at risk of psychological distress that multigravida pregnant women. Meanwhile, based on the findings from the pregnant women in this research population, it was evident that multigravida women also experienced psychological distress.

Anxiety was found as the most common mental health problem during pregnancy based on midwives' experiences, as both Rita and Rara reported:

> *"Well, mostly I found pregnant women having anxiety… (I found it) during the history taking. We can observe the women whilst we are asking them and talking with them" (Midwife Rita)*
>
> *"…mostly pregnant women are experiencing anxiety…" (Midwife Rara).*

Unfortunately, they mentioned anxiety solely based on their interpretation on pregnant women's responses during their antenatal visit. The midwives relied on their observations, and their clients' responses, to assess any symptoms of anxiety. Yet, serious mental illness such as schizophrenia was also reported to be found in pregnant women who visited the Setaman Primary Healthcare Centre. They identified those common mental health problems based on their knowledge of several mental distress' symptoms:

> *"At first I did not know that she had schizophrenia, but from her appearance- she refused to self-care. She told me that she got pregnant because her husband sent the sperms through the phone. That absolutely nonsense. Then we consulted the mental health programme supervisor (nurse) and the GP. The woman was diagnosed to have schizophrenia" (Midwife Sani).*

Specific mental illness such as schizophrenia was mentioned by the midwife after involving experts' judgement. It seemed like the midwife needed other opinions (from those considered as experts) when she met a pregnant woman who showed an unusual and noticeable condition. I think this was to confirm the symptoms and establish a plan for care.

This fact seemed to reveal that a mental health service is available in Setaman Primary Healthcare Centre. It also showed that collaboration between midwife, GP and mental health programme supervisor is easy to achieve and does not require a complex system and procedure.

(Field note 9th September 2016).

From the quotation and field note above, it appears that in general access to the mental health programme is available in Setaman Primary Healthcare Centre. However, it seems that the service is only available to patients with severe mental disorders. Meanwhile, some pregnant women who have mild to moderate psychological distress symptoms might need early management to prevent their condition from getting worse.

Most midwives agreed that difficult life situations, which related to social issues, could influence pregnant women's psychological health. The following midwives

acknowledged that some social and biological factors might cause pregnant women experiencing psychological distress:

> *"Living with their in-law, pregnant women who have problem with their husbands, or pregnant women who have no husband….An unplanned pregnancy and premarital pregnancy too. Those women could possible experience psychological distress…" (Midwife Sani)*
>
> *"…(Lack of) support from her husband... (lack of) support from the family …Living with parents-in-law sometimes can cause a problem too. It is possible that the problem comes from her neighbourhood…The other, maybe physical illness…like asthma and gestational diabetes. They tend to be more anxious than those who are physically healthy during pregnancy" (Midwife Rita)*

Some factors such as: i) living with in-laws, ii) unplanned pregnancy, iii) conflict with families and neighbours and iv) physical illness were also mentioned by pregnant women who experienced psychological distress. These points were in line with the women's comments presented in section 4.4.1.3 about women's personal life difficulties. Nonetheless, none of the healthcare professionals mentioned about the history of mental distress or illness in women's life and families as one of the risk factor of psychological problems during pregnancy.

Healthcare professionals agreed that women's psychological health is an important aspect in a healthy pregnancy. The professionals identified several potential factors associated with psychological distress during pregnancy. The following section illuminates the practices of psychological health assessment in Setaman centre.

4.4.3.2 Healthcare professionals' practices of psychological health assessment

Healthcare professionals in Setaman Primary Healthcare Centre implemented different approaches and styles when performing psychological health assessments during the woman's antenatal booking visit. Most midwives would ask about the women's feelings toward their pregnancy. This enquiry was aimed to investigate the women's acceptance of their pregnancy and to discover the woman's pregnancy intention; planned or unplanned? Through this initial question healthcare professionals, and particularly midwives, believed that they could reveal potential associated factors of mental health problems in pregnancy:

> *"I usually ask about their pregnancy, are they happy with the pregnancy? If I already asked about their feeling, then I continued, for example, if they (answered) feel scared; then I am going to ask why, so I can ask further." (Midwife Sani)*

> *"…the first question for all pregnant women is whether she is ready for her pregnancy or not" (Midwife Andri).*

Some midwives also asked other questions to pregnant women during the history taking, in order to gain insight on each woman's psychological health. The questions might not directly ask about women's emotions, but the midwives presumed that it would relate to their patient's psychological health. For instance, the midwives asked about the woman's husband's employment, her financial readiness towards the childbirth and the pregnancy spacing. They considered that this latter question could explore pregnant women's financial stability.

> *"They would not know that we actually assess them… For example, I asked them about their financial saving for the childbirth…" (Midwife Rita)*
>
> *"We could also ask about the spacing between the previous child…Usually, when the spacing is too close, the woman is feeling more stressed…" (Midwife Andri).*
>
> *"In the first antenatal booking visit, I ask their willingness to get pregnant…" (Midwife Rara).*

Midwives believed that a woman's pregnancy intention was very influential regarding the quality of the pregnant women's psychological health. Furthermore, midwives also concluded that pregnant women's behaviour and responses shown during the antenatal visit could describe their mental health status:

> *"Sometimes, we could see her encouragement and enthusiasm when she was actively asking us. While when we give them a counselling session and she remained silent or she couldn't repeat our suggestion, then we have to investigate whether it is a planned or an unplanned pregnancy" (Midwife Andri).*
>
> *"Women with an unwanted and unplanned pregnancy…they usually do not follow our suggestions… they tend to be more selfish. For instance they refused to take the iron tablets because it makes them nauseous" (Midwife Rita).*

Midwives reported that when women had an unintended pregnancy and/ or experienced certain personal life difficulties, the women would have shown distinct attitudes during their antenatal visits. On the other hand, healthcare professionals also considered some physical complaints such as hyperemesis or prolonged emesis were the consequences of a woman's unpreparedness for dealing with her pregnancy. Thus, the healthcare professionals considered some physical

discomforts as symptoms of psychological distress. This perspective is illustrated in the following quotes:

> *"…for those who have hyperemesis, I usually ask about "whom do you live with?" I also asked whether she has good sleep, and if she has sleep disorder I sometimes ask if she has something to think about, or what has happened with her…Yes, those who have hyperemesis tend to have psychological distress, then I could ask further" (GP Neti).*
>
> *"Too many complaints, Hyperemesis and from their physical appearance, they show no excitement during the visit…Sometimes they skip the multivitamin regularly or they don't eat healthy food…They didn't listen to my suggestions…They just don't have intention to take my advice" (Midwife Suli).*

From the quotes above, it can be seen that some healthcare professionals also presumed that pregnant women's physical discomfort was related to their psychological health. Nevertheless, there were different healthcare professionals' reactions towards pregnant women's physical complaints. The GP would probe further into the symptoms of psychological distress, such as sleep disorder, whereas the midwives focused on the women's responses and attitudes shown during their clinic visits.

The midwives also observed the women's physical appearance, facial expressions and their enthusiasm, or lack of, when attending an antenatal booking visit. They were sure that through observing women's expressions and reactions, they could recognise the symptoms of psychological distress:

> *"…when it was an unwanted pregnancy, they couldn't hide it. It will be obvious. (In a wanted or planned pregnancy) We could see the woman's happiness when she knows that she's pregnant" (Midwife Andri).*
>
> *"…sometimes I also observe their behaviour and facial expression, It can be so obvious, can't it?... I also have to be aware when they talk and respond to us passively." (Midwife Mia).*

In contrast, the GP admitted that she would give more attention to the women's psychological health only when a woman showed particular emotional distress symptoms:

> *"All this time, I haven't really noticed unless the woman showed particular affect (expression), such as flat affect (a reduction in emotional expression)... I have never really given concern to pregnant women's mental health" (GP Neti).*

Both midwives and GP relied on their observation skills to recognise pregnant women with psychological distress. Meanwhile, this technique could lead to a misjudgement in recognising mental distress amongst pregnant women. This misjudgement might happen as sometimes a woman's facial expression can be different from her true personal feelings. On the other hand, flat affect is usually shown by those who have more severe psychological health problems such as schizophrenia, depression or traumatic brain injury (Padersen, 2018).

Since the implementation of a new history taking proforma, midwives said that they could perform the assessment effectively, particularly to assess pregnant women's physical health. Yet, the utilisation of the proforma depends on the midwives' experiences, willingness, awareness, communication skills and knowledge in providing care to pregnant women. These provisos were illustrated in the following excerpts:

> *"However, at the end it depends on each midwife, it is the art of asking the questions" (Midwife Rita).*
>
> *"It depends on our experiences, education and the type of midwife, whether she is a caring midwife to her clients or not…" (Midwife Rara).*
>
> *"Willingness from the midwife, whether the midwife is interested enough to ask in-depth about the client's psychological condition towards her pregnancy" (Midwife Andri).*

Midwife Suli also emphasised that respect and empathy were important to provide a good quality of care for pregnant women during the visit:

> *"It depends on us… I mean if we can adjust ourselves to our clients it wouldn't be a problem… We have to pay attention on the words and our behaviour. We have to be able to adapt to the patients' condition based on her education and her background maybe…" (Midwife Suli).*

It was noted that the utilisation of this new proforma has not been fully optimised. The healthcare professionals also seemed to be unaware with the problematic recording process of the mental health assessment. A detailed explanation on the new proforma will be presented in section 4.5 about the documentary analysis.

It was apparent that healthcare professionals did not thoroughly question pregnant women about their symptoms of psychological distress during the booking visit. Healthcare professionals relied on their intuition and observation skills to recognise symptoms of psychological distress. Questions on pregnancy intention, financial stability and pregnancy spacing were considered capable of giving hints to

healthcare professionals about pregnant women's psychological health. In addition, physical conditions, for example hyperemesis were believed to influence the women's psychological health. A mental health service in general is available in Setaman Primary Healthcare Centre. However, a specific perinatal mental health service is not yet in place even though a new proforma had been used.

4.4.4 "It is never easy to ask about mental health"

The second theme from interviews with healthcare professionals focuses on healthcare professionals' challenges to conducting a sensitive and thorough mental health assessment during the antenatal booking visit. Privacy issues, disappointment towards colleagues' behaviours and communication skills for trust-building are highlighted as obstacles and challenges to carrying out sensitive mental health assessment. Nevertheless, healthcare professionals were aware of their roles in providing psychological support and educating the women and their families. They were also cognisant of their need to receive specific training on perinatal mental health.

Different approaches were used by healthcare professionals when they encountered a client with psychological distress; including a religious approach. Midwives were found to be uncomfortable talking about their clients' mental health issues and ill-prepared to respond to women's queries about psychological health problems. Whereas, although the GP was equipped with knowledge and skills in mental health in general, she was not confident enough to provide appropriate and tailored care for women with psychological distress.

4.4.4.1 Obstacles and challenges to sensitive mental health assessment

Healthcare professionals acknowledged that they did not assess pregnant women's mental health thoroughly. Even though they had used the new proforma, they admitted that they did not screen the non-specific mental disorder sensitively:

> *"I found a pregnant woman who showed passive attitude towards her pregnancy but in terms of any psychological distress, I don't think I explored it very well" (Midwife Mia).*

Midwives mentioned that it was difficult to perform a thorough mental health assessment as they perceived they needed longer if they were to provide suitable care during a woman's antenatal booking visit. Healthcare professionals agreed that the clinic being so busy was the biggest challenge to conducting a thorough and sensitive assessment, as Rara reported:

> *"Well, we need more time to ask such questions, while we have many patients sitting in the waiting room" (Midwife Rara).*

The following quotations and field notes also suggest that in certain situations, some midwives fail to address all questions in the proforma, due to time constraints. This pressure is also illustrated in the documentary analysis (section 4.5) in figure 4-3. The short process of the history taking seems to hinder pregnant women from talking about their mental health:

> *"We ask the points on the form, but not all the questions, it takes time, they have to have the lab test... When she answered no (in one question) I didn't investigate it further because it will take a longer time." (Midwife Mia).*

Observation: 5th – 26th September 2016

Setting: Maternity room

In the morning, usually there are 4-7 midwives in the room. Some of these midwives would leave the healthcare centre to perform a community service. One of them had a morning shift work in an emergency room. In the 4x4 maternity room, there are 3 tables in the room. Table 1 is usually used for history taking and initial examination, i.e.: blood pressure, height and weight measurement. There are 2 chairs around table 1: 2 chairs for the patients and 2 chairs for the midwives. Sometime a pregnant woman can meet 1 midwife, sometimes, she can meet 2 midwives at the same time.

Table 2 is located right-rear side from table 1. There are two chairs provided for the midwives. Midwives usually work on documentation of monthly report at this table. Others also work on their laptops to fill the form and prepare documents which are needed for the accreditation process. At that time, the healthcare centre's staff were preparing for the national accreditation procedure.

Table 3 is located next to the front door and there is a computer to input information and patients' data into the healthcare information online system. At the left side of table 3, a space for abdominal examination and scan are provided. There is one bed and an ultrasound machine in this space. This space is covered using a blue curtain.

In this healthcare centre, on average, every patient stayed around 10-15 minutes in the examination room. Sometimes, when the door is not properly closed, there was a patient peeking into the room.

(End of observation)

Based on the observation above, lack of privacy emerged as another obstacle in the interview with the midwives which prevented those professionals from performing a sensitive psychological health assessment. Usually, there were more than four midwives in the examination room. All the midwives were aware of this problem.

> *"Patients feel uncomfortable to share their problems in the primary healthcare centre… Too many midwives in the room. They need privacy, don't they?" (Midwife Rara).*
>
> *"Too many midwives in the room. One (midwife) examines the woman, the other one fills the medical record and another one asks the woman (history taking)…All midwives would like to talk and ask the woman at the same time, she'll be confused" (Midwife Mia).*
>
> *"…there are too many people in the room. It should be better when we have a private consultation room… Yes, privacy, sometimes if the women want to tell the truth, while there are more than 4 midwives in the room, they will reluctant to tell their problem to us" (Midwife Andri).*

Midwives were aware that there was a room available and can be used to talk in private with pregnant women. This room was the same location in which the research interviews with the pregnant women and midwives took place. Details of the room were presented in Chapter 3 (section 3.4.1.1).

To overcome the lack-of-privacy issue, there was one midwife who decided to use the time and opportunity to talk to the women while performing an abdominal examination. The midwife used this opportunity as she thought that it was the best possible chance for her to talk privately with the women:

> *"What I usually do during the palpation (abdominal examination) is talk to them particularly when I noticed "something"… When I perform the abdominal examination, I could make a direct contact with the woman so that I feel closer to the woman" (Midwife Rita).*

Midwife Rita noticed that pregnant women needed privacy to talk openly about their life difficulties. However, based on the interviews with the women, it was found that women also expected sensitive responses from the healthcare professionals who were dealing with them (see section 4.4.2). The findings suggested that pregnant women also required appropriate settings and sufficient time to share their emotions during the antenatal visits.

It was evident that healthcare professionals understood about perinatal mental health issues in general and acknowledged there were obstacles to performing

sensitive psychological health assessment procedures. Yet, it seemed that those same professionals were unwilling to change their routine practice in providing care:

> *"…ideally, when we provide care for the woman, we can use this room (room next to the maternity room)… I personally need privacy. So does the woman. When we use this room, a woman's privacy would be well-maintained, they don't have burden when they want to talk. We need a more private room, so we could listen to the clients attentively, not too many people in the room, but we rarely used this room" (Midwife Suli).*

Another reason why healthcare professionals felt reluctant to change their routine practice might be related to their uncomfortable feelings when they had to talk and ask about a client's mental health as the following quote illustrates:

> *"It's never easy to ask about their mental health. It's different when we assess their physical condition. You know, when we find high blood pressure, we know what we're going to do, but you can't ask the questions regarding the mental health straightforwardly. Yes, it's not easy" (Midwife Andri, 10 years working experience).*

This quote suggests midwives felt confident when dealing with physical problems or complications during pregnancy. In contrast, when it comes to mental health issues, its viewed as a 'taboo' topic and this perception appeared to negatively affect the quality of the healthcare professionals' services as well as their confidence levels. The following quotation and field note also indicated that healthcare professionals felt uncomfortable to ask some questions from the mental disorder screening section:

> *"It is so uncomfortable for me to ask whether they or their family have history of mental health problem. I'm not comfortable when asking about it even though it is important to ask… I don't think it is common to ask about mental health here, though that is very crucial, so sometimes I skipped the questions" (Midwife Andri).*

In addition, before asking the women whether they have family members with a mental health problem history, some of the midwives begged for pardon by saying, "nuwun sewu", which is actually a term in Javanese that is usually aimed to minimise any potential conflict. The midwives were very cautious when asking mental health- related questions, afraid that it would be offensive to the women's feeling.

In addition, midwives appeared to consider mental health section as the toughest questions to be asked to pregnant women. They usually asked about mental disorder symptoms at the end of the history taking. Even though, during the interview the midwives said that they could not ask the

questions in mental health section straightforwardly, there is no evident variation in asking the questions.

(Field note 2nd October 2016).

In Indonesia, mental health is considered as a very sensitive topic. The stigma attached to a person with mental health disorders are related to a) lack of faith, b) inability to cope well with problems, or c) showing strange, disturbing and even harmful behaviours. This difficult and sensitive topic will be discussed further in Chapter 7. As a result of the issues cited above, healthcare professionals felt cautious to talk and asked about mental health. They used the words "*nuwun sewu"* before they started to ask women the questions on mental disorder section. The English language equivalent would be *'I am sorry for asking'*, which puts the questioner in a humble position. It felt as if the midwives did not want to pry, but they had to raise the issue.

Based on Ani's observation in section 4.4.2.2 it was revealed that healthcare professionals avoided eye contact with the women when asking about mental health. In addition the midwife seemed to normalise the woman's negative previous experience in the hospital. This observation also showed that healthcare professionals could not respond appropriately to women's questions relevant their psychological health.

On the other hand, healthcare professionals acknowledged their lack of awareness of psychological health assessment for pregnant women:

> *"Our awareness to conduct it (the assessment) to the clients… So far, we tend to ignore it. We just focus on physical condition" (Midwife Andri).*
>
> *"The obstacle is maybe my awareness. I am unaware about women's mental health" (GP Neti).*

There was another view that emerged relating to the lack-of-privacy issue. Most of the midwives considered that privacy issue was due to the unavailability of a proper examination room (which was not correct). Meanwhile, the disappointment towards midwifery team was explicitly expressed by Mia. She was concerned that her colleagues were unable to comply with women's needs sensitively, as she stated:

> *"Well, the condition (in the examination room) is getting better now. In the past, they (midwives) ate lunch whilst there were patients in the room. I thought it was so unacceptable" (Midwife Mia).*

Another disappointment was relating to the system operating in the Setaman Primary Healthcare Centre. Some midwives realised that they needed to establish good teamwork in order to provide high quality service for women, as reported by Rita and Andri:

> *"Here, healthcare professionals (the midwives) envy each other. While I know that to establish a good of system is not easy... Back then when I just moved in here, it was really difficult. Everything had to be done by myself including the paper work, reporting and administrative requirement for job promotion" (Midwife Rita).*
>
> *"…we have to build a solid team, for example when I wanted to conduct the integrated antenatal care, but another midwife wanted to finish the shift and just let the student obtain the history taking… It's difficult" (Midwife Andri).*

From the above quotes, it would seem that paper work and the presence of student midwives in the healthcare centre might have provided another barrier to performing sensitive mental health assessments. The placement of student midwives in the primary healthcare centre is aimed to enhance their clinical practice skill levels. This experience is usually provided in the last year of their formal education. During the placement, the presence of student midwives was considered to be very useful for midwives:

> *"During the history taking, it is quite helpful to utilise the proforma and ask the questions. However, sometimes the history taking is done by the midwifery student (if they are present). Therefore we don't really know whether the students conducted the assessment appropriately or not. No one watch them perform the assessment as they usually conduct the history taking in this room (the interview room)" (Midwife Andri).*

It was found that in Setaman clinic, midwifery students were sometimes asked to take on history taking duties, perform physical examinations and record the examination results. The students were supposed to be doing the activities under midwifery supervision. Yet, since the students performed the history taking in the other room next to the maternity room (the interview room), the assessment was often conducted without any oversight from the qualified midwives.

Some midwives also believed that the obstacles of mental health assessment might come from the pregnant woman's type of personality. Consequently, midwives sometimes struggled to adjust and relate to the different personalities of their patients during the history taking and assessment:

> *"The barriers could be caused by the client who has an introverted personality…" (Midwife Rara)*

> *"…the barrier could come from the woman herself, maybe she is an introverted type, so she doesn't want to share and talk" (Midwife Sani).*

Some midwives usually opened the history taking session with informal talk and some light jokes. Having good communication skills can assist in building trust between a healthcare professional and a patient. This point was illustrated in the following excerpts:

> *"Well, I usually do not ask the questions directly. I... kind a make an informal chat before asking about mental health condition…" (Midwife Sani).*

> *"I mean I don't think that it is too hard to assess (pregnant women's mental health). When we have already built the trust it will be easier for us to ask. But when we fail to build the trust, it is going to be hard in the future" (Midwife Rita).*

The building of a trusting relationship was considered as an essential element in conducting a sensitive mental health assessment. Thus, some healthcare professionals argued that good assessment could not be done during the antenatal booking visit. They suggested it was difficult to engage with the women, to ask such sensitive questions, especially when the women were seeing the healthcare professionals for the first time.

> "*I cannot assess their psychological and mental health during the first antenatal visit…It could be a challenge to require the woman to tell us her problems openly during the first contact. Maybe she would feel shy, so I think in the subsequent visit she would be more open to us." (Midwife Andri).*

Several midwives thought that it was easier to build trust between service users and service providers when they already knew each other. They considered that this situation also applied when the pregnant women are able to see the same midwives in their subsequent visits. Unfortunately, it was difficult for the midwives construct a continuity of care system for their pregnant patients due to daily work shift arrangement:

> *"…Because the shift- work of the midwives keeps changing. Automatically, the clients are reluctant to talk. Whereas in midwife private practice, the clients could see the same midwife on every visit" (Midwife Rara).*

The quote above indicated that the midwives who worked in private practice were able to explore pregnant women's emotions and engage with the women. This maybe because they have more time and work in more appropriate clinical settings.

This information suggested the value of continuity of care from the midwives' perspective, as both midwives Rara and Andri mentioned:

> *"…in midwife private practice women are usually willing to talk to us. They (the women) usually reveal their complaints and problems without hesitation... It is based on my experience in my own clinic, the clients are more open when we ask about their problems. They are willing to tell the truth" (Midwife Rara).*
>
> *"In midwife private practice, the clients come to the clinic and they are usually already familiar with the midwife…" (Midwife Andri).*

In spite of the succeeding observation revealed even when the midwife and the woman have known each other, the midwife still failed to explore the pregnant client's emotions or to provide support for the woman:

Observation: 27th September 2016, Midwife Suli, 21 years working experience Pregnant women: Sari, 39, 3rd pregnancy with secondary infertility and perinatal loss Midwife Suli and client Sari know each other as Sari is a community health worker. They usually work together in the community, particularly during the development of monthly community healthcare report. Sari had mentioned that she felt worried and fearful after her pregnancy was confirmed. During the history taking, Sari said that she did not believe that she had finally succeeded to conceive and showed teary eyes. She mentioned about her infertility, and complicated pregnancy and childbirth. However, Midwife Suli just focused on Sari's physical health. The midwife did not show an intention or interest in further exploring Sari's feelings. (End of observation)

It was evident the lack-of-privacy issue is considered a major barrier to conducting a sensitive and effective mental health assessment. Nonetheless, even though there was a private room available in Setaman Primary Healthcare Centre, healthcare professionals rarely used the room when providing antenatal care services. It was apparent that the quality of a client's mental health assessment depended on the healthcare professionals' knowledge, willingness, self-confidence and awareness relating to this issue. The next section focuses on the perceived healthcare professionals' roles in mental health assessment.

4.4.4.2 Perceived healthcare professionals' roles in mental health assessment

Midwives were aware that they played an important role in maintaining pregnant women's psychological health, despite the obstacles and challenges to carrying out an effective mental health assessment procedure having been identified. They perceived that their obligation included to identify risk factors and symptoms of mental health problems during antenatal visits:

> *"…in my opinion, every pregnant woman has to be assessed for their psychological health. We have to ask not only about her pregnancy, but also other things…" (Midwife Andri).*

Midwife Rara also suggested that she had to involve and inform each woman's family about the importance of maintaining the woman's psychological health. She concluded that pregnant women could also experience psychological distress due to the pressure from the woman's family:

> *"I encouraged, reassured and educated the woman's family for not being too strict with her. Because the trigger (of psychological distress) could came from the family… usually her parents and her parents-in-law are too rigid with the women…" (Midwife Rara).*

Working collaboratively with other healthcare professionals was indicated by the midwives when they had to encounter a client with mental health problems. As mental health professionals were not positioned in every primary healthcare centre in the Southern district, midwives expressed their difficulty in dealing with the women's mental health issues. Some midwives understood that they had to refer the women to a higher level of healthcare when the women were indicated to experience serious mental health illness, such as schizophrenia:

> *"…it depends on the case. I reported and referred a woman to the mental health programme coordinator. She was that pregnant woman with schizophrenia" (Midwife Sani).*
>
> *"I worked (collaboratively) with Purinirmala Psychiatric Hospital, as the client refused to get dressed. She cried, screamed, and I referred her to the hospital. Until now, she is still taking the psychotropic medication in this healthcare centre routinely. She has schizophrenia" (Midwife Rara).*

Another important role perceived by midwives, when working with mental health issues, was to support the woman through a counselling session by giving her advice and suggestions. However, during the antenatal visit, midwives often mixed

the assessment and counselling session together. In the research interview sessions, two midwives said that they usually suggested that pregnant women should do their best to manage their stress. This advice was aimed to prevent the baby from developing a congenital malformation or foetal defect. They believed that this advice would work for the women who have life difficulties, such as financial problems, or are in conflict with their husbands. Yet, instead of getting calmer, those who were experiencing difficulties during their pregnancy might feel scared and discouraged after receiving such a suggestion:

> *"She said that she often had an argument with her husband, then I suggested her to stop overthinking, or the baby would have a foetal defect. Then it happened, the baby had a malformed penis, he had phimosis." (Midwife Mia).*
>
> *"I could give her advice about what should be done, such as, "for now, you just need to focus on your pregnancy, so that your baby won't have any birth defect" (Midwife Rara).*

If during the counselling session, midwives found a woman with potential risk factors or who showed psychological distress symptoms, they used several approaches to deal with the issue. Some used a religious perspective when providing a counselling session to the woman by referring to the reward from *Allah* (God) if the woman accepts and bears with her difficult situation sincerely:

> *"You will be rewarded in heaven (by God), you need to pass this, you have to accept this, then all will be fine. If your (other) children cannot help (with the daily chores), the most important is your 'nrimo' (*Javanese for wholeheartedly willing to accept the condition*), a child is a gift (from God)" (Midwife Sani).*

Midwife Rita chose to use a more sensitive approach to help a pregnant teenager who verbalised suicidal intentions:

> *"I talked to her, "that's (suicide) was not a solution, why do you want to commit suicide? You would be a mother, you do have a mother, don't you?" So, what I did was bringing around her consciousness as a woman. Her eyes glistened with tears. I didn't talk much at that time, I patted her shoulder and she just cried when I hugged her… I did not refer her to anywhere but I made a follow up contact through an SMS with her" (Midwife Rita).*

Based on the quote from Rita above, it was also found that no referral was made to help the woman who had verbalised psychological distress symptoms and chose to use her own approach. These two different approaches were considered to be beneficial for distressed pregnant women. The midwives found that the women

showed reduced distress symptoms following the religious and sensitive approaches cited above. It seemed that the midwives were using their 'intuition' and reflected on their life experiences when they dealt with women with mental distress symptoms:

> *"I found women with postpartum blues. Well... because I have experienced it (laugh). It is true, I have my own experience on postpartum blues that's why I know, and that's how I dealt with it" (Midwife Sani).*

Considering their limitations in managing mental health problems, particularly in assessing pregnant women's mental health, midwives suggested several things that could help them to improve the assessment process. These are: i) getting specific training on mental health, ii) developing a more empathetic approach and iii) improving their communication skills. Midwives acknowledged that they would enable them to be more aware and confident to talk and to ask appropriate questions and to provide more evidence-based information.

> *"…I need special training. So far, there is no training or seminar about women's mental health. Specifically, I need information about how to ask, how to respond and how to assess women's mental health. I am lacking knowledge on that topic" (Midwife Rara).*
>
> *"…If midwives don't get it (the training), how could we provide basic counselling? We need to understand basic concepts of mental health. How could we investigate if we don't know its basic knowledge?" (Midwife Sani).*

During their formal education to become a qualified midwife, the student midwives have been exposed to the issues of communication and counselling skills. They had been introduced to the psychological changes experienced by women during their perinatal period. Nonetheless, some midwives thought it was insufficient exposure to equip them to provide an early management of mental health problem amongst women during their perinatal period. Midwife Sani said:

> *"As I remember during the diploma of midwifery there was only 1 credit in psychology. During the bachelor programme... I don't think we've learnt about perinatal mental health very well. (Midwife Sani).*

In contrast, unlike the midwives, the GP felt quite confident and comfortable to do the assessment and ask pregnant women about their mental health.

> *C: "Do you have difficulties to ask the questions about mental health to pregnant women?"*

> *GP Neti: "No, Not at all. I just need to ask, "how are you? Do you feel anxious for being pregnant?" just like that. I don't think I have difficulties."*

It seemed the GP had the skills and experience to manage clients' mental health problems; including those expressed by pregnant women. Nevertheless, she reported that she was uncertain with her skills. Therefore the GP only stated that she could help the patient to express their emotions through a catharsis process:

> *"So far, I could provide catharsis (process of releasing strong emotions) for the patients. After the cathartic release, I usually said, "so, what do you want now?" However sometimes it takes time, so I asked the patients to come again tomorrow afternoon. Then we can talk longer…" (GP Neti).*

Both midwives and the GP noticed that they did not pay a great deal of attention to pregnant women's psychological health. There was a difference between the midwives and the GP's preparedness and readiness to dealing with the mental health problems of pregnant women. The majority of midwives felt hesitant, showed and expressed difficulties when required to explore each woman's feelings during her antenatal booking visit. The GP appeared to be more prepared to address mental health problems, but was not confident to provide care; a somewhat 'band aid' approach to this sensitive area. It was apparent that further training in perinatal mental health for healthcare professionals was crucial. The next section presents the results of documentary analysis.

4.5 Documentary analysis

As was mentioned in Chapter 3, documentary analysis was used as a form of data triangulation. As a supplementary data source, the documents provided information regarding the issue of psychological health assessment in Setaman Primary Healthcare Centre. Details relating to psychological health aspects in the integrated antenatal care programme's guidelines are included in this section. Also included are content explanations of the psychological assessments implemented in the Setaman Primary Healthcare Centre. The way in which midwives wrote and recorded the result of history taking, particularly on questions related to the psychological health during the antenatal booking visits, are explained. The data is interpreted to inform or contrast with the findings from the interview and the observational data.

4.5.1 Documentary data

Appendix R is an original proforma of history taking for antenatal booking visits that has been implemented since 2015 in the Southern district, including Setaman Primary Healthcare Centre. Tables 4-3 and 4-4 respectively describe the documents and content which related to the psychological health assessment set out in the guidelines of the integrated antenatal care programme (later called the national guidelines), together with the new proforma of history taking in the Southern district.

Document's name	Guideline of integrated antenatal care programme
Who produced the contents	Indonesian Ministry of Health (IMoH)
When it started to be used	2010
Document's content	This document provides information on integrated antenatal care programme which was described in Chapter 1 (section 1.3)
Psychological health content (Page 27)	***Pregnant women with possibility of having mental health problems:*** • *Refer to mental health service* • *Follow up the result of referral* • *Collaboration with referral hospital in pregnancy* *Pregnant women experiencing domestic violence:* • *Refer to tertiary hospital which has integrated service centre for violence victims*
Explanation of the content	No further explanation with regards to the psychological health assessment in any perinatal care guideline. This is the only guideline published by the IMoH for use in the antenatal care services. Violence was described as any form of violent act which affects women's physical and psychological health. This form of violence includes threat or coercion to control someone's freedom which occurred in a public or private domain.

Table 4-3: Details of documentary data

Document's name	Antenatal history taking proforma
Who produced the content	Southern District Department of Health, Yogyakarta
When it started to be used	Since October 2015
Document's content	A structured history taking proforma which aims to obtain information involving past and current details about pregnant women. It includes physical health, psychological health, past and current health and illness and the woman's family's history of certain illnesses

Psychological health assessment content (has its own section)	*C. Specific illness in pregnancy* ***1.1.13 Mental disorder:*** *Feeling anxious/ fear/ scared/ restless* *Seeing the shadows/ feeling the touch* *Hearing voices/ hallucinating* *Social withdrawing/ talking to themselves/ refusing to take a bath* *History of psychotropic medication* *History of domestic violence*

Table 4-4: Details of psychological assessment in Setaman history taking

As can be seen from tables 4.3 and 4.4, the questions on psychological health assessment content in proforma appear to have been adopted from the national guideline (see row in green colour). It is apparent that the policy makers from the Southern District Department of Health, Yogyakarta have set out to develop a more comprehensive antenatal booking proforma. The section: 'Pregnant women having the possibility of mental health problems' in the national guidelines was broken down into several questions to facilitate the screening of mental disorder and domestic violence. The title of the section in the proforma was named 'mental disorder'.

Nevertheless, there were different issues being addressed in this 'mental disorder' section in the proforma. It would have been more appropriate if the questions had been categorised as 'screening for non-specific mental disorders'. Based on the International Statistical Classification of Diseases and Related Health Problems 10th Revision (ICD-10) (WHO, 1992) and the Diagnostic and Statistical Manual of Mental Disorder 5th Edition (DSM-5) from American Psychiatric Association (APA, 2013), the questions in the proforma do include a few questions relating to psychological distress symptoms:

1. Feeling anxious/ fear, scared/ restless are related to anxiety symptoms.
2. Delusion and hallucination are some of the symptoms in schizophrenia spectrum and other psychotic disorders
3. Refuse to self-care and social withdrawal could relate to depression and other mental illness, however these are not the main symptoms of depressive disorder
4. History of psychotropic medication was related to history of severe mental disorder.
5. Domestic violence was one of social factor which associated with the past or current psychological distress.

Even though a brief definition of domestic violence was offered in the national guidelines, no detailed operational definition of domestic violence is included in the antenatal proforma. Furthermore, as it was a structured antenatal, history-taking proforma, there is only a limited opportunity for healthcare professionals to perform an appropriate assessment. For example, it would be difficult to explore pregnant women's psychological distress symptoms and probe further, such as establishing the duration and intensity of the symptoms. The following section will explain the difficulty of recording the results when the women's responses are not structurally written in the proforma.

4.5.2 Inacurate recording

Based on the observation and the recording of the history taking, it was found that most midwives in Setaman recorded the finding in 'screening for non-specific mental disorders' section inaccurately. To illustrate this error in recording, examples are offered.

Inaccurate recording 1. Sari met a midwife who just skipped asking the mental disorder questions. Yet, the midwife answered 'No' to the questions. She filled the box only in the first question in every section (see the red box in Figure 3-2). In the other pages of history taking, which included the information of the woman's identity, gravidity and parity, the midwife wrote a note that the woman was categorised as having a high risk pregnancy for she had given birth to a baby with congenital malformation that died only days after her first birth (Figure 4-2).

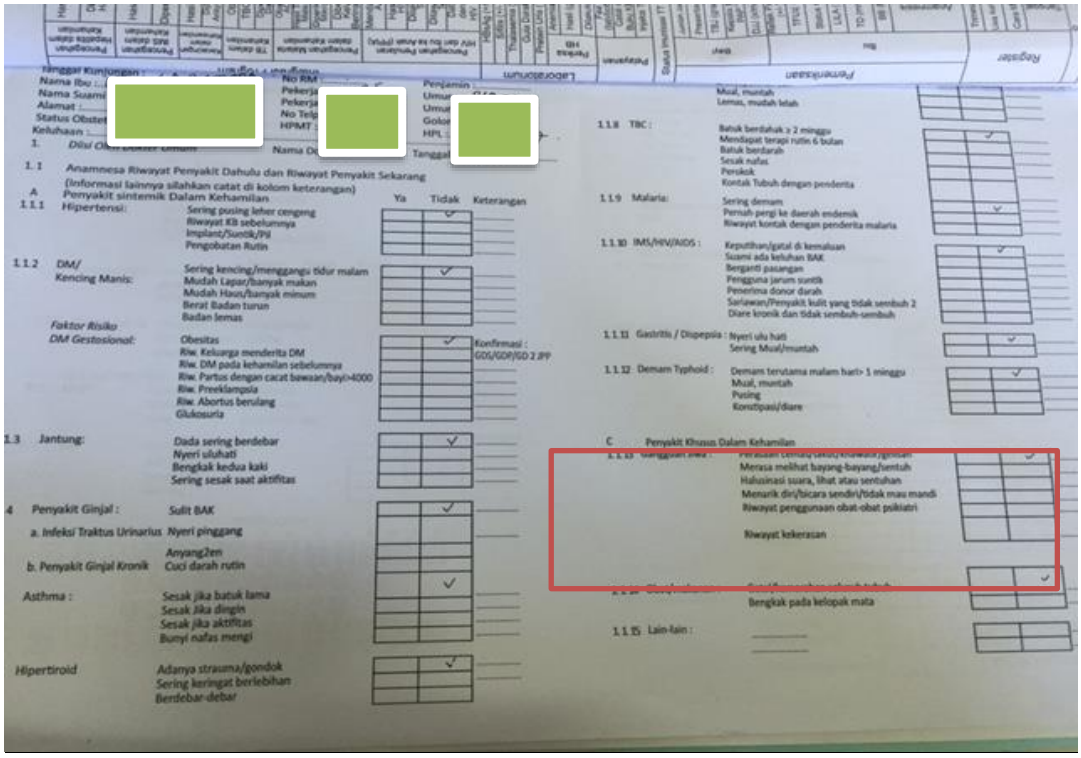

Figure 4-2: Documentation of Sari's history taking

Inaccurate recording 2. During observation in Ani's history taking session and in the interview with her, it was found that she had a traumatic birth in her first childbirth. In her history taking session, Ani stated that she had fear of childbirth when the midwife asked her whether she felt scared, anxious or worried. The midwife noted and wrote "fear of childbirth" next to the box which asked "feeling anxious/ fear/ scared/ restless". Nevertheless, the midwife did an inaccurate recording as she confirmed 'No' in mental disorder section. This can be seen in Figure 4-3 below.

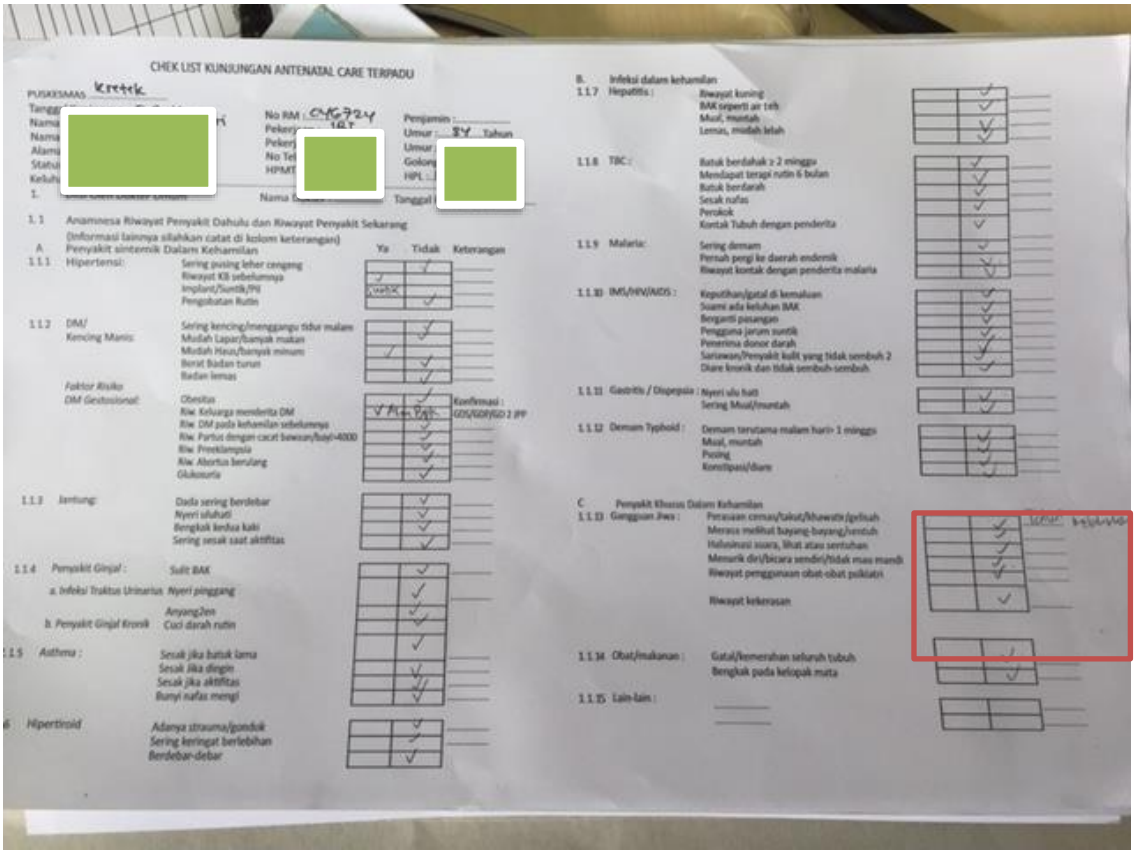

Figure 4-3: Documentation of Ani's history taking

4.5.3 What information can be gained from the documentary analysis?

The inaccurate recordings shown above demonstrate that midwives hesitate to confirm a positive answer in the mental disorder section. On the other hand, when the pregnant women had physical complaints or physical discomfort, such as leucorrhoea, the midwife confirmed it without hesitation and spontaneously asked further about the symptoms ("how long?"). The midwives then ticked 'Yes' in the box and wrote 'sometimes' (see red box in Figure 4-4). It is possibly that the midwives were unsure how to respond to the women's answers to questions taken from the mental disorder section.

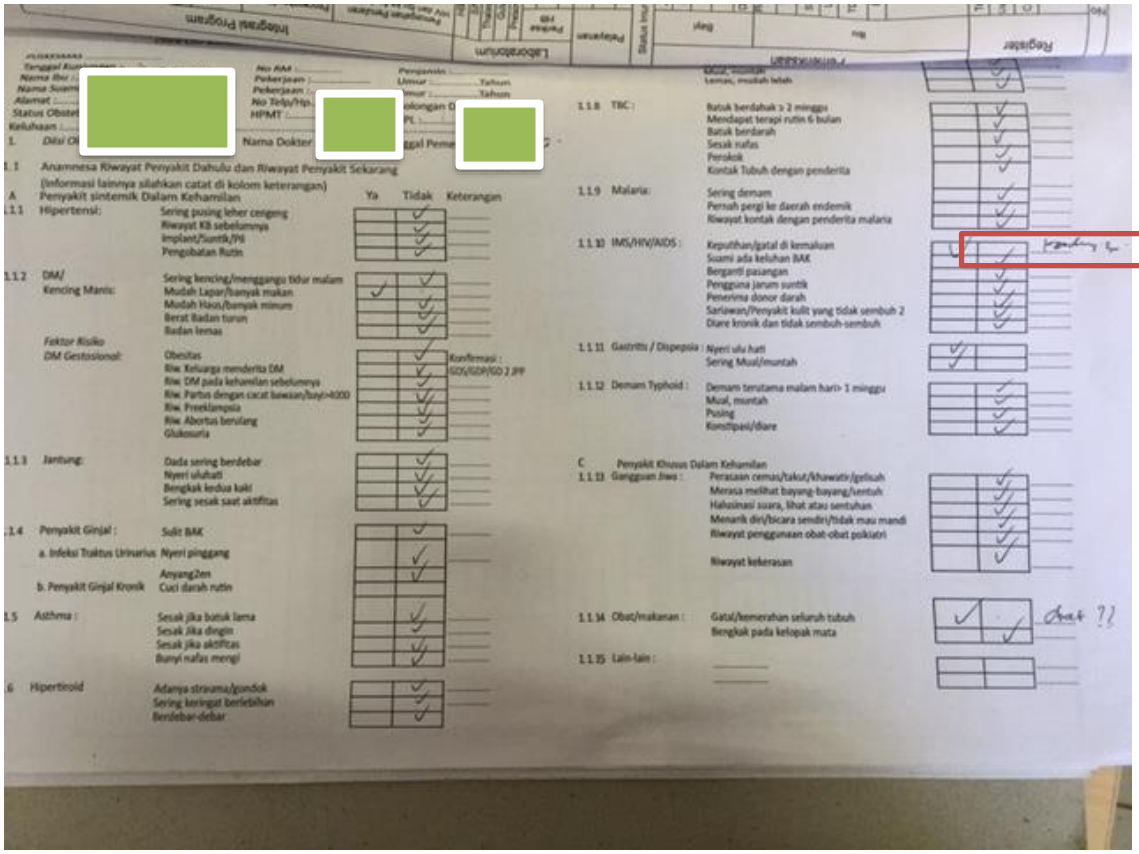

Figure 4-4: Documentation of history taking

The timeframe of women's experiences and emotions were not asked and recorded appropriately. Furthermore there was no action plan or referral procedure if the assessment indicated symptoms of psychological distress. This new proforma was not accompanied by specific guidelines or explanations of how to address the questions in the 'mental disorder' section. As a result, healthcare professionals may perform differently when posing questions to the women and responding to their answers during the antenatal booking visit.

The documentary data has strengthened the findings from the interviews and observations. The study found that healthcare professionals not only avoided sensitive and stressful conversation with pregnant women, they also had difficulties in recording a positive result of mental disorder symptoms. In addition, the instrument to screen non-specific mental disorder was not well-structured.

4.6 Conclusion

This chapter has explored the perspectives and experiences of pregnant women and healthcare professionals (mainly the midwives) regarding psychological health assessments carried out at the Setaman Primary Healthcare Centre. The chapter

has highlighted key issues relating to psychological health assessments for pregnant women during their antenatal booking visit. Observational data, field notes and documentary analysis were used to strengthen the interpretation of interview data. Four themes emerged from the data: i) '*Me and my early pregnancy',* ii) *'Listen to me',* iii) *'This is how we do it'* and iv) *'It is never easy to ask about mental health'*. The following chapter will present the findings from the second study site.

Key Summary:

- In general pregnant women had mixed emotions about their pregnancy
- Biological factors which might influence pregnant women's psychological health were physical illness, multigravida pregnancy and advanced maternal age.
- Psychological factors which might related to women's psychological health during pregnancy were a previous traumatic pregnancy and childbirth and history of perinatal loss.
- Some sociocultural factors were indicated as an added burden for pregnant women. This added burden included poor support from husband and family, women's multiple roles in the family and society, living in an extended family and financial difficulties.
- Pregnant women wanted to be able to talk about their life difficulties and expected the healthcare professionals to listen to them.
- General mental healthcare services are available in primary healthcare centres. However, only patients with severe mental illness could access this service.
- Healthcare professionals' routine practice regarding psychological health assessment was influenced by their varying levels of awareness and knowledge in perinatal mental health.
- Midwives were uncomfortable to talk about, and ask their patients about mental health.
- The midwives and GP felt ill-prepared to give response and to provide care in response to pregnant women's accounts of their mental health.
- Specific training for healthcare professionals in perinatal mental health is crucial to optimise pregnant women's experiences.
- A structured proforma which included a screening for non-specific mental disorders was used in the Southern district and seemed to be adapted from the national guidelines for integrated antenatal care.
- The proforma did not capture the women's psychological health thoroughly as the questions addressed symptoms of non-specific mental disorders.
- Midwives had difficulties in recording the results of the assessment, thereby producing invalid and inaccurate documentation.

Chapter 5 Case 2: Findings from Purwo Primary Healthcare Centre

5.1 Introduction

This chapter presents the findings from case 2, Purwo Primary Healthcare Centre. The detailed research setting, characteristics of the participants, the findings from interviews with pregnant women, midwives, the clinical psychologist and the GP are presented in this chapter. Observational data and field-note narratives are also presented to provide contextual information and to strengthen interpretations of data. Data from non-participant observations are presented in a blue box, while field notes are written in the box using *Lucida calligraphy handwriting font.*

5.2 Research setting: Purwo Primary Healthcare Centre

Purwo Primary Healthcare Centre is located in an affluent district in North Yogyakarta. The healthcare centre provides inpatient services comprising of general care and midwifery. The health centre employs midwives, GPs, nurses, a nutritionist, a physiotherapist, pharmacists, dentists, and other healthcare professionals such as a psychologist (see below), a laboratory analyst and a radiographer. The services provided include general health checks, emergency care, midwifery, laboratory facilities for haematology and urinalysis, physiotherapy, radiography, lactation support consultation, nutrition and psychological consultations.

The average number of daily antenatal visits was 25, with two midwives providing the service during the morning shift. From 2005 a collaboration with Gadjah Mada University, has allowed the placement of a clinical psychologist in this primary healthcare centre as part of a pilot project enabling the primary healthcare centre to provide mental health services for the community it serves. Since 2010, those who had premarital pregnancy have been referred automatically to the psychologist assuming that they would need a psycho-educational session as a consequence of getting pregnant out of wedlock. Following the implementation of integrated antenatal care services in February 2016, all pregnant women have the option to consult with the clinical psychologist during their antenatal booking visit, or at least

once during their pregnancy. The complete process of an antenatal care booking visit was explained in Chapter 3.

5.3 Characteristics of participants

More than fifty pregnant women were given the leaflet by the receptionist. Thirty one women were approached by the participating midwives and 21 women were given further information by the researcher. Fifteen pregnant women declined to take part in the study as they did not want to be interviewed. Their reason for declining the invitation to participate was due to time constraints. At the end, there were 6 pregnant women agreed to participate in this study. All pregnant women first made contact with healthcare professionals in the clinic. Gestational ages ranged from the first to the third trimester; some women having attended hospital or another clinic for antenatal appointments.

PIS and consent forms were given to 11 midwives, a clinical psychologist and two GPs after an information session was conducted. The information session was conducted after a monthly meeting of the Primary Healthcare Centre. Three midwives and a GP did not return the consent forms and 2 midwives were unable to participate as they rarely had a morning shifts due to continuing midwifery education. One midwife was on maternity leave. A total of six midwives, including the coordinator midwife, and one clinical psychologist who provided mental health services to participating pregnant women were interviewed. A doctor was also included in the study. The profile of all participants (in pseudonyms) are presented in tables 5-1 and 5-2.

Women/ Age (years)	Gestation Age (weeks)	Description
Nani (21)	16	She had a premarital pregnancy.
Yati (23)	6	She had an unintended pregnancy.
Putri (39)	10	She had a very well-planned pregnancy.
Rina (30	30	She had an intended pregnancy.
Fani (21)	31	She had a premarital pregnancy.
Nurma (19)	34	She had an intended pregnancy.

Table 5-1: Profile of women participants

Healthcare professionals/ Age (years)	Education/ Working experiences (years)
Midwife Rumi (45)	Diploma 3 of midwifery (24)
Midwife Ndari (40)	Diploma 3 of midwifery (20)
Midwife Fitrah (47)	Diploma 3 of midwifery (25)
Midwife Lusi (35)	Diploma 3 of midwifery (12)
Midwife Intan (23)	Diploma 3 of midwifery (2)
Midwife Rahma (45)	Diploma 3 of midwifery (19-since graduated from diploma 1)
GP Lani (38)	Medical doctor (14)
Psychologist Desi (31)	Clinical psychologist/ master degree (4.5 years)

Table 5-2: Profile of healthcare professionals

5.4 Emerging themes from the interviews: Purwo Primary Healthcare Centre

Four themes emerged from data analysis with women and staff at Purwo Healthcare Centre. For pregnant women the theme “My pregnancy added more burden” explains pregnant women’s feelings and their dynamic life along with psychosocial issues following confirmation of their pregnancy. The theme “I needed more” describes pregnant women’s opinions on psychological health services provided during the antenatal booking visit. In addition, women’s coping strategies (when they encountered, or were faced with, emotional changes and psychological distress) are presented under this theme. The first theme from the healthcare professionals was: “We usually do this”; it presents information about healthcare professionals’ routine practices in performing psychological health assessments. The other theme: “Unintegrated antenatal care programme” reveals the obstacles, challenges and supporting factors on the sensitive issue of ‘mental health assessment’. Figure 5-1 illustrates the findings from Purwo Primary Healthcare Centre.

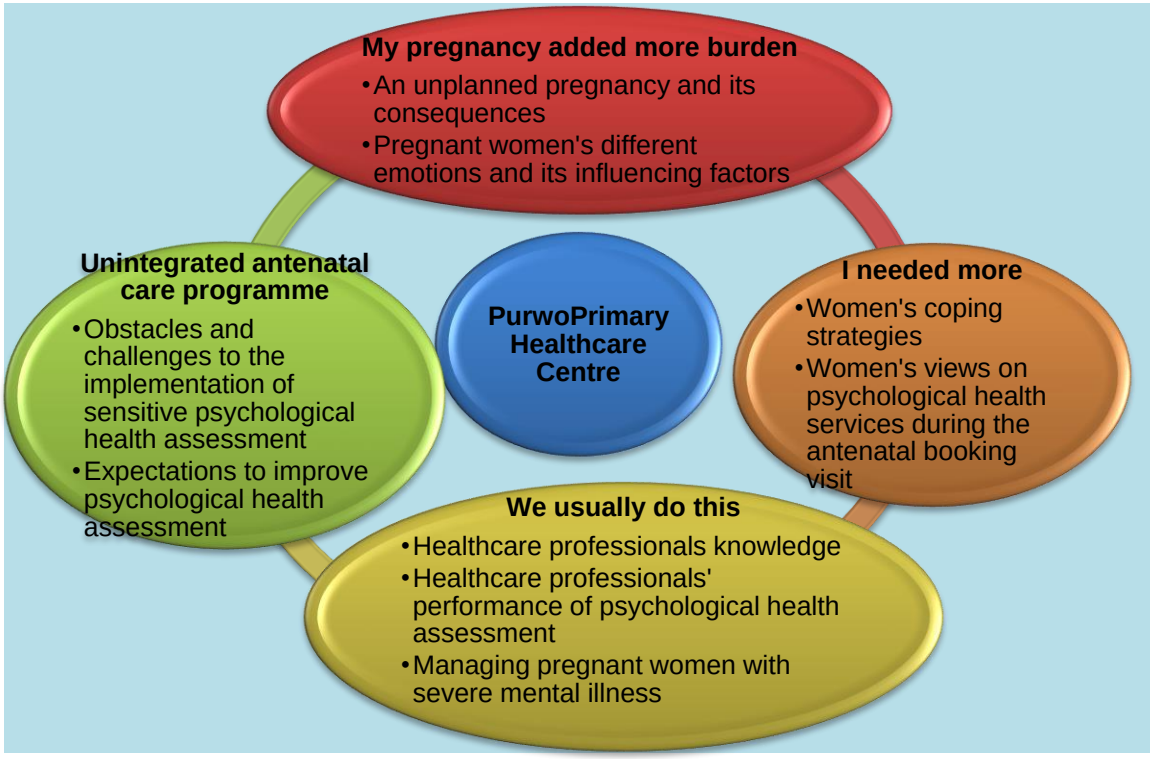

Figure 5-1: Themes from Purwo Primary Healthcare Centre

From pregnant women's perspective

5.4.1 "My pregnancy added more burden"

This theme revealed pregnant women's different emotional feelings towards their pregnancy. Some of them also experienced symptoms of psychological distress. Sociocultural beliefs seemed to influence pregnant women's emotions too. This theme includes pregnant women with an unplanned or planned pregnancy and their consequences. It also includes women's concerns towards their life difficulties and social burdens, which were mostly related to financial problems. The potential joy of pregnancy was overshadowed by financial pressures or unexpected social pressures. Role changing and domestic responsibility division and relations with the women's family, when / if they lived in an extended family, also presented significant challenges. Furthermore, social and cultural consequences of these life difficulties are explained in this theme.

5.4.1.1 An unplanned pregnancy and its consequences

Three pregnant women who came for their antenatal booking visit spoke about an unplanned pregnancy. Two of them had a premarital pregnancy. The following excerpts showed the negative emotions expressed by participants:

> *"I cannot explain it, as I was not married (at that time)... I did it (sexual intercourse) with my affair partner. I was afraid…Actually it is very difficult. I have a heavy burden… but sometimes I feel sorry for my ex…" (Nani, 21, 1st pregnancy, 16 weeks gestation).*
>
> *"I was confused and scared. Because I was not married (at that time)" (Fani, 21, 1st pregnancy, 31 weeks gestation)*

Negative emotions such as fear, anxiety and worry were mentioned by Nani and Fani as they were worried about their burden of responsibility. These negative feelings apparently related to, and stemmed from, the stigma of premarital pregnancy within Indonesian society. Nani reported that she experienced an emotional change that included feeling easily offended and sad when people talked about her:

> *"I feel now, during pregnancy, I get easily offended… But I don't like it when people are just staring at me. Like yesterday, when I walked by in front of the security officers, they whispered to each other. I feel upset (Nani, 21, 1st pregnancy, 16 weeks gestation).*

As premarital pregnancy is prohibited within Indonesia society, Nani experienced negative social judgement. Further explanation about negative consequences of premarital pregnancy are discussed in Chapter 7. To rectify the condition, both Nani and Fani agreed to get married. Nani finally married the father of the baby; yet Fani was abandoned by her boyfriend and so was asked by her mother to get married to someone else:

> *"Well… I am happy, but… I feel sad too, how could I separate my baby from the father" (Nani, 21, 1st pregnancy, 16 weeks gestation).*
>
> *"…my mom wanted to look for a house to rent, and then the landlord offered to marry her son (to Fani). At that time I only think about my baby, what if my baby is born without a father. Then I agreed (to marry him)…" (Fani, 21, 1st pregnancy, 31 weeks gestation).*

Both Ani and Fani considered that getting married could 'save' their baby from negative societal judgment due to being born without a legal father. It is interesting that the reasons behind the marriage of women with premarital pregnancy were revealed. Those who had a premarital pregnancy would have married as a result of social pressure to be seen to be married. Nani chose to marry the real father of the

baby as she did not want to separate the baby from the father. On the other hand Fani, who was at that time was in a powerless situation, agreed to married a stranger for the 'sake' of the baby.

Nevertheless, after getting married, Fani experienced a form of 'control violence' from her husband:

> *"I am not allowed to visit my mother's house. I am not allowed to leave his house. If I insist to do it, he threatened me. He said that he will leave me, he will not go home and he will not take care of me anymore (Fani, 21, 1st pregnancy, 31 weeks gestation).*

Fani did not acknowledge that her husband's threat could be categorised as a form of intimate partner violence. Yet, it appeared clear that her husband used their relationship to control Fani. There was a tension in Fani's marriage with her husband which did not appear to be positive. In Java, which is a patriarchal society, Fani and her mother lacked any opportunity to solve their problems. Therefore, Fani was thinking about divorce with her husband.

> *"I don't know. I cannot endure this (the marriage). What could I do…(difficulty in expressing her own expectation, took a deep breath). I really can't, though I have been thinking about my baby too… but I always think about divorce" (Fani, 21, 1st pregnancy, 31 weeks gestation).*

From the quotes above, Fani showed the difficulty in expressing her future plan. She also verbalised a challenging decision, to divorce from her husband. Nonetheless, she also seemed to have weighed the potential consequences of terminating her marriage, particularly the effect of divorce on her baby.

It was most likely that Nani and Fani agreed to get married because they felt shame, as society would have developed negative stereotyping for having a premarital pregnancy. As a result, women with premarital pregnancy also reported their social withdrawal as they wanted to minimise contact with other people. They decided not to tell their friends and stopped make contact with them. This self-imposed social exclusion also included concealing their marriage and avoiding social events.

> *"I did not invite anyone when I got married… I am ashamed when people asked me about my pregnancy…" (Nani, 21, 1st pregnancy, 16 weeks gestation).*

> *"I can't. I don't have courage to tell them. I did not contact them since a long time ago" (Fani, 21, 1st pregnancy, 31 weeks gestation).*

It was also found that women with unplanned pregnancy, experienced several symptoms of psychological distress. This situation is reported in the following quotes:

> *"No. I can't sleep well since I married him" (Fani, 21, 1st pregnancy, 31 weeks gestation).*
>
> *"I did, when I had not informed my parents about my pregnancy. I could not sleep (well)" (Nani, 21, 1st pregnancy, 16 weeks gestation).*

Even though sleep difficulty is common in pregnant women, Fani and Nani started to experience a sleeping disorder after they encountered certain socially and emotionally difficult life events. Thus, it was quite possible that their sleep disorder was a manifestation of psychological distress. Further investigation is needed to distinguish between complaints in a normal pregnancy and those that can be signs of psychological disorders. In addition, Nani also reported changes in her appetite and mood:

> *"Before I got married, I often felt worried. The first time I knew about my pregnancy and before getting married I had sleep difficulties, I did not eat properly…" (Nani, 21, 1st pregnancy, 16 weeks gestation).*

Furthermore those who had a premarital pregnancy reported that they had lost their interest to do activities that they usually found enjoyable. This symptom was actually similar to those associated with anhedonia, a core symptom of mental health problems.

> *"…before getting pregnant I usually hang out with my friends, while now, I usually stay at home after work. I rarely leave the house to go out nowadays" (Nani, 21, 1st pregnancy, 16 weeks gestation).*
>
> *" I just stay in my bedroom. I prayed, just laying down on the bed. I stay at home all day, my mom visits me every day" (Fani, 21, 1st pregnancy, 31 weeks gestation).*

Of course, an unplanned pregnancy can be also experienced by married women. 'Feeling shocked' was the experience reported by a married participant who had initially wanted to delay her pregnancy:

> *"Surprised. Because I am not ready (to get pregnant) since the beginning (of the marriage). I planned to get pregnant at least a year after getting married… Surprisingly, the result was positive. I am pregnant. I felt shock too."(Yati, 23, 1st pregnancy, 6 weeks gestation).*

Yati expressed disappointment towards her unplanned pregnancy after her marriage. The same finding was also found in case study 1 (Chapter 4, section

4.4.1). These negative emotional states appeared as the result of an unexpected event.

Being married did not make an unplanned pregnancy any easier than it was for the unmarried mothers. This situation was reported by Yati, whose mother verbalised her anger and disappointment towards Yati's pregnancy:

> *"I felt upset, because my mother even asked me such questions, like how many times I did it (sexual intercourse) in a week, how could I get pregnant so quick after getting married…" (Yati, 23, 1st pregnancy, 6 weeks gestation).*

Yati also had an uneasy feeling towards her unplanned pregnancy. She believed that her pregnancy not only would be a burden for herself, but also for her mother. A sense of guilt towards her mother also can be captured from the following excerpt:

> *"But my mother... well she has the same thought as me. My pregnancy adds more burden for her… she was angry because of my pregnancy…" (Yati, 23, 1st pregnancy, 6 weeks gestation).*

Different views of a pregnancy termination plan amongst women with an unplanned pregnancy were found. A woman with premarital pregnancy had thought to terminate her pregnancy, whilst those who got married but had an unplanned pregnancy had no intention for abortion at all.

> *" No, I will continue this pregnancy" (Yati, 23, 1st pregnancy, 6 weeks gestation).*

> *"I previously had a plan to abort the pregnancy, but before I decided to abort it I asked for a scan by an obstetrician. He then said that the baby was healthy. Well, I am a woman and I didn't think I could do it (the abortion) after seeing the baby (started to cry)… Then I discussed with the baby's father that if he wasn't willing to take the responsibility, I plan to take care of the baby all by myself." (Nani, 21, 1st pregnancy, 16 weeks gestation)*

Even though Nani finally changed her intention for abortion, it could show the different initial responses towards the pregnancy between married women with an unplanned pregnancy and women with a premarital pregnancy. Nani reflected upon her role as a woman before deciding to continue her pregnancy. She mentioned that she did not have the heart to terminate her pregnancy and expressed the intention to take care of her baby independently after seeing the baby through the ultrasound scan.

Those respondents who had an unplanned pregnancy also reported that they accepted the consequences of what had happened and what would happen to them. This was expressed by both Yati and Nani:

> *"I am sad too, because I feel like I have lied to them, to my parents. I had promised to my mother as she wants me to have more savings. I don't expect anything from them. I can't. It's the consequence for me to handle it…" (Yati, 23, 1st pregnancy, 6 weeks gestation).*

> *"…I blamed myself…Why didn't I think further? People blamed me when they knew that I am pregnant with my husband… my supervisors, my parents, my friends they all like, "how could you be so stupid?"… I am ready if they blamed me" (Nani, 21, 1st pregnancy, 16 weeks gestation).*

Both Yati and Nani felt regretful about their pregnancies. They also blamed themselves for disappointing their families and realised that they have to accept the consequences of being blamed by others. Whilst Nani seemed to have more burden as she failed to comply with Indonesian society's norms.

There were different responses and consequences of unplanned pregnancy between a married woman and those who had a premarital pregnancy. Whilst premarital pregnancy evidently brought negative emotions to the women and was associated with symptoms of psychological distress, an unplanned pregnancy in a married woman was, in this study, a cause of shock and disappointment. The women who are married and facing an unplanned pregnancy, and those who had premarital pregnancy, both felt guilty towards their family members or their closest person. The difference and similarities of response and consequence were related to a strong sociocultural context of pregnancy and parenthood in Indonesia. This subject will be discussed further in Chapter 7.

5.4.1.2 Pregnant women's different emotions and influencing factors

Unlike those who had an unplanned pregnancy, women who expected or wished to conceive were found to be able to enjoy their pregnancy. This positive emotion was expressed by Nurma:

> *"I am happy. I am really happy, I just got pregnant after marriage. I am trusted (by God) to have a baby" (Nurma, 19, 1st pregnancy, 34 weeks gestation).*

When Nurma was asked about her feelings towards her pregnancy, as an expectant first-time mother she referred to her faith and her conceptions of God. Her response included the thought that God was the supreme being and creator.

This was in line with the findings in case study 1 which revealed that pregnant women considered the presence of a child as a gift from God.

At the same time, even though most women with a planned pregnancy verbally expressed positive emotions toward their pregnancy, they also experienced emotional and mood changes. This was illustrated in the following quote:

> *"Suddenly I wanted to cry and be angry. I have no reason. It feels really different compared to the condition before I got pregnant. I have been so moody, more sensitive. I don't know" (Nurma, 19, 1st pregnancy, 34 weeks gestation).*
>
> *"I don't know why I wasn't in a good mood... I feel like I want my husband to give more attention to my baby too, not only to my first child... but… I don't know…" (Putri, 38, 2nd pregnancy, 10 weeks gestation).*

Women were aware that they could experience emotional and mood changes during their pregnancy. Nevertheless Putri explicitly expected her husband to provide enough attention and care for her pregnancy. This underlined the need for support from significant others during the pregnancy period.

Furthermore, other factors could influence women's emotions during their pregnancy. One such factor was financial issues, as Putri reported:

> *"My husband said that he wanted to have another child too, but we're thinking about the education (cost), (the money needed) to entertain them, (like) going for a picnic or going somewhere else and it will cost us money too" (Putri, 38, 2nd pregnancy, 10 weeks gestation).*

Putri had a very well-planned pregnancy and eventually the decision to have a second child was made together with her husband. The couple were initially hesitant, influenced by the thought of being unable to provide a good quality of life for their children. Financial instability also caused women wanting to delay their pregnancy. This view was expressed by Yati, who had an unplanned pregnancy:

> *"I actually wanted to make more money so that I could have our own house… I also still want to work, to have more savings" (Yati, 23, 1st pregnancy, 6 weeks gestation).*

It was found that most pregnant women in this study site were worried about the financial difficulties they might encounter with during pregnancy and following childbirth. It also appeared that their concerns about financial difficulties led to their fear of having a *C-section*. This was shown from the following quotes:

> *"I feel scared actually…because of my previous experience of a C-section. Well…it is actually (more related to) a financial problem" (Putri, 38, 2nd pregnancy, 10 weeks gestation).*
>
> *"I told my husband about my fear of having C-section … To be honest, thinking about a C-section is quite bothersome for me. The cost is too expensive. The recovery* process *will take longer*" *(Nurma, 19, 1st pregnancy, 34 weeks gestation).*

It was evident that either primigravida or multigravida pregnant women were fearful about having a *C-section*. Having a *C-section* was also considered costly for most pregnant women. It also appeared that the longer recovery time was considered as another reason to fear having *C-section*.

Even though there was a national health insurance mechanism that will cover the cost of a *C-section* if there are obvious indications, the service was not used appropriately by all participants. While talking about health insurance, it was found that there were participants who planned not to use the healthcare insurance due to its limitations.

> *"My husband had an experience in using the national insurance too. The queue was so long, took time and he felt hesitant to register. Even though I already told him, but he looked unwilling to apply" (Putri, 38, 2nd pregnancy, 10 weeks gestation).*

Putri reported a complicated process to register and to use the insurance, based on her husband's experience. This difficulty caused her husband to be unwilling to proceed with the insurance. It also seemed that Putri was forced to follow her husband's decision for not having a healthcare insurance. Meanwhile, Putri's concern in her pregnancy was rooted in her financial insecurity.

The findings suggested that pregnant women had fear of a *C-section* because they considered their life following the childbirth would be affected. Pregnant women in this study thought that they would be more dependent upon other family members when they have a *C-section*. This issue is illustrated in the following excerpts:

> *"…having a C-section means it is not a normal (process)... It will be less bothersome for my family if I have a normal birth as I live with my husband's family. I will have a speedy recovery. The cost is not too expensive too" (Nurma, 19, 1st pregnancy, 34 weeks gestation).*
>
> *"I told the midwife that I was afraid of having a C-section. I am worried. If I cannot do anything (after the section), who will do the house chores? No one, it has to be me" (Rina, 30, 30 weeks gestational age).*

From Nurma and Rina's quotes it was found that their fear of having a *C-section* could add to the workload of other family members. They were concerned about their inability to take care of their family members and do the household chores due to the physical after-effects of a *C-section*. This response also revealed that the women wanted to uphold their domestic responsibilities. In addition, they were concerned about their social role within their family. These might be the consequences, after Nurma had decided to live in an extended family.

There were several reasons that influenced a couple to decide to live in an extended family after their marriage. This form of family is quite common in Indonesia, since caring for ones parents is a part of the nation's culture. This practice relates to social and cultural norms and is linked to religious teaching, which will be discussed further in Chapter 7. Similar with the findings in Chapter 4, there were also a couple who actually wanted to live in a nuclear family. Yet, due to financial reasons they went back to their parents' house and had space sharing in the same household with other family members:

> "*Previously, my husband lived in Purwosari* (pseudonym- a rural district in Central Java*), it is actually a rural area. We didn't have any idea what kind of job that he could get. So we decided to move to Jogja and live with my parents"(Yati, 23, 1st pregnancy, 6 weeks gestation).*

This study found that there was a downside to living in an extended family. As was reported by Rina, she felt uncomfortable living together with other family members after her marriage. This was due to the couple having to deal with, or at least be exposed to, the other family members' personal issues:

> *"…We have good relations. But, you know, it feels uncomfortable to stay with our parents after getting married. If I stay at my parents or my parents in law's house, when I buy some food to eat, I have to buy the food for all of us. I felt uneasy... It's uncomfortable" (Rina, 30, 30 weeks gestational age).*

For Rina, she felt burdened economically when living in an extended family. Thus, she agreed with her husband's decision to move from her parent's house. Living in an extended family might also bring other responsibilities for women. In addition, living in an extended family might lead to a conflict with other family members. It might possibly happen since a person who lived in an extended family had to compromise to deal with other family members' personal business in order to accommodate everyone's interests. This situation was experienced by Yati who did not receive support from her mother regarding her pregnancy:

> *"I feel uncomfortable when doing anything at home. Now I am married and we are living in my parents' home. It feels agonizing…" (Yati, 23, 1st pregnancy, 6 weeks gestation).*

Furthermore, those who were living with their parents-in-law seemed to have the obligation to meet their parents-in-law and husband's expectations. This was reported by Nurma:

> *"Good… (the relationship with the in-laws). We eat (the same food) together, I do the house chores with the help of my sister-in-law, together… I clean the kitchen, so in the morning, I will have easier and less house chores to do" (Nurma, 19, 1st pregnancy, 34 weeks gestation).*

As was expressed by Nurma, it seemed she felt obligated to do the household chores even though she stated that she felt comfortable to live with her parents-in-law. Women might also feel the pressure from society that had shaped their intention to meet their parents-in-law's expectations and to please their in-laws. Meanwhile, usually in Javanese culture, women get exemption from domestic chores when they are pregnant as pregnancy is considered to be a special and sacred period. Therefore, pregnant women might get help from their families in related to the household chores. However, Nurma did not seem to get the exemption even though she was at the third trimester.

Apparently the additional responsibility was not for the women only, but also to the other family members. This additional responsibility resulted in the family's response; particularly the women's mother. Yeti stated:

> *"My niece is still a toddler too and my mother is taking care of her when my sister-in-law going for work. That's why I don't want to get pregnant before my niece grows a little bigger (than now)… I am not happy with this pregnancy" (Yati, 23, 1st pregnancy, 6 weeks gestation).*

The response of Yati's mother might have possibly been related with her role after Yati's childbirth. The grandmother would have to take care of her grandchild once the new mother decided to go back to work for financial reasons. This study found that the woman's mother, the new grandmother, expressed resentment at any assumption that she would take on the role of child care provider for her grandchild; expressing her objection to this role. This caused Yati to feel bad and upset towards her pregnancy.

In contrast, Nani, who planned to stay at home after giving birth and take care of her baby by herself, seemed to be able to maintain a good relationship with her mother:

> "*I plan to resign from my job, maybe after the 6th month of my pregnancy… I want to focus on my baby. I already discussed it with my parents and my husband. My mother said that if I don't have any more strength to work, I should resign at any time" (Nani, 21, 1st pregnancy, 16 weeks gestation).*

Even though Nani was living with her big family, and she had a premarital pregnancy, she planned to be independent in taking care of her baby. Her response also revealed that in spite of Nani's family's initial rejection of her marriage and societal exclusion from her family, later she was able to regain support from her parents:

> *"My parents initially did not agree if I am (married) with him (the affair partner)… but now, they already accepted him. Previously I was isolated by my families, they didn't want to talk to me (crying again), but now everything's fine… "(Nani, 21, 1st pregnancy, 16 weeks gestation)*

Both women, with unplanned and planned pregnancies, experienced emotional changes during their antenatal period. Nevertheless, the women with a premarital pregnancy seemed to experience psychological distress as a result of breaking their cultural norms. Women who were married, had an unplanned pregnancy and had poor support from their family also reported negative emotions, such as guilt and self-blame. All women in the study had their life difficulties and it was reported that pregnancy brought more burden, not only for the women, but also to the women's families. Pregnant women's concerns about financial issues and their fear of having a *C-section* were evident in this study site. Fear of having a Caesarean section was categorised in to three reasons: i) social, ii) physical and iii) economic.

5.4.2 "I needed more"

This theme reports pregnant women's coping strategies when they experienced mood changes and psychological distress symptoms. Their coping strategies depended on the support provided by their significant other and family; primarily husband and mother. Pregnant women's views on healthcare professional services, particularly related to psychological health services and support in Purwo Primary Healthcare Centre available during their antenatal booking visit, are presented under this theme. This theme also explains obstacles to the provision of sensitive care during the antenatal visit through the lens of pregnant women.

5.4.2.1 Women's coping strategies

When pregnant women experienced emotional changes and symptoms of psychological distress, as described in the previous theme, they reported not only their condition but also their coping strategies. These strategies included doing other things to distract their negative thoughts and emotions and talking with others, as reported by Nani and Fani:

> *"I still want to work now, because if I just stay at home, I will be thinking more about the past that will make me get stressed more and more…" (Nani, 21, 1st pregnancy, 16 weeks gestation).*
>
> *"I can talk only to my sisters and my mother. I cannot talk to other people" (Fani, 21, 1st pregnancy, 31 weeks gestation).*

Both Nani and Fani had premarital pregnancies; however Nani seemed to have more social support from people around her than did Fani. Talking with others, refocusing on something positive such as working, could help Nani to stop dwelling on her regretted past. Even though in the previous theme Nani said that she initially avoided her friends and experienced several symptoms of which might relate to psychological distress, she was still able to work as usual. Her behaviour and associated social support could be interpreted as an acceptance of her pregnancy. On the other hand, whilst Fani was at her third trimester at the time of her interview, she still had a tendency to seclude herself, except from her family. Thus, she had limited support resources to help her to overcome her negative feelings.

Talking to a significant other was reported by Rina and Nurma who both had fear of a *C-section* and Nurma fearing she would not be able to take care of her baby:

> *"He said it's fine, if I have to have a C-section, then it's okay. It will be for the sake of the baby" (Rina, 30, 2nd pregnancy, 30 weeks gestational age).*
>
> *"I told my husband about my anxiety of having C-section…He suggested that I should be happy because this is our first child and there will be many people (other family members) to help me to take care of the baby. Our families live close to our home too…" (Nurma, 19, 1st pregnancy, 34 weeks gestation).*

The husbands of Rani and Nurma provided support to overcome their wives' fears. In addition, Nurma's husband also gave reassurance that she would get help from other family members, as the couple lived with their parents. This also illustrated the benefits of living in an extended family or living close to family; situations which provide a sense of security and parenting support. A discussion about living in an extended family is presented in Chapter 7, section 7.3.2.3.2

Whilst some women coped with their negative emotions and fear by talking with their husband, as well as getting support and reassurance from that husband, the following excerpt showed that pregnant women did not necessarily disclose their sadness to their partner:

> *"I rarely talk with him. I don't know. I just can't….No, I don't want to talk to him. I want to keep my distance from him" (Fani, 21, 1st pregnancy, 31 weeks gestation).*

In contrast, following her consent to marry a man she had not met who was chosen by her mother, Fani felt that her relationship with her husband rendered her helpless. Therefore she did not expect support from her husband. She not only excluded herself socially but also reported limited sources of support. Due to that limited support, Fani chose to adopt a religious approach as one of her coping strategies. She then decided to open her mind and soul to expect help and guidance from God, as was stated in the quote below:

> *"… I just stay at my bedroom. I prayed, just laying down on the bed … But I always pray to Allah that if the divorce is the support best way for me, I asked God to give me the guide, the light" (Fani, 21, 1st pregnancy, 31 weeks gestation).*

Further discussion about coping via a religious approach is presented in section 7.3.2.4 Similar with Fani, Yati who was disappointed about her pregnancy, decided not to disclose her negative feelings to her husband:

> *"No, he doesn't know. He works every day. He is really happy with this pregnancy… but… I don't think he ever saw me cry. I keep it for myself. I don't tell him about my disappointment. I feel so sorry for my mother…" (Yati, 23, 1st pregnancy, 6 weeks gestation).*

Yati's quotation shows the importance associated with support from her mother. Yati still felt very guilty. Both Nani and Yati's mother were against their pregnancies. Nonetheless, there was a difference in the terms of Nani and Yati's gestational ages. At the time the interviews were conducted, Nani was in her second trimester, while Yati was in her very early pregnancy. Thus, it seemed that Nani's mother began to accept her pregnancy and provided support along with the increasing gestational age. This conclusion was supported in the following excerpt:

> *"…At first my mother was against my marriage and was upset towards my pregnancy. But now, she's accepted them already. Now she offers me the food that I want to eat" (Nani, 21, 1st pregnancy, 16 weeks gestation)*

Based on the interview, it was suggested that the women's mothers had an important role in shaping the pregnant women's coping strategies. This situation was particularly experienced by those who had an unplanned pregnancy. The following observation informed the role of the pregnant women's mothers during the booking visit. The observation below also reveals that Fani, who was at risk of experiencing psychological distress, missed the chance to see the clinical psychologist as the midwife considered that Fani had met with a psychologist in another healthcare centre. Findings on healthcare professionals' practices of psychological health assessments are presented in section 5.4.4.

Observation: Fani, 21, 1st pregnancy, 31 weeks gestation

Date: 15th November 2016

During the booking visit, when Fani was asked to come in to the examination room, Fani's mother, who came with her, helped Fani answering the questions asked by the midwife during the history taking. Fani showed a 'flat' affect (did not show any emotion) and did not seem to be enthusiastic. She met a young midwife, Midwife Rahma who was busy looking at Fani's pregnancy book. Midwife Rahma seemed to be concerned about Fani's gestational age and asked why she had only just come for a booking visit when she was in her third trimester. Fani's mother replied that Fani previously visited another primary healthcare centre located close to her mother's house.

Midwife Rahma measured Fani's mid-upper arm circumference, height and weight and then documented the results. The midwife was then aware that Fani had not gained any weight since her last visit to another primary healthcare centre. In fact, Fani had actually lost some weight. The midwife then asked why Fani had lost rather than gained weight, and Fani just smirked. The midwife asked Fani whether she felt nauseous or still vomited. Fani's mother replied that Fani did not have any appetite. Midwife Rahma then told Fani to eat properly for the health of the baby. Fani then was asked to wait in the waiting area for her turn for the abdominal examination. When Fani had left the room, Fani's mother told the midwife that Fani just got married a few weeks ago and that Fani had a premarital pregnancy. That was the reason why she lived with her husband at that time. She lowered her voice as one pregnant woman was being examined (abdominal examination). Midwife Rahma just said, "oh…." and nodded.

After the abdominal examination, the midwife offered Fani to see the psychologist. However, Fani and her mother said that they had seen the psychologist in another

primary healthcare centre. The midwife said that Fani had finished her integrated antenatal care programme in that other healthcare centre. The midwife emphasised Fani should eat properly and to think about benefitting her baby. Fani still looked unenthusiastic and was still smirking.

(End of observation)

The findings suggest that those who received satisfactory social support reported a positive coping strategy, including working for pay which help to let go of negative thoughts and contribute to family economy. Nevertheless, women also reported that their husbands provided support and gave reassurance for issues that made them worried, such as the matter of delivery via a *C-section*. The following sub-theme presents pregnant women's views on psychological health services provided or available during the booking visit.

5.4.2.2 Women's views on psychological health services during the antenatal booking visit

As was mentioned in section 5.2., a clinical psychologist is available at the healthcare centre. It was planned that the presence of the clinical psychologist could offer benefits for women who felt anxious during their pregnancy. They also reported that they were impressed by the service provided during the booking visit. Rina reported:

> *"… I have never seen a psychologist before, being asked and talked about my feelings… After seeing the psychologist, I feel relieved and I don't feel anxious (about having a C-section) now" (Rina, 30, 2nd pregnancy, 30 weeks gestational age).*

and Putri noted:

> *"I felt comfortable (talking) with her…I didn't expect that it would have been a comprehensive examination, this is my first time coming here. It's beyond my expectation" (Putri, 38, 2nd pregnancy, 10 weeks gestation).*

The findings suggested that instead of talking to the midwife about her fear of a *C-section*, Rina preferred to talk to the psychologist. Meanwhile, she could obtain trusted and valid information about a *C-section* from the midwife. Even though it was their first time to see the psychologist, both Rina and Putri felt relieved and comfortable to consult the clinical psychologist. Their good impression was possibly because the psychologist could maintain the clients' privacy, as well as providing

information and time to listen and talk to the women. The following observation reports Rina's experience during her antenatal visit:

Observation: Rina 21, 1st pregnancy, 31 weeks gestation

Date: 8th November 2016

The midwife took Rina to the clinical psychologist's room. The psychologist closed the door and asked Rina to sit on the couch and the psychologist sat on another couch in front of Rina. The psychologist introduced herself and asked for details regarding Rina's identity. They shake hands. The psychologist also explained about the aim of the session and the assessment as part of integrated antenatal care. Then the psychologist started to ask about Rina's feelings. Rina said that she was worried as in her third trimester, based on the previous abdominal examination, the baby was in breech presentation. However, the latest examination result suggested that at the moment it was a head presentation. Rina then told the psychologist that the midwife mentioned the possibility of having a *C-section* as the baby's presentation could change. The psychologist explored Rina's fears concerning a *C-section*. Rina was scared of a *C-section* as she was informed by many people that those who had a *C-section* would have a poor womb condition afterward.

The psychologist had intense direct eye contact with Rina. She listened to Rina carefully, smiled and nodded sometimes whilst listening to Rina's answers. The psychologist asked about her previous pregnancy and childbirth experiences. Rina said that there was a changing situation between her first and current pregnancy. In her first pregnancy, she lived with her parents-in-law, but currently she only lived with her husband and her child; a situation she very much enjoyed. She felt she had more responsibilities when living with her in-laws, such as cleaning the house and helping to cook.

The psychologist asked about the responses of Rina's husband and her families on her pregnancy. Rina looked very comfortable to talk with the psychologist. The psychologist emphasised the importance of her husband's support and roles during the pregnancy and after the childbirth. To manage Rina's fear about having a *C-section*, the psychologist said that it was normal to feel scared or worried. However, it was important to manage those feelings so that Rina did not need to overreact to them. The psychologist also explained that pregnant women should be able to control their emotions as they could negatively affect the pregnancy (did not explain further). At the end, the psychologist suggested Rina should look for information

about a *C-section* from the healthcare professionals and advised her to ignore lay people's comments about the *C-section* issue.

End of observation

From the observation above, it was revealed that the psychologist did not provide any information about the issue of a *C-section* delivery. The psychologist gave encouragement to Rina to try to control her negative feelings or thought by finding information about *C-section* delivery from healthcare professionals. The session lasted for 15 minutes and the psychologist showed a compassionate attitude and empathy to her client Rina. In addition, the client's privacy was well-maintained. As a result, Rina appreciated the service provided to her by the psychologist.

The clinical psychologist not only assessed the women's emotional status. She also helped the women to manage symptoms of psychological distress. The psychologist informed the women about issues relating to 'preparation for parenthood', adapting to a new family member and managing sibling rivalry. Most women who had met the psychologist stated that they were impressed with the service at the healthcare centre in general.

> *"She asked me about my feelings…I feel calmer. She (also) said that I need to explain to my first daughter carefully about the new member. She told me that I still have to give the attention to my first daughter, and so does her father" (Putri, 38, 2nd pregnancy, 10 weeks gestation).*

Pregnant women stated that the psychologist's communication style made them feel comfortable to share their emotions. Rina reported that she felt that she was being accepted and listened to by the psychologist; thus she talked to the psychologist without hesitation:

> *"The way she's talking. Mbak Desi (the psychologist) is really nice while talking to me. She is so lovely, she listened to me and she didn't ask the questions over and over again" (Rina, 30, 2nd pregnancy, 30 weeks gestational age).*

Occasionally, due to other duties, the clinical psychologist was not available in the healthcare centre. In this situation, a psychology student replaced the qualified psychologist; a circumstance experienced by Nani, based on the observation as reported below.

Observation, 11th November 2016

Participant: Nani, 21, 1st pregnancy, 16 weeks gestation

Nani went to see the clinical psychologist, but at the time she did not see the psychologist, there was only a master's student who provided the service (master of psychology candidate who is at the placement to be a clinical psychologist). The student provided a psycho-educational session for about 15 minutes. Nani's husband was in the room with her and sat next to her. Nani and her husband were sitting face to face with the psychologist on a couch and there was a coffee table between them. In the beginning of the psycho-educational session, the student psychologist confirmed the couple's personal identities. Then, the student encouraged Nani to be happy and accept her pregnancy, even though it was an unplanned event. The student asked about the Nani's and her husband's feeling. The student did not ask the husband to wait outside the room. The session was mostly focused on the preparedness for childbirth, parenthood and the role-changing that will be experienced by the couple following the childbirth.

The student did not explore Nani's feelings in any depth. Nani told her that she planned to resign from her job in 3 months. The student also asked about socio-economic conditions, particularly in related to the financial preparation for the baby's birth, as well as the couple's relationship with their parents. The student psychologist used a low voice tone, and she was holding Nani's medical record and a notebook. Sometimes the student smiled and nodded whilst listening to Nani and her husband. Nani looked unenthusiastic, did not show excitement and seemed to constraint herself by answering the questions as needed. She looked a little bit uncomfortable whilst Nani's husband looked more excited during the session.

(End of observation)

Based on the observation above, Nani seemed to feel uncomfortable to talk to the psychology student. This was possibly as a result of Nani's husband being present in the room during the interview session. It seemed like there was no standardised questions and procedure during Nani's psycho-educational session. The session did not seem to provide adequate help for Nani to manage her psychological distress symptoms resulting from her being very disappointed with herself and her situation.

On the other hand, different impressions were gained from other pregnant women. The following observation informed the process of Yati's antenatal booking visit in the midwifery clinic:

Observation, 22nd November 2016

Participant: Yati, 23, 1st pregnancy, 6 weeks gestation

During the antenatal booking visit, due to time constraint, Yati was not asked to go to the psychologist's room. Yati met a midwife who only asked her about her feelings towards her pregnancy at the end of the visit. There were no other patients/ women in the room. Yati then answered that it was an unplanned pregnancy, as she was not ready to get pregnant. The midwife asked her about her marriage status, and she mentioned that she got married already. Without asking further questions about the reason why Yati wanted to delay the pregnancy, the midwife suggested that Yati should try to accept her pregnancy happily. The midwife also mentioned that many other couples did not get chance to have child, or children, due to many factors. The midwife also suggested that her pregnancy was a *berkah* (Indonesian language for gift from God) and that not all couples were so blessed or could afford it. The midwife asked Yati to be grateful to God for her pregnancy. Yati looked upset and sad. She did not smile *at all throughout the* visit.

The midwife appeared to be hurrying through the meeting with Yati as Yati was the last patient in the clinic. The midwife did not write anything about Yati's feelings towards her pregnancy either in Yati's medical records or in the antenatal book.

(End of observation)

Following her antenatal visit with the midwife, during the interview with the researcher, Yati mentioned that she did not get enough support from the centre's healthcare professionals.

> *"Nothing changed after I saw the midwife. I still feel a bit anxious and sad, because it is an unplanned pregnancy and I haven't been ready yet to get pregnant" (Yati, 23, 1st pregnancy, 6 weeks gestation).*

It was found that even though there was a mental health professional in Purwo Primary Healthcare Centre not all pregnant women who expressed negative emotions about their pregnancy or stressful life events were referred. Yati did not have the opportunity to see the psychologist. Even though the midwife had given

her some suggestions, Yati mentioned that she still felt unsettled with her pregnancy. The observation session revealed that Yati did not have a chance to talk more about her feelings. In addition, the midwife used a religious approach to help Yati to accept her pregnancy; still, it seemed the approach did not work as Yati was still upset. Furthermore, there was no documentation made by the midwife in Yati's medical record regarding her unplanned pregnancy. If such a record had been created, other healthcare professionals might have been able to follow up Yati's progress in the subsequent visits.

When referring to their session with the psychologist, some women said that they did not disclose their emotions. Putri explained:

> *"…she (the midwife) asked me about (my health) complaints. I said that I have cough. it is more related to the physical (discomfort). And the midwife said that maybe it was because of the weather…If the midwife explained something about women's emotions and could influence the pregnancy, I would be very happy to talk to her (the midwife)" (Putri, 38, 2nd pregnancy, 10 weeks gestation).*

From Putri quote's above, she associated questions about complaints to a physical discomfort. The midwife did not ask about Putri's feelings and psychological wellbeing. Meanwhile, the word 'complaints' can be interpreted broadly, rather than only being focused on physical health. It is most likely that lay people would have made the assumption that when they were visiting their healthcare centre, they would receive treatment mainly or only related to their physical health. Furthermore, it seemed that Putri was passively waiting for the midwife to ask about her psychological health rather than directly expressing her feelings in a proactive way.

On the other hand, the pregnant participants agreed that they should have been asked about their mental and psychological health during the antenatal visit. Rina was aware that this was one of a midwife's roles:

> *"The midwife is the person who will help the woman during the childbirth. So they should know the woman's feelings. If they advise me not to be too stressed out, so that I would not have a higher blood pressure, then I will try to manage my stress. I will listen to them" (Rina, 30, 2nd pregnancy, 30 weeks gestational age).*

The pregnant participants acknowledged one of the reasons that might cause the midwife to be unaware of their psychological health was due to time pressure and the centre's limited number of healthcare professionals. This was expressed by Rina in the following excerpt:

> *"Maybe it's because of the time too… because there are so many patients but sometimes there was only one or two midwives…so the service time and the queue time took longer" (Rina, 30, 2nd pregnancy, 30 weeks gestational age).*

The following quote illustrated that at least one pregnant woman felt hesitant to express her feelings as it was her first time to meet with the midwife:

> *"Maybe because I am not too close or don't know the midwife very well maybe…This is the first time I saw the midwife" (Nurma, 19, 1st pregnancy, 34 weeks gestation).*

It was revealed that pregnant women would have felt more comfortable to talk openly about their personal feelings with a midwife they were already familiar with. Rina explained:

> *"I feel I cannot talk freely with other midwives except with Midwife Rahma... I feel close to her, she helped me during my previous labour…" (Rina, 30, 2nd pregnancy, 30 weeks gestational age).*

Continuity of care seemed to provide the opportunity for good relations and trust-building between healthcare professionals and pregnant women. The pregnant participants also mentioned implicitly that they expected a sense of empathy from healthcare professionals, particularly 'their' midwife. Nani stated:

> *"Well, I was disappointed… the midwife's first response when she knew about the age of my pregnancy (gestational age) and I haven't had a TT (tetanus toxoid) shot (a woman who is going to married has to get this shot, a national programme to reduce tetanus)... I felt offended…" (Nani, 21, 1st pregnancy, 16 weeks gestation).*

The following observation describes Nani's experiences during the booking visit.

Observation, 11th November 2016

Participant: Nani, 21, 1st pregnancy, 16 weeks gestation met Midwife Rumi

During the antenatal visit, after her name was called for examination, Nani met midwife Rumi. Nani sat and midwife Rumi started to asked about her immunisation history. When the midwife asked Nani about her premarital *tetanus toxoid* (TT) shot, Nani answered that she has not got one. The midwife directly enquired: "how come at this (gestational) age, you haven't got the shot?" Nani answered straightforwardly that she had a premarital pregnancy. Nani looked upset when she answered the

midwife's question. The midwife did not assess anything in terms of the patient's feelings. The antenatal visit with the midwife lasted for 10 minutes.

(End of observation)

The quote and observation above shows how a midwife's response and attitude could influence a pregnant patient's impressions towards the services provided in the healthcare centre.

Another obstacle to offering a sensitive psychological health assessment during the antenatal visit was the inappropriate care setting. Below is the observation note of daily services provided in the clinic.

Observation: 17th November 2016, 08.30 am – 03.00 pm
Setting: Midwifery clinic/ room

During the service hours, there were three desks in the room and in each desk there was a midwife or midwifery students who were responsible for taking care of the women. One midwife (in the first desk) called each woman to have an initial physical examination such as measuring blood pressure, body weight, measuring height and upper arm circumference (for their antenatal booking visit). Afterwards, the women were asked to return to the waiting room. Meanwhile, the other midwife (in the second desk) did the history taking, after which another midwife would do the abdominal examination. The last midwife then provided each woman with a brief counselling session and asked her to see other healthcare professionals if needed. Sometimes those who did the history taking, abdominal examination or brief counselling session were the same midwife, but at other times those three activities were performed by different midwives.

(End of observation)

Based on the observation above, it was found that on some occasions there would have been more than one patient in the examination room. Ensuring privacy, or being unable to do so, was clearly an issue in Purwo Healthcare Centre.

It was apparent that in regards to the women's psychological health, most pregnant women acted passively during the antenatal visit. They did not express or verbalise their feelings when healthcare professionals did not explore that aspect of their pregnancy. The women's impressions regarding the psychologist's style of

communication was a positive highlight. On the other hand, there was some dissatisfaction expressed regarding the midwifery service. Lack of time and midwives' performance were mentioned as the two main causes of the women's dissatisfaction.

From the healthcare professionals' perspectives

5.4.3 "We usually do this"

This theme reports the healthcare professionals' knowledge and attitudes towards pregnant women's psychological health. It notes that the healthcare professionals agreed that pregnant women's psychological health was as important as their physical health. Nevertheless, they admitted that they paid more attention to pregnant women's physical health than their mental wellbeing during the antenatal visit. Psycho-social risk factors and clinical judgment during observations were two main determinants used by healthcare professionals in order to identify pregnant women who were considered to be at risk of experiencing psychological distress. The different perspectives and performances of midwives, the doctor and the psychologist, in assessing pregnant women's psychological health, are explored under this theme.

5.4.3.1 Healthcare professionals' knowledge

Most healthcare professionals involved in the study mentioned that anxiety was the most common mental health problem experienced by pregnant women. Mostly their opinions were informed by their working experience. Midwives Fitrah and Intan reported:

> *"I have seen pregnant women with mental health problems. Anxiety, to be precise" (Midwife Fitrah).*

> *C: What kind of psychological problem is commonly experienced by the women?*
> *Midwife Intan: "Anxiety"*

Yet, it was revealed that midwives mentioned mental health problem such as anxiety without doing proper psychological assessments of their patients. Furthermore, they closely linked anxiety with pregnancy and childbirth preparedness. Thus, they considered women: a) with an unplanned pregnancy and/or b) primigravida were at risk of developing an unsatisfactory mental health

condition. The psychologist mentioned that pregnant women also expressed fear of childbirth and a *C- section*:

> *"Women mentioned complaints such as worry and fear of childbirth. This is actually the most common case in here" (Psychologist Desi).*

Midwives and the GP acknowledged that pregnant women might experience emotional changes and distress which can be triggered by psychosocial factors. GP Lani reported:

> *"I also found a pregnant woman who had been physically abused. Her husband was easily-angered when they were quarrelling. He even hit the woman's abdomen and banged her head on the wall" (GP Lani).*

Midwife Rahma noted:

> *"…lived with parents- in-law… Mostly it happened in primigravida, but it also sometimes happened with the second or third pregnancy too. Premarital and youth pregnancy, problems with the husband, an uncaring husband… I meet those kinds of cases often" (Midwife Rahma).*

Psychosocial factors which were acknowledged by healthcare professionals included: i) having an unplanned pregnancy, ii) intimate partner violence, iii) lack of support, iv) living in an extended family, v) premarital pregnancy and vi) youth pregnancy. Biological factors were also believed to cause dynamic changes of pregnant women's emotions. This was illustrated in the following excerpt:

> *"Their emotional changes, the up and down mood in pregnant women are caused by hormonal issues... Even myself during my pregnancy I felt that- I mean 'emosian' (Indonesia- emotional, Indonesian usually refers to the irritability associated with the word emotion)" (Midwife Ndari).*

Hormonal variations in a pregnant woman's body were considered as a normal cause of emotional changes amongst pregnant women. Additionally, healthcare professionals also reflected on their personal subjective experiences.

Some of the healthcare professionals involved in the study agreed that these emotional changes could influence pregnant women's health behaviour. Thus, the healthcare professionals believed that the emotional changes might affect pregnant women's physical health and their babies, as midwife Fitrah and Intan reported:

> *"Anxiety precisely. She was hospitalised several times every trimester... We managed her well and we had a psychologist here. But, at the end the baby was born with IUGR and Low Birth Weight (LBW)" (Midwife Fitrah).*

> *"The women who aren't ready to get pregnant can be so ignorant. They might not really care whether they need to have an antenatal check or not. They won't be aware how to maintain their nutritional intake" (Midwife Intan).*

Some midwives stated that a poor mental health condition, such as anxiety, could cause low birth weight (LBW) and intra-uterine growth retardation (IUGR). Pregnancy preparedness was also mentioned as one important aspect which could predict the woman's health behaviour during their pregnancy period.

Healthcare professionals were aware that they had a responsibility and important role to help women experience an optimum pregnancy journey. Healthcare professionals agreed that maintaining women's psychological health is as important as keeping their physical health during pregnancy. They believed that when pregnant women's mental health is assessed properly, early intervention is possible to be carried out, if needed. This opinion actually demonstrated that some healthcare professionals had commitment to a new insight into screening in order to help to prepare women throughout their pregnancy. Quotations below show that some healthcare professionals had a desire to engage with the women's factual / informational needs to improve their clients' health outcomes during the pregnancy:

> *"Well…I feel like I have a moral responsibility, not just…only following the procedures for an integrated antenatal care... I really expect that psychological consultation will have a significant impact for them to the next stage" (Psychologist Desi).*

> *"… It is not that we are too curious, but actually, we have to be more understanding of the women…" (Midwife Rahma).*

Nonetheless, both midwives and GP agreed that psychological health assessment was somewhat forgotten during the antenatal visit in this particular primary healthcare centre. This omission was noted as follows:

> *"It is important, but sometimes, when there are too many patients we forget to ask about it" (Midwife Lusi).*

> *"However in regard to blues, mental health problems following childbirth, I have never found it. Maybe I didn't investigate it well or maybe there aren't lots of cases, I don't really know. Or maybe because when she comes to the healthcare centre, we are too focused on her physical examination" (GP Lani).*

Healthcare professionals admitted that they paid more attention to the pregnant women's physical health. Obstacles to the provision of sensitive psychological healthcare are presented in section 5.4.4. The following section explores the practices of psychological healthcare provision in the Purwo Primary Healthcare Centre.

5.4.3.2 Healthcare professionals' performance of psychological health assessment

Healthcare professionals presumed that women with psychosomatic symptoms of mental health problems can be easily recognised. Thus they relied on their observation skill during the patient's antenatal visit. This perspective was expressed by midwife Ndari:

> *"Women who have (psychological) problems will show obvious expressions of them. At the first time I see the woman I will be able to recognise whether the woman has a problem or not…" (Midwife Ndari).*

The following excerpts revealed that midwives relied on their instinct, observation skills and perceived risk factors of mental health problems during the history taking part of a patient's antenatal visit:

> *"So far… I used my intuition, to decide whether the woman needs help from the psychologist or not… I also observe the woman's expression. If she looks happy, I think she has no problem" (Midwife Ndari).*

> *"I know that not all midwives had enough experiences. The more we listened to other people who had complicated problems, the more we can learn from them…" (Midwife Rahma).*

Midwives valued their instincts and experience to explore pregnant women's psychological health. Thus, they trusted their observation skills to help them make a clinical judgment. However, clinical judgment should be made based on competencies including knowledge, skill and attitude. Further discussion about healthcare competencies in psychological health assessment is presented in section 7.3.3.

It was noted by this researcher that the first common question asked by the midwives and the psychologist was the patient's intention to 'get pregnant', to conceive. The midwives and the psychologist agreed that 'pregnancy intention' was a compulsory question posed in order to explore pregnant women's psychological health. The professionals believed that this question could lead to another cue to recognise the risk or symptoms of psychological distress amongst pregnant women, as Midwife Rumi and the psychologist reported:

> *"The most important issue is the intention of pregnancy. Is the pregnancy being planned? Usually the women talked (to me) when I asked these questions" (Midwife Rumi).*

> *"So, usually, I start with, 'is this a planned pregnancy?' From that point, I can continue with the assessment of the woman's psychological wellbeing" (Psychologist Desi).*

Unlike the midwives and the psychologist, the GP would firstly focus on the pregnant women's physical discomfort. This was expressed in the following quote:

> *"I started from physical complaints. When patients have so many physical complaints but they seemed unrelated one to another, I will be suspicious... It can be psychosomatic. Usually those who have psychological distress have many complaints that keep changing in several parts of the body" (GP Lani).*

The GP seemed to draw a conclusion that unrelated physical discomfort and inconsistent physical complaints could be forms of psychosomatic symptoms. Sometimes the psychologist also asked about pregnant women's physical discomfort. Even so, she had different reasons to the GP for asking about the women's physical condition.

> *"…not all people are aware of their psychological (condition), and based on my experience in this primary healthcare centre, the easiest way to assess and ask about their private problem is…begin with, physical discomfort…" (Psychologist Desi).*

From Desi's quotation above, it is apparent she considered that asking about the women's physical discomfort could help the women to tune in to their psychological aspects, thereby helping Desi to engage with the women.

The psychologist also emphasised the changes that were possibly experienced by pregnant women, which then enabled her to assess their psychological health rather than only focusing on their physical wellbeing. The changes included different feelings, thoughts and behaviours before and during the pregnancy. Changes that might intervene in the pregnant women's daily activities were also investigated:

> *"Explicitly, I asked about their changes during pregnancy. 'what do you feel now?' and 'what did you feel (before pregnancy)?'… If there are changes on thoughts and behaviours, I would explore to know if it interfere with their daily activities. Usually there are 3 things: interfering with activities, sleeping or eating (disorder)…" (Psychologist Desi).*

Nevertheless, sleeping and eating disorders might normally be experienced by pregnant women due to their hormonal and physical changes. Thus, simplifying / reducing the psychological focus onto just three things that might have changed, and comparing those three aspects before and after the pregnancy, can cause the psychologist to miss other symptoms and possible risk factors associated with psychological distress. Therefore, the psychologist also looked back at the psychosocial factors of the women during their psycho-educational sessions.

> *"I tend to see their psychosocial factors…was it an unplanned pregnancy? Or did she get support from the partner and family?... it can be a risk factor if they have no support from their family and partner…, or another cliché risk factor; economic factor..." (Psychologist Desi).*

There were three psychosocial aspects mentioned by the psychologist as the risk factors for women to experience psychological distress: i) pregnancy intention, ii) social support and iii) the woman's financial stability. Before conducting a psycho-educational session, it was evident that the psychologist had assessed the pregnant woman's psychological health. In addition, she also tried to assess the woman's psychological health using a distinctive approach compared to other healthcare professionals, such as midwives and doctor. Although most healthcare professionals were aware that some psychosocial risks could affect pregnant women's psychological health, it was found that some of them did not ask about the risk to the women during their antenatal visit. Furthermore, the doctor was found to use a medical approach when discussing the psychological health assessment for the pregnant women. The doctor focused on the physical discomfort and complaints of the women.

During the antenatal booking visit, there was a variety of ways that the healthcare professionals responded to the women's answers. This point is illustrated in the following quotations:

> *"I'd like to give the women's chance to cry and after they stopped crying, we could give them suggestions... If the women still want to "explode", to talk about their problem, they cannot think clearly" (Midwife Rahma).*

> *"…when people tell others about their sadness, usually it can help them to reduce that sadness. Even though it's only a little bit... however, I don't want to get into it because I will refer her to the psychologist anyway. I don't want to '*ngulik ulik' *(*Javanese for being curious for other's problem*)…" (Midwife Ndari).*

From the above quotes it can be seen there were different responses offered by the midwives to their patients. Midwife Rahma would give the women an opportunity to express their emotions and carefully listen to them. She had no objections to giving suggestions and advice to the women. Meanwhile, midwife Ndari preferred to refer the women who verbalised their sadness and disappointment to the psychologist, as she did not want to ask more about the women's problems. Equally she may not have wanted to risk overlapping into her colleague Desi's professional field of expertise.

Yet, emotional sharing such as a patient crying or verbalising sadness to a health professional could indicate interpersonal trust between two people. Pregnant women who showed their emotions or verbalised their distress most probably expected something from the midwives. This conclusion was based on the fact that in Indonesia it is culturally uncommon for someone to express their personal emotions to another, unless the recipient was a person they were familiar with.

Nonetheless, based on the quotations above, it seemed the midwives drew a line between themselves and the women. The following excerpt illustrates that some healthcare professionals are apparently working beyond her skill as a midwife:

> *"Well… I think I'd rather call it counselling based on experiences, which means when we give them suggestions, I will try my best to give suggestions based on my own experiences…" (Midwife Rahma).*

Midwife Rahma was concerned of her ability to provide psychological support for women. As a result, midwife Rahma preferred to call a counselling-based - on-experience session when she was faced with women exhibiting psychological distress symptoms.

A young midwife stated that she would have asked the women very detailed questions. Such an approach would probably cause the women to perceive the session as an investigation rather than an antenatal visit. This method was suggested by Midwife Intan:

> *"I ask 'what do you feel, how come it happened?', many questions were asked. Those questions can lead to other things. 5W 1 H (What, Who, Why, When, Where and How) have to be assessed" (Midwife Intan).*

However, it is possible these investigative questions might offend and provoke the women's negative feelings. Meanwhile, another midwife (Ndari) mentioned her concerns about the women's feelings when they were being asked personal questions. Thus, she avoided any situation which may involve stressful issues that could cause the pregnant patients to feel uncomfortable:

> "*…if I investigate a pregnant woman in a very detail way, I am afraid it will cause her to feel uncomfortable. However, when she comes for the antenatal booking visit, she will see the psychologist, there is an expert who will handle her" (Midwife Ndari).*

On the other hand, altruism was one personal value that could inform a better midwifery services for pregnant women, as noted by midwife Rahma:

> "*If I really want to ask about the woman's feeling, I have to make sure that I can really help her to solve the problem. That's me, from my perspective" (Midwife Rahma).*

On the other hand, midwife Ndari stated that she preferred to wait for the women to talk or show the intention to share their problems and feelings rather than asking directly about those issues:

> *"I feel hesitant. Because I am not sure if she talks to me then what should I do? What can I do to help?...I rarely 'ngutak atik' (Javanese for asking someone about her problem in order to know the problem) other people's business, unless she told me. So I just listen to the woman" (Midwife Ndari).*

From midwife Ndari's statement, it appears that she did not feel sufficiently confident to respond appropriately to pregnant women who showed or verbalised psychological distress symptoms. It seemed like she was worried about being unable to meet the women's expectations. She also used the words '*ngutak atik' and 'ngulik- ulik'* to identify her unwillingness to get involved in pregnant women's personal problems.

Furthermore, it was found that the midwives were cautious of their authority when a clinical psychologist was available at the healthcare centre. Consequently, midwives just referred the women to see the psychologist, as midwife both Ndari and Lusi reported:

> *"…because we have a psychologist here, I don't think I have the authority to 'ngulak ngulik'" (Midwife Ndari).*

> *"…when there are psychosomatic symptoms, they looked sad and said that they were upset and had dizziness, (so) I referred them to mbak Desi (the psychologist)" (Midwife Lusi).*

Meanwhile, it was found that some midwives approached the women who showed symptoms of psychological distress in a sensitive manner. They made physical contact and used soft voice tone. This approach is illustrated in the following excerpts:

> *"I usually make physical contact with the woman. I touched and held her hand. That's what I have usually done…Usually, after making physical contact, the woman tells me her feelings. After that, I started to ask further to understand her condition" (Midwife Rahma).*

> *"…when we use a bit higher voice tone, it will be difficult. They thought we were scaring and threatening them. We did it slowly and carefully… We have to be extra patient when seeing a woman with an unwanted pregnancy" (Midwife Rumi).*

From the above quotes it appears that some midwives seemed to always associate an unplanned pregnancy with psychological distress. There were various approaches and styles used by healthcare professionals in the psychological health assessment process. A sensitive and empathetic manner was employed to tease out the women's feelings and strengthen the women's willingness to talk openly to the midwife. The midwives used physical contact and talked in a lower/softer voice tone to gain the women's trust.

5.4.3.3 Managing pregnant women with severe mental illness

Some healthcare professionals have seen and treated pregnant women with more severe and enduring mental conditions such as schizophrenia and psychosis. Most women who were found to have symptoms of serious mental illness during the antenatal booking visit had been diagnosed with having a severe mental illness prior to their pregnancy. Thus they were taking prescription medication at the healthcare centre as a matter of routine. Therefore, midwives and other healthcare professionals could easily find information about such patients.

> *"Well she had schizophrenia... When we suggested her to do anything (related to the pregnancy), she understood and she did it. But, then she stopped taking her medication (psychotropic medicines), and she relapsed..." (Midwife Lusi).*

> *"The patients mostly came with a known history of mental illness and were under medication routinely, so they came in a stable condition. However, I have never found a new case of a pregnant woman who then experiences a mental health problem, or acute mental illness, following her pregnancy" (GP Lani).*

When midwives met women with severe mental illness, they would directly refer the women to the GP and the psychologist. This study found that healthcare professionals would have been working collaboratively when there was evidence that the women suffered from serious mental illness. The GP even mentioned about working inter-professionally to assess pregnant women's psychological health:

> *"I am doing the physical examination. Because I think related to mental health, we have a psychologist. The medication is prescribed by the GP. Psychological consultation is conducted by the psychologist." (Midwife Lusi).*

> *"Well, treatment can be initiated from the midwife because in the integrated antenatal care programme, the woman is asked to see the GP, the dentist and the psychologist. But it doesn't close the chance that other healthcare professionals, such as a lab worker, will be able to see the risk. Maybe, from the scars when she is taking the blood sample on the woman's hand, then the lab worker would ask, "what happen with this?", so usually, when we found "something" they (other healthcare professionals) usually make a call (to me), "Doc, the patient was actually a victim of abuse", so we make*

> *contact if we find problem in one unit, we will pass it to other related unit (GP Lani).*

Based on the quotation above, the GP emphasised the main role of midwives in the integrated antenatal care programme. The GP also divided such collaborative work in to three stages: i) identify, ii) report and iii) refer. The GP stated a clear medical model and believed that midwives and other healthcare professionals could have roles in recognising the symptoms or risk of pregnant patients experiencing psychological distress.

It was also apparent that those women who had a history of severe mental illness, and who were under routine medication, would have told the midwife and other healthcare professionals about their condition during the history taking. Midwife Lusi reported:

> *"The woman told me that she had schizophrenia, but she insisted that she was well-recovered, and asked why she had to take the medicine... So, we did not say that it (the medicines) was a psychotropic medicine. We told that it was a medication for the mother and the baby's health" (Midwife Lusi).*

Pregnant women with a serious mental illness, who had received medication prior to their pregnancy, seemed to realise that their mental health could affect their pregnancy and their baby's health. Hence, they did not hide their mental health status from the healthcare professionals. Yet, healthcare professionals still had to deal with a risk for medication noncompliance from the women. One of the efforts to manage this situation was through covert medication as suggested by Lusi's quotation whereby healthcare professionals did not disclose the true nature of the medication given to the women. Covert medication in mental health services, whilst the patients are conscious, might be considered as an example of healthcare professionals' inability to gain trust from their patients. Healthcare professionals should carefully evaluate women's previous responses to their medication to assess the risk of a relapse, whilst still considering the effect of the medication to women's pregnancy.

There were different perspectives about pregnant women's psychological health assessment amongst midwives. Some midwives felt unable and/or unwilling to provide such an assessment as they thought they did not have the competency and authority to perform it. Other midwives believed that the pregnant women's mental health assessment was a part of midwife's duty. Empathetic behaviour had been demonstrated by the midwives to establish trust. The GP identified the pregnant

patients' physical discomfort as psychosomatic symptoms and employed a medical approach to manage them. However, the psychologist asked about the pregnant women's physical discomfort in order to engage with those women during their psychological health assessment and counselling sessions. It was also found that inter-professional collaboration between midwives, GP and the psychologist had been implemented when managing pregnant women who were suffering from severe mental illness.

5.4.4 Unintegrated antenatal care programme

This theme describes some challenges and obstacles to healthcare professionals performing sensitive psychological health assessments for pregnant women. These impediments included a lack of healthcare professionals and therefore a very busy clinic, privacy issues and fragmented midwifery care. Yet, some supporting factors in the Purwo Primary Healthcare Centre could strengthen and improve the quality of the perinatal mental health service and the integrated antenatal care available from this clinic. In particular there was: a) the availability of a clinical psychologist and b) the healthcare professionals' awareness of the need to improve their mental health knowledge and confidence.

5.4.4.1 Obstacles and challenges to the implementation of sensitive psychological health assessment

Purwo Primary Healthcare Centre was the only healthcare centre in Purwo sub-district that offered both inpatient and childbirth services. Hence, this healthcare centre was a very busy clinic:

> *"The number of patients! When we have lots of patients it feels uncomfortable, especially with the other waiting patients who peek into the examination room. In the end we forget something that should be asked or told to the patient..." (Midwife Ndari).*

> *"Yesterday there were 26 visits. You knew it. If there is enough time and we have enough midwives, we could have proper counselling and history taking sessions. However, for the counselling session, we really need sufficient time to do that well" (Midwife Rahma).*

Lack of healthcare professionals and the number of visits were mentioned as two of the main reasons why midwives could not perform a thorough and sensitive assessment of their patients' psychological health during the antenatal booking visit. Midwives were also concerned with privacy issues as some patients would peek into the examination room. Due to this reason, midwives stated that they could

not ask their pregnant patients any personal or sensitive questions. Furthermore, the following observation also provides information about the number of midwives in the examination room:

Observation: 10th- 24th November 2016, 08.30 am – 03.00 pm

Setting: Midwifery clinic/ room

Monday to Wednesday were specifically used to provide antenatal care services. Thursday is the schedule for immunisation. Friday is specifically used to provide a family planning service to women and Saturday is used to provide postnatal care services. However, if there are pregnant women came on Thursday to Saturday, midwives were still willing to provide the care. Sometimes, during the service day, there were two midwives in the room. Sometimes there were three and on some occasions there was only one qualified midwife who was being helped by midwifery students to provide care for the women. Also midwives sometimes had to provide services to the community and therefore they had to leave the healthcare centre.

(End of observation)

Lack of healthcare professionals was also mentioned by the GP and the psychologist:

> *"…for instance when the patient wants to talk but there are many patients in the waiting room. If we have more GPs then it won't be a problem, but we only have two GPs. When one has a meeting, while the other has training…we just couldn't do that" (GP Lani).*
>
> *"I, myself think that we have limited time. But it's not every day, I mean, in a day we sometimes have 4 patients, but on another day, there may be 6 or 7 patients. Meanwhile, psycho-education and consultation need longer times…" (Psychologist Desi).*

Psychological health assessment needs to be performed thoroughly. Thus, an appropriate psychological health assessment could take time in order for the psychologist to recognise the patient's symptoms and possible risk factors of mental distress or mental health problems. The room settings and service system in the midwifery clinic in this healthcare centre were also regarded as barriers to the implementation of women's privacy. To accelerate service time, there were two or three pregnant women in the examination room at the same time; an inappropriate and undesirable situation as mentioned in an observation note in section 5.4.2

above. Midwives were aware of this 'lack of privacy' issue. The following observation describes the psychologist's room setting:

Observation 11th – 15th November 2016
Setting: Clinical psychologist's room

The psychologist's room was a standard room, 2 metres x3 metres, with sofas, a coffee table and a working space (for the psychologist). There was a laptop on the working space table. There was only a psychologist in the room who was sometimes accompanied by a student. The door can be closed and patients who were willing to see the psychologist were provided with chairs for waiting outside of the room. The location was next to the nutritionist's room and sometimes, when there was a client in the psychologist's room, the patient was asked to go to the nutritionist and have a counselling session with him, whilst waiting for her turn to see the psychologist.

There was a sign in front of the psychologist's room which indicated whether Psychologist Desi was available in the healthcare centre or not. When there was no client, the psychologist usually left the door open.

(End of observation)

The psychologist's room seemed to have been designed to make clients feel comfortable. Therefore, as was described in section 5.4.3, some midwives would directly refer the women who verbalised their distress or had psychosocial problems, such as an unplanned pregnancy, to the psychologist.

The primary building of the healthcare centre was listed as the cultural heritage building. Hence it was very difficult to propose for a building refurbishment to rehabilitate the room settings of the midwifery clinic. Midwife Intan and the GP reported:

> *"I acknowledged that we don't protect the women's privacy well, others can overhear what we are talking about with the patient as well as hearing information that the patient tells us" (Midwife Intan).*

> *"This place is a cultural heritage building, so we cannot refurbish the building" (GP Lani).*

For some midwives, their lack of number combined with the burden of numerous daily tasks, was considered to be onerous and took time. It was possible that due to the status of the healthcare centre, which had been nominated as the best primary

healthcare centre in Yogyakarta, the midwives felt the pressure to excel with their documentation.

> *"We have to do the reporting and recording (on the computers-system). Our human resources are very limited. They (the healthcare centre management) are demanding for high, quick and thorough reports" (Midwife Ndari).*

At the end of the work shift, midwives had to do the administrative work included finishing daily and monthly visit reports. During the antenatal visit, they had to manually fill the women's medical record, pregnancy register book and pregnancy book that would be given to the pregnant women. The midwives also needed to make an online report about each antenatal visit through a computer system every day. In addition, at the end of the month, midwives had to fill the cohort book of antenatal, neonatal and postnatal visits manually and report it to the District Department of Health. (Field note 18th November 2016)

It was evident that most midwives did not feel sufficiently confident to ask about mental health issues with their pregnant patients. They confessed that they were ill-prepared to assess and deal with matters of psychological distress and mental health problems. Nevertheless, some of the midwives wanted to be considered as a competent professional. This wish can be seen in the following quote:

> *"…I realised that I have limitations. I have only limited skills and knowledge to do the assessment and management... but even though we have limitation in knowledge, we have to be confident. Never say, "I don't know" because we want to win our patient's trust" (Midwife Rumi)*

Midwife Rumi emphasised that it was essential for midwives to show their confidence and credibility to the women. Nonetheless, this kind of act might bring disadvantages for the women patients, if the midwives were actually unsure about the validity of the service they were providing.

Midwives were the main providers of antenatal care in the healthcare centre. Thus, they played a central role in deciding if pregnant women needed to be referred to other healthcare professionals. Yet, even though it was found that the midwives relied on the psychologist to assess and manage pregnant women's psychological health, they rarely referred pregnant women to the psychologist. The exception was those patients who came for an antenatal booking visit, as can be seen from the following quotes:

> *"…I rarely refer women to the psychologist unless it's an antenatal booking visit." (Midwife Lusi).*
>
> *"But, so far, I do not remember I have ever referred a pregnant woman to the psychologist unless for an antenatal booking visit" (Midwife Intan)*

Another issue revealed during the interviews was that co-production decision making within an integrated care is yet to be developed amongst the healthcare professionals. Psychologist Desi noticed it was an obstacle that needed to be overcome:

> "*...I think sometimes I haven't really built a good communication with the midwife regarding the patient's condition. For instance, there was important information gathered by the midwife, but it wasn't communicated to me...So it depends on the midwife… The system is not integrated yet" (Psychologist Desi).*

Also Midwife Rahma stated:

> *"Yes, only once during the booking visit (the psycho-educational session with the psychologist). We don't know the progress after the session. We never know the progress after the women have seen the psychologist" (Midwife Rahma).*

The psychologist expected that as midwives are the first healthcare professionals to have contact with the women patients, it is the midwives who could and should pass any important information to the psychologist or other healthcare professionals. Additionally, the psychologist mentioned about the still unintegrated services due to this issue and added:

> *"But I cannot make sure whether these women will be able to come again or not (to see me)" (Psychologist Desi).*

Yet, problems associated with following up the progress of pregnant women's psychological health could have been related to the difficulty of documenting their medical records. Based on the GP's interview, it was noted that healthcare professionals never write down detailed information in the medical record about women who were thought likely to experience, or have risk factors relating to, psychological distress:

> *"When I refer a patient to the psychologist I do not make the notes in her medical record…Because if it is read by other healthcare professionals that the woman had a problem with her husband… it does not feel right. The psychologist has such detailed information, while in the medical record she only wrote about relaxation or a psycho-educational session. In the medical record we only write general information" (GP Lani).*

It was found that the GP categorised some risk of psychological distress as private and sensitive information and thus she was concerned about writing the risk in the medical records. Meanwhile, healthcare professionals should be able to identify

possible factors associated with psychological distress. Further discussion on this issue will be explained in Chapter 7 section 7.3.3.

Different work shifts of the midwives could also cause difficulties to following up pregnant women's psychological health condition during their subsequent visits. Pregnant women might have seen a different midwife every time they had an antenatal visit; hence, this potentially confusing and distressing situation also underlined the value of continuity of care as central to midwifery services. Midwife Ndari claimed:

> *"But, afterwards, I don't really know about the woman's progress... I don't know about her condition, because I can't follow it up" (Midwife Ndari).*

Another obstacle might come from the patient's personality is that she may not want to disclose their problem or feelings to others. This possibility was expressed by the GP as follows:

> *"The obstacle might come from the patient who has an introvert personality. Maybe she doesn't want others to know her problem. So, even though we had asked, she refused to talk" (GP Lani).*

In addition, a midwife also mentioned about a typical of Javanese individual who, for socio-cultural reasons, is not used to talking about their misery and sadness to other people:

> *"… Particularly Javanese people, they don't talk about their sadness. Well, I am a midwife, not their sister, not their close friend and maybe it was the first time for them to see me. So, maybe they haven't trusted me; maybe they felt uncomfortable to talk to me" (Midwife Ndari).*

The quote above indicates that culturally, talking about sadness is not common in this study site. It also suggested the need to introduce to both service providers and service users that assessing psychological health, and exploring its risk factors, is part of healthcare professionals' responsibilities.

The study found that: a) an extremely high case load causing the clinic to always be busy, b) lack of healthcare professionals, c) poor midwifery clinic setting room lacking in privacy, d) documentation and e) an unintegrated antenatal care system were obstacles preventing patients from receiving effective psychological health assessment. Even though a clinical psychologist was available at the healthcare centre, however, midwives rarely asked pregnant women to see the psychologist unless for completing the procedure of an integrated antenatal care programme.

Meanwhile, psychological health problems can occur at any trimester of pregnancy. Cultural perspectives about life difficulties also influenced healthcare professionals' views of risk factors indicating potential psychological distress in their pregnant patients. The following section described expectations of healthcare professionals to improve psychological health assessment in Purwo Primary Healthcare Centre.

5.4.4.2 Expectations to improve psychological health assessment

Healthcare professionals were aware that there were opportunities for the improvement of the psychological health assessment process. The willingness of healthcare professionals to work together as a team was considered as one of supporting factors to improve the service for pregnant women. This was mentioned by the psychologist as she believed that the service provided in Purwo Primary Healthcare Centre had been improving because of inter-professionals practice.

> *"I believe that we cannot solve the clients' problems on our own. I think we are in the same boat and seeing through the same lens, that work collaboratively can optimise our service" (Psychologist Desi).*

The psychologist also mentioned about the unavailability of standardised instruments to perform an effective psychological health assessment. She assumed that standardised instrument could help her to obtain a better outcome during the assessment. She explained:

> "*I don't use any instruments. This has actually become one of my concerns. I am afraid I performed a non-standardised practice. However, if we have a standardised instrument, I believe we will have more standardised results..." (Psychologist Desi).*

From the quote above, it is clear the psychologist was aware of some tools or instruments which can be used to screen mental health problems. A standardised instrument might reduce the service time. Along with the increasing number of pregnant women's visit to the psychologist, Desi had concerns of improper assessment which might be caused by using her intuitions. Desi also stated:

> "…*There are more and more pregnant women coming. Meeting the women with various problems could improve my skill. This can have either negative or positive sides. The positive side is I am now more sensitive to women's changes and I could easily identify verbal and non-verbal expression. But the negative side is...I think it is more an intuition as my judgements are not supported by a standardised instrument" (Psychologist Desi).*

Midwives also mentioned about the need for an instrument that could be used to assess pregnant women's psychological health. This point was expressed by a

midwife who seemed to acknowledge that women with psychological distress would not be always showing the symptoms. Midwife Ndari claimed:

> *"...Sad people don't always cry. Happy people don't always smile. People have their own ways to demonstrate or express their feelings differently.... But…I have no idea about the instrument… If it is exists, maybe it will help us a lot" (Midwife Ndari).*

Nevertheless, it was evident that midwife Ndari did not know about instruments or tools to detect and screen pregnant women in order to identify symptoms of mental health problems. Furthermore, Midwife Ndari was aware that observation in mental health assessment was somehow tricky to do.

It was later known from the GP that some healthcare professionals in Purwo Primary Healthcare centre had been trained in *Desa Siaga Sehat Jiwa* (DSSJ) which is translated as mentally-healthy alert village. Further information about this programme is offered in section 7.3.3.

> *"…it was very long time ago. There was only one GP and a midwife who had been trained for it. However I don't think that the training had a clear follow-up plan. I don't see any new programme following the training" (GP Lani).*

The healthcare professionals were also aware that they required specific training to improve their mental health literacy. It seemed that they considered training in mental health could improve their service. Nonetheless, during the interview, the midwife who had been trained in *DSSJ* still mentioned the need for specific training to be able to provide early management of perinatal mental health problems:

> *"I got a training in general mental health a few years ago… but I still need a training on how to recognise depression symptoms, things that we don't really understand. At least those are our needs" (Midwife Rahma).*

Meanwhile, even though the psychologist had provided a psychological assessment and psycho-educational session for pregnant women, she expected a training programme which included all healthcare providers involved in the integrated antenatal care programme. It was believed this idea could improve the quality of integrated antenatal care in general, as Psychologist Desi explained:

> *"…even though I am a psychologist, but maybe there are things that need to be highlighted based on the aim of the integrated antenatal care programme. So I think it is important to have a training or workshop with other healthcare professionals" (Psychologist Desi).*

Obstacles and challenges in providing sensitive and thorough psychological health assessments for pregnant women during the antenatal booking visit were evident in Purwo Healthcare Centre. However, healthcare professionals were also aware of the opportunities to improve the quality of their services. This opportunity included the availability of a clinical psychologist in this healthcare centre. There was also a need to strengthen healthcare professionals' commitment to improve the quality of their care and enhance the understanding of an integrated antenatal care programme.

5.5 Conclusion

This chapter has explored the views of pregnant women, as well as healthcare professionals' views and experiences regarding psychological health assessment at during the booking visit in the Purwo Primary Healthcare Centre. Four themes emerged from the interview, observational and field notes: i) *'My pregnancy added more burden',* ii) *'I needed more',* iii) '*We usually do this'* and v) *'Unintegrated antenatal care programme'*. It is set out to explain key issues informing pregnant women's life difficulties and their expectations towards healthcare professionals during the antenatal visit. This chapter also examined obstacles, challenges and opportunities in conducting sensitive psychological health assessments with pregnant patients. The following chapter will present a cross-case analysis of the findings from the two study sites.

Key Summary:

- Some women with unplanned pregnancy experienced symptoms of psychological distress.
- Social factors and financial instability overshadowed women's joy towards their pregnancy.
- Some pregnant women feared having a *C-section* for social, physical and/or financial reasons.
- Pregnant women's coping strategies depend on support from their husband and parents.
- Not all pregnant women could benefit from the availability of clinical psychologist in the Purwo Primary Healthcare Centre. Some pregnant women did not have the opportunity to see the psychologist as the midwife did not refer them.
- Inter-professional care had been given to pregnant women with severe mental illness.

- Midwives were uncomfortable to talk and ask about mental health issues and thus relied on the clinical psychologist to manage pregnant women with psychological distress symptoms. However, they rarely referred pregnant women to the psychologist, except for the completion of the patient's antenatal booking visit.
- Healthcare professionals stated that they used their observational skills to identify pregnant women who were experiencing psychological distress.
- Privacy issues, busy clinic, lack of healthcare professionals, poor documentation and fragmented and unintegrated care services were the main obstacles inhibiting the provision of sensitive and appropriate psychological health assessment.
- Specific and collaborative training for healthcare professionals in perinatal mental health and integrated antenatal care programmes are crucial to optimise pregnant women's healthcare experiences.

Chapter 6 Cross-case Analysis

6.1 Introduction

This chapter presents a report on a cross-case analysis of studies from two Primary Healthcare Centres, Setaman and Purwo, in Yogyakarta, Indonesia. Cross-case analysis is performed to develop and construct new explanations to further articulate the concepts from each case (Pope and Mays, 2006; Khan and VanWynsberghe, 2008). In this chapter, cross-case analysis is presented to produce a synthesised outcome from two different case studies which have already been analysed separately (see Chapters 4 and 5).

6.2 Cross-case analysis findings

The steps for cross-case analysis in this study are based on the paradigm developed by Miles and Huberman which involve: i) data reduction, ii) data display and iii) conclusion drawing and verification. Data reduction involves a process of a) selecting, b) focusing, c) simplifying, d) abstracting and e) transforming the studies' results. Data display requires a researcher to develop organised information through a matrix, tabulation or graph building. The last step of cross-case analysis is to draw conclusions using a matrix or tabulation by noting commonalities and differences and finding patterns, explanations and possible causation or propositions for phenomena of interest.

Miles and Huberman (1994) also divided the strategies for cross-case analysis in to three styles: i) case-oriented strategies, ii) variable-oriented strategies and iii) mixed case and variable- oriented strategies. Case-oriented strategies were firstly introduced by Yin (1984) by examining the cases in-depth, then the patterns found in the first and second case are analysed. Within this strategy, the uniqueness of each case receives greater attention. In contrast to case-oriented strategies, variable-oriented strategies examine the themes that cut across-case. Final categorisations or themes are made after the researcher sorts and analyses the similarities and differences of themes from each case. The mixed strategies compile the case-oriented and variable-oriented approaches by stacking the case-level displays in a matrix following the process of understanding each case.

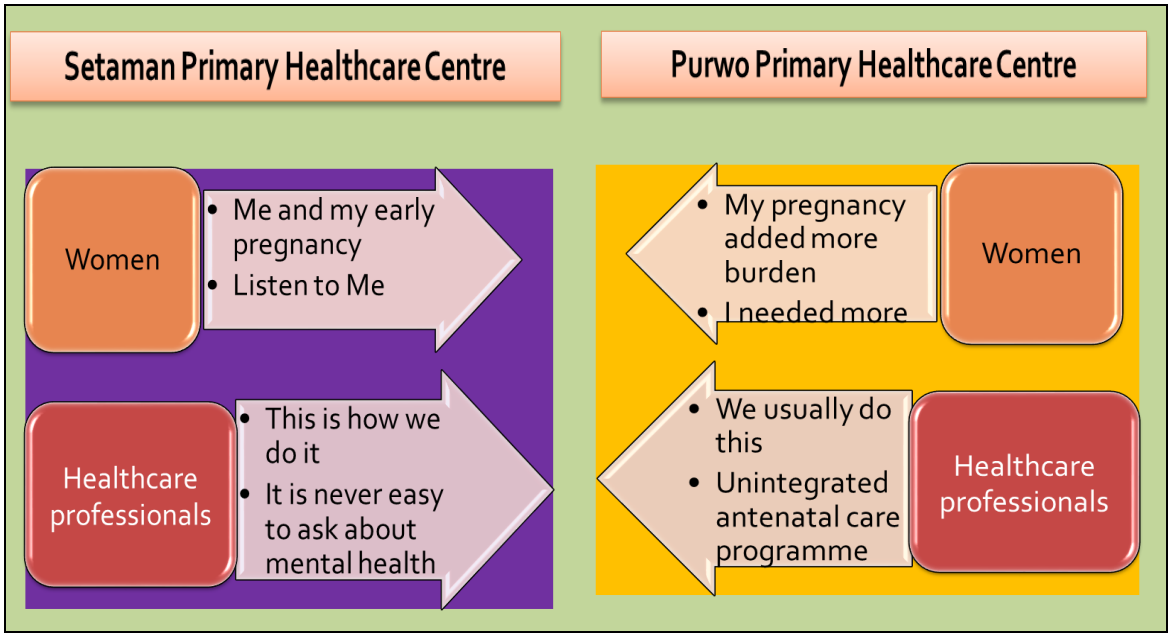

Figure 6-1: Final themes from two study sites

The researcher decided to use a mixed strategy as it provided a well-organised display; thus, the data can be compared systematically. The mixed strategy allows the researcher to see the pattern(s) across the themes coming from two cases, whilst still preserving the uniqueness of both cases. Furthermore, within mixed-strategies, the researcher develops a two-variable case-ordered matrix, which generally orders cases carefully by column via an evident or well-known variable. In this research *urban* and *rural* columns represent study sites 1 and 2. Rows are then added that include several key aspects or dimensions to explore possible interrelationships (Table 6-2).

This type of matrix could be implemented in multiple case studies in which themes in several cases have been initially grouped together according to some commonalities; thus further analysis is needed to be performed. As Chapter 4 and Chapter 5 presented data analysis results from the case studies in Setaman and Purwo, a two-variable case-ordered matrix was considered to be optimal when further analysis was needed to see whether more commonalities and patterns existed among and between the two research settings. The tabulation in this method helped the researcher to develop her conceptual focus by seeing the main trends across the themes of the two cases. However, the table also helped the researcher to search for and understand the patterns within and across cases. These initiatives resulted in the final organisation of the sub- themes into a diagram consisting of inter-related themes (see Figure 7-1 in Chapter 7).

Setaman	Purwo
Documentary Data: • The questions in the proforma appeared as a non-specific mental disorder screening and were developed based on the national guideline of integrated antenatal care programme • Invalid and inaccurate documentation **Women: Me and my early pregnancy** • Pregnant women's initial emotions: - Mixed feelings, complex emotions • Women's responses to their pregnancy: - Active and positive attitudes • Women's personal life difficulties: - Conflict with in-laws - Living in an extended family: financial reasons, additional responsibilities - Traumatic pregnancy and childbirth (perinatal loss and dissatisfaction towards healthcare professionals) • Coping with difficult situations: - Support from family and significant other - Remain silent - Positive strategies to prevent complications during pregnancy - Previous experience of pregnancy, childbirth and motherhood - Religious coping	**Women: My pregnancy added more burden** • An unplanned pregnancy and its consequences: - Negative emotions - Societal judgment due to premarital pregnancy - Symptoms of psychological distress - Poor social support - Different responses and consequences of unplanned pregnancy between married women and premarital pregnant women • Pregnant women's different emotions and influencing factors: - Pregnant women were aware of their mood changes - Financial problems and insecurity - Women's personal life difficulties: living in an extended family (for economic reason), dilemmas in childcare responsibilities, fear of childbirth and *C-section*.
Women: Listen to me • Women's views on psychological health in pregnancy period:	**Women: I needed more** • Women's coping strategies:

- Women were aware that psychological health is as important as physical health in pregnancy. - Women wanted to talk to and be listened to by healthcare professionals about their life difficulties • Women's views on mental health assessment - They were asked about several symptoms of mental health problems but they expected better care from healthcare professionals - Barriers included: lack of time and lack of privacy	- focusing on other positive things, praying (religious coping), support from significant others, i.e.: husband and women's mother • Women's views on psychological health services during the antenatal booking visit: - Women waited for active roles of healthcare professionals during the antenatal visit - Positive highlight from the availability and performance of the clinical psychologist
Healthcare professionals: This is how we do it • Healthcare professionals' awareness and knowledge: - Healthcare professionals were aware that psychological health could influence the pregnancy outcomes and women's relationships with their family. - Healthcare professionals identified some biological and social factors that might influence pregnant women's psychological health - Mental health service is available for those who had severe mental illness. • Healthcare professionals' practices of psychological health assessment: - Practices of psychological health assessment: questions about pregnancy intention, feelings and acceptance of pregnancy, economic condition and physical discomfort, - Healthcare professionals relied on their clinical intuition and their observation skills to make assessment and judgment on women's psychological health	**Healthcare professionals: We usually do this** • Healthcare professionals' knowledge: - Healthcare professionals were aware that psychological health was as important as pregnant women's physical health and aware of their responsibilities and roles. - Biopsychosocial factors were acknowledged as potential influences on pregnant women's psychological health - Obstacles appeared to cause the omission of the psychological health assessment during antenatal booking visit. • Healthcare professionals' performance of psychological health assessment: - Pregnancy intention was a compulsory question. - There were various approaches and styles used by healthcare professionals in the psychological health assessment process: observation, initial judgement, medical approach, sensitive approach. • Managing pregnant women with severe mental illness: - Inter-professional collaboration have been implemented as a mental health professional is available in this Primary Healthcare Centre

Healthcare professionals: It is never easy to ask about mental health • Obstacle and challenges to sensitive mental health assessment: - Privacy issues - Healthcare professionals did not feel confident and comfortable to talk about mental health - Difficulties in building trust between healthcare professionals and the women during the antenatal booking visit - Healthcare professionals willingness, knowledge, attitudes towards mental health influenced their performance in psychological health assessment • Perceived healthcare professionals' roles in mental health assessment: - Identify women at risk and recognise those who have psychological distress - Working collaboratively with other healthcare professionals and referring the women to other healthcare facilities - Providing support trough different approaches: depends on their instinct and life experiences - Need for: training to equip the healthcare professionals	**Healthcare professionals: Unintegrated antenatal care programme** • Obstacles and challenges to the implementation of sensitive psychological health assessment: - Busy clinic - Lack of healthcare professionals - Lacking in privacy - Poor documentation and follow up - Fragmented care and services • Expectations to improve psychological health assessment health assessment: system and adequate trainings

Table 6-1: Summary of findings of two case studies

Following the summary of findings from two study sites, similarities and differences between the data were identified. During the process of identifying the patterns, a series of data reduction processes was conducted. An example of this stage is illustrated in the following table (Table 6.2)

Setaman Women: Me and my early pregnancy	**Purwo Women: My pregnancy added more burden**
Pregnant women's initial emotions: • Mixed feelings, complex emotions	*An unplanned pregnancy and its consequences:* • Negative emotions • Societal judgment, societal withdrawal due to premarital pregnancy • Symptoms of psychological distress • Poor social support • Different responses and consequences of unplanned pregnancy between married women and premarital pregnant women
Women's responses to their pregnancy: • Active and positive attitudes	
Women's personal life difficulties: • Conflict with in-laws • Living in an extended family: financial reasons, additional responsibilities • Physical illness, traumatic pregnancy and childbirth (perinatal loss and dissatisfaction towards healthcare professionals)	*Pregnant women's different emotions and influencing factors:* • Pregnant women were aware of their mood changes • Financial problems and insecurity • Women's personal life difficulties: living in an extended family (for economic reason), dilemmas in childcare responsibilities, fear of childbirth and *C-section*.
Coping with difficult situations: • Support from family and significant other • Remain silent • Positive strategies to prevent complications during pregnancy • Previous experience of pregnancy, childbirth and motherhood • Religious coping	

Table 6-2: Example of selecting, focusing and simplifying process of findings

The example of selecting data, focusing on, and simplifying the processing of the data can be seen from the highlighted findings in table 6-2 above. Based on the process of data reduction above, as was mentioned earlier in Section 6.2, there are two substantial dimensions classified. 1) Women's life difficulties; one dimension related to sociocultural issues including financial concerns (highlighted in blue colour); the other dimension related to previous traumatic events (highlighted in

green colour). 2) Women's coping strategies (highlighted in red colour). Then the patterns which formed initial syntheses, were abstracted.

These patterns are presented in the two-variable case ordered matrix in Table 6-3 below. In this matrix there are six dimensions to illustrate the healthcare professionals' assessment of pregnant women psychological health. The six dimensions emerged based on the main findings from two cases, as follows: i) women's life difficulties, ii) women's coping strategies, iii) psychological health assessment procedure, iv) women's perspectives on mental health assessment, v) problems of conducting a sensitive and thorough psychological health assessment and vi) factors influencing healthcare professionals in performing mental health assessment.

Dimensions	Setaman (rural)	Purwo (urban)
Women's life difficulties	• Prior conflict with family • Poor support from husband • Prior conflict with neighbour • Long-distance marriage • Physical problems • Traumatic pregnancy and childbirth • Living in an extended family	• Premarital pregnancy • Unplanned pregnancy • Living in an extended family • Financial instability • Fear of childbirth and C-section (physical-social and financial reason) • Childcare plan
Pregnant women's personal life difficulties are mostly related to socio-cultural context and financial instability		
Women's coping strategies	• Positive strategies • Avoidance behaviour to avoid conflict • Religious coping	• Positive strategies • Societal withdrawal
Choice of coping possibly depends on the availability of support from family members or significant others.		
Antenatal booking visit		
Psychological health assessment procedure	• Using questions in a proforma (closed questions) • Mental health professional is unavailable	Women are offered to see the psychologist at the booking
Women's perspectives on psychological health assessment	Wanted to talk to and be listened to by healthcare professionals	Expected for more suggestion and information during the counselling session
Within the healthcare system		

Problems of conducting sensitive and thorough psychological health assessment	• Not a well-structured instrument • Poor and different performances • Poor documentation • Privacy and space issues • Busy clinic	• No instrument • Unintegrated antenatal care programme • Privacy and space issues • Busy clinic • Different perceived roles of healthcare professionals • Poor documentation
Factors influencing health professionals' practices	• Personal experiences • Sociocultural and religious beliefs • Stigma on mental health • Cultural value • Knowledge • Experiences • Paperwork • Healthcare professionals' perceived roles	• Healthcare system (the availability of mental health professionals) • Knowledge • Experiences • Social practices • Cultural value • Paperwork • Healthcare professionals' perceived roles
Healthcare professionals did not conduct a sensitive and thorough psychological health assessment.		

Table 6-3: Two-Variable Case-Ordered Matrix: pregnant women's mental health assessment in two different primary healthcare centres

Content in italics illustrated initial syntheses of two cases

The next step, after developing a matrix, was to develop an initial synthesis (see *italic font*). The process of developing a synthesis included searching, questioning and challenging patterns found from the two cases based on the table above. The researcher's main argument was that the sociocultural and religious values, beliefs and practices are the factors that influence the women's pregnancy, their life difficulties and mental health assessment procedures during the antenatal visit.

The following sections describe the process of syntheses development and explanations from the findings across-cases which support the researcher's arguments on the role of sociocultural and religious values, beliefs and practices in the assessment of pregnant women's psychological health in two study sites in Indonesia.

***Synthesis 1: Pregnant women's personal life difficulties are mostly related to their socio-cultural context and financial instability*.**

Pregnant women could experience multiple life difficulties. Yet, it was found that those who had sociocultural-related difficulties, such as: a) conflict with in-laws, b) premarital pregnancy, c) unplanned pregnancy, d) financial instability and e) poor

social support were found to be more likely to verbalise their stressful situations. Most of these difficulties also rooted from the religious values which have embedded in Indonesia's sociocultural context.

The initial synthesis development was based on the extensive reading of the findings from the two sites. At first, the pattern was '*pregnant women's personal life difficulties are mostly related to sociocultural issues'* and was withdrawn from poor social support and stressful life events which were experienced by the women. In addition, the religious connotation of premarital pregnancy and the obligation to follow the mother's wishes also influenced the women's psychological health. However, following the discussion with the supervisory team, financial pressures emerged; for example, women worrying about the cost of a *C-section* and the need for childcare, as well as the need to return to paid work. These potential problems evidently caused great concerned for the women. Hence, an emergent key theme was '*Pregnant women's personal life difficulties are mostly related to socio-cultural context and financial instability*'.

Synthesis 2: Pregnant women's choices of coping strategies possibly depends on the availability of support from family members or significant others.

Different coping strategies were implemented by pregnant women to help them deal with their life difficulties. Their strategies included: a) religious coping, b) positive attitudes and c) avoidance behaviour***.*** Women who were supported by their husbands, women's mother and other family members were more likely to have coping strategies superior than those who were not well-supported by their family or significant others. Their faith and religious beliefs also played a part in the pregnant women's coping strategies.

The second pattern '*Choice of coping possibly depends on the availability of support from family members or significant others*' emerged, drawn from two contradictory responses: positive strategies and societal withdrawal. Some of the positive strategies were: i) committed to focus on pregnancy and ii) searched for information related to any potential problems to the women's pregnancy. Pregnant women who disclosed such strategies were found to have received practical or emotional support from their husband and other family members. Meanwhile, the majority of those who decided to seclude themselves and withdraw from society did not receive positive support from their family members due to an unplanned and unwanted pregnancy. Some of these women were subjected to pressure from their

family members, verbally mentioning the burden of living in an extended family and therefore having to share the household chores. These complex family-related issues stem from the sociocultural context.

Synthesis 3: Healthcare professionals did not conduct a sensitive and thorough psychological health assessment.

Two different types of psychological health assessment were employed during the women's antenatal booking visit: i) using a proforma which involved screening for non-specific mental distress symptoms and ii) pregnant women having the chance to meet a clinical psychologist. When the issue of a pregnant woman's mental health was raised during the antenatal visit, the women expected healthcare professionals would address their psychological health concerns sensitively. Most healthcare professionals were aware of the potential effects of psychological distress during pregnancy on both the women and their newborn's health. During the booking visit, some problems of the psychological health assessment appeared. Healthcare professionals relied on their clinical intuition and observation skills to identify pregnant women at risk of psychological distress. Several healthcare professionals reported that they felt ill-prepared and uncomfortable to perform a sensitive and thorough psychological health assessment.

The third synthesis was developed based on the process of antenatal booking visits within the healthcare system. This synthesis was initially drawn from three dimensions: i) psychological health assessment procedures, ii) women's perspectives on psychological health assessment and iii) the problems of conducting sensitive and thorough psychological health assessments. Based on the findings from the two study sites, it was noted that most healthcare professionals lacked the skills or knowledge to assess pregnant women's psychological health. However, from the last dimension (factors influencing health professionals' practices), the root cause of healthcare professionals' lack of preparedness was due to the dominant sociocultural and religious context around mental health issues in Indonesia. Thus, a mental health programme, specifically for the perinatal period, has not been developed yet; therefore training to improve healthcare professionals' knowledge, skills and competencies is currently missing from the healthcare system.

***Synthesis 1: Pregnant women's personal life difficulties are mostly related to their socio-cultural context and financial instability*.**

Synthesis 2: Pregnant women's choices of coping strategies possibly depends on the availability of support from family members or significant others.

Synthesis 3: Healthcare professionals did not conduct a sensitive and thorough psychological health assessment.

It was found that the three syntheses above related to social relationships, financial conditions, and cultural and religious contexts. Pregnant women's life difficulties are mostly related to sociocultural issues, especially negative financial conditions, and religious issues in the two study settings. Thus, the choice of their coping strategies when experiencing psychological distress is limited to the sociocultural constraints which are commonly applied amongst Indonesian society. Pregnant women's life difficulties exert a serious and potentially negative or harmful influence on their psychological health. It is also evident that sociocultural and religious contexts affect healthcare professionals' performance as well as the healthcare system in service delivery of pregnant women's psychological assessment, as the healthcare professionals are also members of the same society and culture shared by their female clients. Therefore, the issue of sociocultural context is important in understanding pregnant women's psychological health.

Final synthesis

Sociocultural and religious contexts influence the women's psychological health and form distinct boundaries which affect the practice of healthcare professionals' when performing psychological health assessment during pregnancy

6.3 Summary

The above forms a bridging chapter to finding the key synthesis from two case studies' findings which have been presented in Chapters 4 and 5. After finding the similarities and variations of the findings' patterns the researcher concluded that sociocultural and religious factors influenced the women's psychological health. Sociocultural and religious contexts also influence the process of psychological health assessment by healthcare professionals during the women's antenatal visits. A detailed visual presentation is then developed and presented in the following chapter. The following chapter also presents a discussion of the syntheses.

Chapter 7 Discussion

7.1 Introduction

The main aim of the study reported in this thesis was to gain a deeper understanding of pregnant women's psychological health assessment procedure during an antenatal visit to one of two health centres in Yogyakarta, Indonesia. In order to achieve this aim, the perspectives of both women and healthcare professionals in the two study sites were investigated. This is the first study to explore pregnant women's psychological health assessment, using a qualitative case study approach, in Indonesia. Data to inform this research were gathered from four sources: i) participants were interviewed ii) real-life interactions between the women clients and healthcare providers were observed, iii) documents were analysed, and iv) field notes were reviewed.

This chapter presents a) an overview of the research aim, b) the research questions, c) the key findings and d) a discussion in relation to the theoretical propositions posed at the outset. An overarching discussion of key findings will be presented and further debate will be informed by the existent literature. This discussion will be further elaborated by addressing cultural norms and religious contexts in an Indonesian setting.

7.2 An overview of the study

A set of questions was developed which underpins the main aim of this study:

1. How do healthcare professionals explore pregnant women's psychological health during a routine antenatal booking visit?
2. What are the factors influencing healthcare professionals' practice when conducting a pregnant woman's psychological health assessment during a routine antenatal booking visit?
3. How do pregnant women respond to healthcare professionals during a psychological health assessment experience?

To answer these three questions, a multiple case study approach was adopted and data gathered from two different primary healthcare centres, details of which have been presented in Chapter 3. Table 7-1 below provides information on the number of total participants from two study sites. The findings from the two study sites have been reported in Chapters 4 and 5. Chapter 6 presented the results from the cross-

case analysis and an overview of the study's findings is presented in figure 7.1 (below).

Study Sites / Data Collection		Setaman	Purwo
Interview	Midwives	6	6
	General Practitioner	1	1
	Psychologist	-	1
	Women	5	6
Observation		5	6 (Including two psychoeducational sessions provided by the psychologist

Table 7-1: Data collection and number of participants

7.2.1 Theoretical propositions

The development of theoretical propositions was influenced by the literature, in-country policies and the researcher's experience as a practicing midwife and educationalist in Indonesia. There were four theoretical propositions underpinning this study:

1. The performance of healthcare professionals in the assessment of pregnant women's psychological health is influenced by their knowledge and awareness of maternal mental health issues.
2. The relationship between healthcare professionals and pregnant women affects the responses given by the women, as well as influencing healthcare professionals' behaviour when carrying out the assessment.
3. The role of each healthcare professional in the assessment of pregnant women's psychological health is affected by the culture and context of individuals, teams and the organisation within each primary health centre.
4. The integrated antenatal care training programme contributes to healthcare professionals' knowledge and awareness of maternal mental health issues.

A benefit of the qualitative case study was that it generated data which enabled the researcher to undertake an analysis of the subject of interest that was both deep and broad. Consequently, the theoretical propositions were identified as a means to examine the data through a wider sociocultural lens in order to explore the healthcare professionals' performance in psychological health assessment. This perspective also allowed the framing of the pregnant women's views of their life difficulties. A psychosocial-cultural model emerged around the assessment of the

pregnant women's psychological health as the synthesis progressed and was presented in Chapter 6. In addition, a religious context, which crosses through all the main themes, was identified as a major influence on both the pregnant women's and healthcare professionals' perspectives. That major influence also affected both parties' responses to the psychological health assessment procedure implemented during each client's pregnancy.

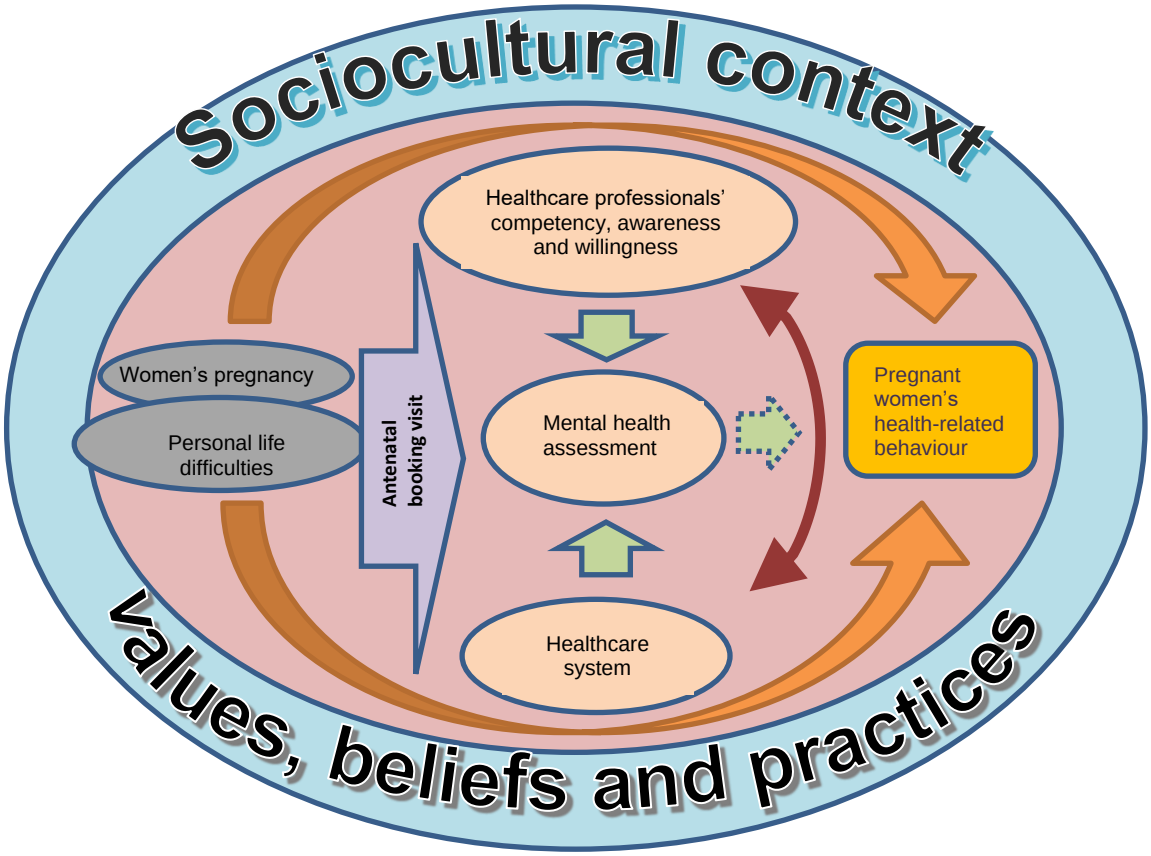

Figure 7-1: A conceptual model of the pregnant women psychological health assessment

This thesis was guided by the work of George Engel. Engel was the first scientist who proposed a model that health and illness are relational and socially constructed (Engel, 1977). Engel's seminal work emphasised the importance of the holistic approach to understand both health and illness in order to optimise the best outcome of treatment. The findings of this research and the development of the model contribute towards strengthening Engel's biopsychosocial approach in an applied health context. This study not only suggests that sociocultural aspects have roles in shaping pregnant women's views regarding psychological health, but also influence the healthcare professionals' performance of their service delivery.

Sociocultural factors are conceptualised as stressful life events and therefore women's experiences could impact differently on their psychological health, depending on their individual and social contexts (Cox, J. L., 1996). Cox's most influential work was the development of EPDS in 1987. Yet, he also highlighted the need to investigate some important sociocultural aspects in postpartum depression. (Cox, John L., 1988). His idea was in line with Engel's biopsychosocial model to improve women's health during their postnatal period. In terms of this study, Engel's biopsychosocial perspective has elaborated that pregnant women's biological factors, such as physical illness, physical trauma during previous childbirth, or hormonal changes during pregnancy, could influence their current psychological health. The approach also could explain that certain psychological conditions (eg. fear of pregnancy and childbirth complications) would have caused a woman to have negative thoughts which affected her health behaviour (for example, a decision to visit several healthcare professionals for antenatal checks in one month).

The biopsychosocial model emphasised that it is not sufficient for a single factor to be the only potential trigger in developing psychological distress in individuals. Rather, psychological distress could have been triggered by the interaction between each factor (biological, psychological and social factors) which occur at the same period or accumulate over certain period. However, variation across individuals' lives, the complex interaction between factors and the degree of influence that each factor exerts remain the issues in the biopsychosocial context-perspective.

The implementation of a biopsychosocial perspective could help healthcare professionals when providing care to clients who experience psychological health problems (Engel, 1977). The results indicate that healthcare professionals are now able to include the women's life aspects to understand their health problems, including during the perinatal period. Hence, women with psychological distress might have self-awareness that their experience was just part of their lives, as a consequence of the interaction of many factors and the context surrounding them. Such self- awareness might enable the women to empower themselves to work together with the healthcare professionals for an optimum health outcome. In addition, the application of the biopsychosocial model could inform societies that everyone can experience mental health problems as we all possess biological, psychological and social characteristics.

Engel's approach also highlighted that the healthcare system in two study sites was still influenced by a biomedical perspective; as could be seen from the standard

procedures of the antenatal examination in both healthcare centres. The services provided to pregnant women mainly aim to detect and prevent any physical complications which might affect pregnancy outcomes. Biomedical perspectives relied on the diagnostic, laboratory test, medical and surgery treatment. However, many health problems could not be treated solely using a biomedical approach (Tschudin, 2017). It is interesting that although most healthcare professionals have acknowledged biopsychosocial aspects might influence pregnant women's life and health, the system does not support their views or concerns. This lack of support might be because in Indonesia psychological distress and disorders are not considered as health problems. This issue will be elaborated in Section 7.3.1.

From this point on, the model will help to frame the discussion related to the key themes that have been presented in Chapter 6 and which the researcher will now discuss. Figure 7-1 illustrates an overview of the findings of this research in the form of a conceptual model. The outer layer of this model is the sociocultural context in which are embedded Indonesians' values, beliefs and day-to-day practices. Some of those values and beliefs appeared to be shaped by the Quran and religious teaching, as learnt through either formal or informal institutions. Thus, religious and sociocultural contexts became intertwined and inseparable as they appeared to have a strong interrelationship. An embedded sociocultural context in Indonesian societies influences pregnant women in perceiving their life difficulties. As a consequence their psychological distress symptoms, which were caused by those life difficulties, were not considered as health problems. Meanwhile, it has been suggested that there is an association between psychological distress and adverse pregnancy-related outcomes at moments such as birth, and the period after the childbirth in both the mothers and their babies (Crandon, 1979a; Crandon, 1979b; Kurki et al., 2000; Chung et al., 2001; Orr et al., 2002 ; Rondo et al., 2003; Rahman, A et al., 2007; Qiao et al., 2012). Detailed discussions on sociocultural and religious aspects informing psychological health during pregnancy, and *vice versa*, are presented in section 7.3.1 and 7.3.2.

The complexity of the process of the antenatal booking visit, including the procedure of psychological health assessment, is plotted in the middle of figure 7-1. Psychological health assessment during the antenatal visit should be performed a) to enable detection of any psychological distress in pregnant women and b) to provide appropriate guidance and management if any such condition is identified. In this study, there was evidence that sociocultural and religious values influence healthcare professionals' practices in psychological health assessment during

antenatal visits. The healthcare professionals' service delivery in pregnant women's psychological health assessment often contradicts the main focus of the healthcare system in Indonesia, which is dominated by the biomedical approach (counter to any aspirations of implementing the holistic model of caring). Further explanation and discussion regarding sociocultural and religious contexts in the assessment of pregnant women's psychological health are covered in section 7.3.2 and 7.3.3.

The study revealed that the service provision for maternal mental health was determined by both the healthcare system and healthcare professionals' performance. Even though this study did not explore the women's health behaviour during their pregnancy period, based on the wider literature it would appear to be accepted that healthcare systems' and healthcare professionals' performance could affect the pregnant women's health-related behaviour. Evidence also suggested that pregnant women's health behaviour could be influenced by how they perceived their own life difficulties. The issue of women's overall psychological wellbeing will be addressed in section 7.3.2.

7.3 Pregnant women's psychological health and its assessment

This section will explore the sociocultural context of pregnant women's psychological health and its assessment. A cross cutting theme within the data was the influence of religion. For the purpose of clarity, religious influence will be explained within sociocultural context, since culture and religious values were inseparable.

7.3.1 Sociocultural values, beliefs and practices in pregnant women's psychological health in Indonesia

Worldwide, healthcare systems (including Indonesia) are dominated by the biomedical model. In a midwifery setting, this model can be seen in the way midwifery care is focused on preventing, diagnosing and treating complications that can occur. Events that may occur during pregnancy, childbirth and the postpartum period are viewed through a set of biomedical assumptions, tests and medical or surgical interventions. Following on from Engel's seminal work in championing a biopsychosocial approach to health and illness and the limitations of the biomedical model, as were highlighted in Chapter 1, several leading clinicians have suggested that mental health problems during pregnancy and after the childbirth are deeply rooted in, and informed by, the patient's cultural context (Cox, John L., 1988; Kumar, 1994).

In an Indonesian context, mental distress is considered as an illness of the 'soul' rather than a specific health problem; a cultural value that influences views about mental distress. A working definition of culture will be used in this discussion as follows:

> *"Culture is the set of attitudes, values, beliefs, and behaviours, shared by a group of people, communicated from one generation to the next via language or some other means of communication"* (Matsumoto, 1994, p.16).

Matsumoto's definition of culture emphasises that the set of learned knowledge and skills is distinct from one community to another, transcending the lives of its subjects in any one generation through social interaction. Cultural values are passed on to the members of any given society during their lifetimes by their parents, teachers, communities and religious leaders.

In this research setting, it was noted that cultural values influenced the women's beliefs about psychological distress, as well as healthcare professionals' attitudes in antenatal mental health assessment. Such values shaped a view that mental health is a sensitive topic to talk about, as it could lead the professionals to ask about the women's personal lives, such as economic status and the women's relationships with their husbands and families. The Indonesian healthcare professionals presumed that such questions crossed the boundary of 'appropriateness' and therefore those professionals were fearful of the pregnant women's reactions, if they enquired about their clients' psychological health.

Furthermore, none of the women participated in this study 'medicalised' their condition, even though they verbalised and had shown the symptoms of psychological distress during the interview session. Rather, they explained their experiences in the context of difficult life events. In many Asian cultures, mental health is seen as a taboo subject and therefore is not discussed openly, if at all. People who suffer with psychological distress chose to hide, neglect and/or deny their symptoms, instead of seeking help from healthcare professionals (Lee, S. et al., 2009). Culture also contributes to constructing how people perceive, experience and cope with such an illness (Kleinman et al., 1978). Thus, it is possible that in different cultural contexts people can hold different views, attitudes and beliefs about certain illnesses. For example, in this study psychological distress that had been experienced, together with the symptoms expressed by some pregnant women, were not considered as an illness. This belief is also affected by religious teachings.

7.3.2 Religious' influence on health and illness in Indonesia

A notable Indonesian anthropologist suggested that culture and religion are very closely related in Indonesians' daily lives (Koentjaraningrat, 1976). As more than 80% Indonesians are Muslims, Islamic values are deeply rooted within Indonesians' lives. As a result sometimes it is difficult, perhaps impossible, to distinguish whether some practices or beliefs come from religious teachings or cultural beliefs, and likely to be a combination of both religious and cultural perspectives.

Based on Islamic values, illness can be considered as a warning from God for doing forbidden acts: *"Whatever of good reaches you, is from Allah, but whatever of evil befalls you, is from yourself…"* (Quran 4:79). The example of this verse's interpretation is that if misfortune such as illness resulted from bad habits, for instance being an alcoholic or taking drugs, the illness could be a reminder or warning which brings consequences. In another verse, illness can be seen as a trial from God, meant for atonement and spiritual progress.

However, there is a verse in the Quran and *hadith* (an authentic narration from the Prophet Muhammad, PBUH) which emphasises that for every illness God gives a cure and therefore seeking for medical treatment should be done by those who suffered from an illness ; *"'O Allah's Messenger! Should we seek medical treatment for our illnesses?' He replied: 'Yes, you should seek medical treatment, because Allah, the Exalted, has let no disease exist without providing for its cure, except for one ailment, namely, old age'."* This narrative underlines the order to find the best treatment to cure an illness. Notwithstanding a minority view that true faith requires total reliance on God, based on this narrative, recourse to medical treatment is not viewed as a weakness of belief. Meanwhile, some verses in the Quran emphasise those who encounter life's difficulties and experience hard times to be patient and pray to God: "*O you who have believed, seek help through patience and prayer. Indeed, Allah is with the patient*" (2:153). In addition, in another verse it is mentioned that those who are patient will be rewarded by God. The verses suggest the importance of prayer and being patient after someone makes a maximum effort to overcome their problem. In Indonesia such behaviour is familiarly referred to as *'ikhtiar'*; originally from an Arabic word which means looking for a better result. Today *ikhtiar* is mostly interpreted as an endeavour that is done earnestly, wholeheartedly, and to the maximum extent possible according to the individual's abilities and skills.

For some who only partially understand the verses cited above, the verses about patience and prayer could be a barrier to seeking help, as if patience and prayer are sufficient to overcome psychological distress. Whilst using prayer and taking a more 'patient' approach may be supportive for some people, it may deter others from seeking help. Moreover, those who try to seek help from healthcare professionals could be judged by others, as if they have no patience and never pray to God. Meanwhile, being patient and praying are just part of the *ikhtiar*, along with seeking help and receiving appropriate treatment. It is interesting that the term *ikhtiar* is very familiar within Indonesian society to illustrate the hard work and efforts that people usually make in order to have a better life materially, spiritually, physically and in the future. Meanwhile, when it relates to psychological distress, the *ikthiar* rarely includes visiting healthcare professionals.

Findings in this study suggested that those pregnant women who presented with symptoms of psychological distress, were judged as: a) being unable to prioritise tasks and b) failing to cope or deal with their life problems. As a result some society members described them as 'lacking in faith'. In Indonesian society, many people who live in rural areas, prefer to see their religious leaders to get advice for their 'worry' and 'anxiety', rather than visiting healthcare professionals as 'illness' is usually associated with physical impairment. Thus, the pregnant women's mental health issues were regarded as more relevant to the domain of religion (via religious leaders) than to that of medicine (via doctors, nurses, midwives). This set of beliefs can diminish the role of healthcare professionals when dealing with the mental health aspects of care.

7.3.3 Exploring the sociocultural context of pregnant women in Indonesia

One of many issues in this thesis is the women's role transition during their pregnancy period, which resulted in sociocultural changes in the women's lives. This section will identify the sociocultural factors that might influence pregnant women's psychological health in Indonesia.

7.3.3.1 Motherhood in Indonesia

In Indonesia, motherhood is socially acknowledged as a powerful role. It is expected that every girl/woman will marry a man and that she will become a mother. Within Islamic teaching, there are a well-known prophet's words, which emphasise the importance of the mother in Islam:

> *"A person came to the Messenger of Allah and asked, "Who among people is most deserving of my fine treatment?" He said, "Your mother". He again asked, "Who next?" "Your mother", the Prophet replied again. He asked, "Who next?" He (the Prophet) said again, "Your mother." He again asked, "Then who?" Thereupon he said, "Then your father." [Abu Hurairah in (Zaman and Zaman, 2013)]*

This verse highlights that being a mother is considered to have an exceptional position within the family and wider society. In the cultural context, there is a strict prohibition about rebelling against one's parents, particularly the mother. This aphorism was emphasised through popular national folktale, namely *Malin Kundang,* which tells how a young man was turned to stone after rebelling against his mother. This folklore is introduced to children from an early age and is often taught through formal education. The high position of mothers in society is also mentioned in the Quran, which forbids the children to say "uff" (the expression of a sigh) regarding the parents and to always respect their parents: "*And your Lord has decreed that you not worship except Him, and to parents, good treatment. Whether one or both of them reach old age [while] with you, say not to them [so much as], "uff," and do not repel them but speak to them a noble word"* (The Quran, 17: 23).

In Islam, the suggestion to hold a special moment or prayer is emphasised at the fourth month of pregnancy as it is believed that at this time the soul enter the foetus. This event is mentioned in *hadith*: *"Each one of you is constituted in the womb of the mother for forty days, and then he becomes a clot of thick blood for a similar period, and then a piece of flesh for a similar period... Then the soul is breathed into him."* (Sahih al-Bukhari no: 3036). In most ethnicities in Indonesia, pregnancy is a highly regarded moment. At a certain time of pregnancy, usually the 7th month, there will be a traditional ceremony to celebrate the condition. This sacred ceremony is widely practiced in Javanese society and is called *'mitoni'* (Geertz, 1960; Koentjaraningrat, R.M., 1985). *Mitoni* is derived from the word *pitu*, a Javanese word for seven and is associated with the word *'pitulungan'* which means help (Utomo, 2005). *Mitoni* has several rituals, where each ritual has a philosophical meaning that contains hopes and prayer for babies, mothers and the delivery process. In the past it was believed that at the seventh month of the pregnancy the women could easily have premature deliveries. Therefore, having a *Mitoni* ceremonial is considered as a protection for both pregnant women and their baby (Pranoto, 2009).

Apart from the religious and cultural values which set the views about pregnancy as a sacred and special period in a woman's life, it is undeniable that pregnant women

could be affected by negative experience in their daily lives. Of particular relevance and sensitivity are matters informed by their sociocultural context (see Chapter 4-theme: *'Me and my early pregnancy'*). It was also evident that the women's pregnancy might influence their sociocultural lives (see Chapter 5-theme: '*My pregnancy added more burden*'). The following section will discuss the sociocultural context of pregnant women's life difficulties and their coping strategies.

7.3.3.2 Pregnant women's life difficulties: sociocultural context

This section explores women's difficulties around their pregnancy period. The discussion is drawn from the data presented in Chapters 4 and 5, which found that pregnant women's worries and fears are rooted in difficulties originating from sociocultural contexts in Indonesia.

7.3.3.2.1 Childcare obligation versus paid work

The interview data revealed that childcare could be one reason for pregnant women to stop working and stay at home. Hence, they chose to let go one of their roles, either resigning from their job or asking others to take care of their baby in order to be more effective in doing another role. Evidence from other literature in Asian countries confirm that in Taiwan, Thailand, Singapore, Japan and South Korea, women have significantly more important roles in childcare than do men (Ochiai et al., 2008). This Asian study is part of a large research initiative which aimed to illuminate how women in Asia dealt with housework, childcare, careers and other multiple responsibilities such as caring for the elderly. A further point that could be highlighted from this broad ranging Asian initiative, which is similar to the findings in this current PhD research, is that when women had adequate support for childrearing, they could continue their careers. Therefore, women in Asia were found to stop working at a certain gestational age when they lived with inadequate social support, in order to focus on the issue of childcare. In many societies, women's main responsibility is to take care of their children. In Indonesia, this duty is not only constructed by social and cultural values, but the women's role in taking care of the children is also set in the context of a religious system. This obligation not only related to the women's nature, such as childbearing and breastfeeding, but also in nurturing the children through a childrearing role.

In many societies, women get exemption from doing physically demanding activities during pregnancy. The findings from this study revealed that pregnant women decided to stop working not only because their employment was physically demanding, such as requiring long periods of standing, but also because the

women wanted to focus on the matter of childcare, and were advised to stop working by their family members. Women often receive advice from their husbands, families and friends to limit their physical activities in order to avoid complications and injury during pregnancy (Clarke and Gross, 2004; Evenson et al., 2008). Even though these two studies were conducted in HICs (UK and USA), nonetheless, the results also revealed the roles of family and relatives in shaping pregnant women's behaviour.

A source from Japan suggests that there were several reasons why some women decided to stop working during their pregnancy period. These reasons related to i) somatic symptoms during the first trimester, ii) working conditions in the second trimester and iii) a sense of social values in the third trimester (Matsuzaki et al., 2011). This study also emphasised the women's intention to focus on childbirth and childcare, a decision most likely influenced by the sociocultural context in which pregnant women felt obliged to listen to and follow their husband's or older family members' wishes. The social values in this context were particularly related to a patriarchal society whose values were embedded in Indonesians' lives (Blackburn, 1999). Thus, the basic demands of childcare and domestic duties were maintained by the women, whilst the men hold primary responsibility for household earnings.

Nevertheless, this current PhD study has revealed that giving up her paid job and focusing on taking care of her baby was a hard decision for each woman to make; particularly those struggling to deal with poor economic conditions. A previous study from Indonesia also reflected the same evidence as revealed by this current PhD study, which found women with low socioeconomic backgrounds were more likely to stop working and stay at home in order to take care of their infants (Andajani-Sutjahjo et al., 2007). Further findings from the study by Andajani- Sutjahjo et al. (2007) will be explored in the following section. Consequently, such decisions could influence women's moods during their pregnancy. This current PhD study's findings therefore support Engel's biopsychosocial approach of health and illness and the conceptual model of pregnant women's psychological health assessment which have been developed in this chapter.

7.3.3.2.2 Living in an extended family: two sides of the same coin

In an Indonesian cultural context, living in an extended family is a common practice. Most participants in this study decided to live together with their parents or other family members. Most of their reasons in choosing to live in an extended family were due to financial considerations. In order to minimise their living costs, this

move often meant that they had to live with other family members in an extended, multi-generational context. Yet, in terms of the childcare, living in extended families did not always mean that women could get support with routine childcare from other family members. In most situations, other family members were also obliged to be in paid work to help with the families' economic condition (Andajani-Sutjahjo et al., 2007). Andajani's study was conducted in East Java, involving interviews with 41 women. Her study explored how Javanese women identified depressive symptoms in late pregnancy and early postpartum. Her study was specifically restricted to women who had an EPDS score above 12 and therefore might have omitted women with mild depression. The findings suggested that women in Indonesia faced multiple daily stressors and that living in an extended family seemed to contribute an added burden during the perinatal period.

On the other hand, evidence from the first population-based study in Pakistan involving 632 women indicates that living in an extended family could be a protective mitigating factor for psychological distress during the perinatal period (Rahman, A. et al., 2003). However, the factor is only protective when women receive practical support from the mother or mother-in-law, such as childcare. Rahman's study also suggested that having a serious conflict with a significant member or members of the extended family was associated with antenatal depression. The Pakistan study adopted the Life Events and Difficulties (LEDS) instrument to investigate women's life events and social factors. LEDS focused on individual events in detail (the timing and relevant contextual information) and consisting of ten key areas of adversity: i) health, ii) reproduction, iii) marital, iv) other relationship, v) work, vi) education, vii) housing, viii) money, ix) crime/legal and x) bereavement (Brown and Harris, 1989).

Despite the fact that the findings of Rahman's study were most likely to be generalisable in rural populations, the Pakistan study confirmed one aspect of the findings presented in this thesis report, which highlighted that there were both negative and positive sides to living in an extended family. When pregnant women live with their family, or family-in-law, and have good relationships with their extended family members, all family members would have shown support and affection towards the women. In contrast, some women who participated in this study still experienced psychological distress when they lived in an extended family. This dissonance was especially evident when they had interpersonal conflict with their partners, parents and/or in-laws, or when the woman had an unsupported antenatal period due to an unplanned pregnancy. Further discussion about

pregnant women's relationship quality, linked with the issue of social support, will be presented in section 7.3.3.3.1.

7.3.3.2.3 Premarital and an unplanned pregnancy in an Indonesian context

Another stressful life event experienced by the women in this study was a premarital pregnancy. Having a premarital pregnancy is stigmatising and considered to breach normal expectations and religious values of Indonesian society. A premarital pregnancy is considered to be extremely unacceptable in most Asian countries (Roomruangwong and Epperson, 2011). These views came from the beliefs that those who had premarital pregnancy also had a premarital sexual relationship, which is considered as taboo and shameful in most Asian cultures (Hojat et al., 1999; Alexander et al., 2007).

Premarital pregnancies are rarely mentioned as risk factors for psychological distress in studies conducted in Western countries. Yet, studies found that premarital pregnancy is one of the causal factors of perinatal mental health problems in Thailand and Malaysia (Limlomwongse and Liabsuetrakul, 2006; Fadzil et al., 2013). Previous research findings also confirm that Indonesian women who have premarital pregnancies experienced the consequences for violating this cultural norm. The consequences could result in such issues as: i) negative judgement, ii) self-blame and iii) self-exclusion or social isolation. Furthermore, self-induced abortion was one of the choices made by unmarried women who were involved in a premarital pregnancy (Hull et al., 1993; Bennett, L.R., 2001).

Bennett (2001) conducted interviews with 35 women and 8 focus groups involving 58 women, the findings revealed that marriage was used by young women to legitimise continuing their premarital pregnancy (Bennett, L.R., 2001). As Bennett's study employed an ethnographic approach and data collection was conducted for 1.5 years, he succeeded in obtaining rich information from Javanese, Balinese and Sasak (an original tribe in Lombok Island) women with various economic and sociocultural backgrounds. Bennett's research supports the findings of this current PhD study which also revealed that women who had a premarital pregnancy and no longer thought of themselves as being single (as they decided to get married), did not attempt to terminate their pregnancy. Thus, marital status is possibly considered as a legitimate way to save the women from being the focus of further negative social comments relating to their premarital pregnancy and being a single mother.

The findings from this study revealed that an unplanned pregnancy could change the woman's economic wellbeing and affect her relationships with her own or her in-

law's family members. Those who were previously struggling to support themselves and their family would find the decision to stop working to be harder to deal with. Fearful of being unable to meet their family's expectations in terms of economic support, some women had initially planned to delay their pregnancy. Thus, when the healthcare professionals confirmed the woman was pregnant, the mother-to-be felt burdened and disappointed. Evidence from Canada, Brazil and the US suggested that poor financial situations were associated with many pregnant women experiencing antenatal depression (Séguin et al., 1995; Lovisi et al., 2005; Rich-Edwards et al., 2006). These studies revealed that either in LMIC or HIC, economic condition had a major role in women's psychological health during their pregnancy period. A study on the prevalence of postpartum depression in Indonesia also revealed that women with income less than 400,000 IDR have a significantly greater risk of experiencing depression than those who have income of more than 400,000 Indonesia Rupiah (IDR) (p<.05) (Edwards, G.D. et al., 2006). Even though the study by Edwards et al. was conducted in Surabaya, East Java which is a bigger city than Yogyakarta, there is only a slight difference in terms of the provincial minimum wage between these two provinces (1,388,000 IDR vs 1,337,645 IDR for East Java compared to Yogyakarta) (ISB, 2018). Therefore, the Surabaya study can be said reflect the situation existing in Yogyakarta.

7.3.3.3 Pregnant women's coping strategies

In this research, there were several coping strategies implemented by pregnant women to help them gain relief from their psychological distress and life difficulties. The findings in this study suggest that support from significant others, family members and religious beliefs played an important part in shaping women's coping strategies.

7.3.3.3.1 Social support from family members and the women's husbands

A seminal work by Cobb (1976) suggested that social support could facilitate coping with a life crisis and even accelerate a person's recovery process following treatment of certain illnesses (Cobb, 1976). Furthermore, he identified three components in social support which consisted of: i) recognition and respect, ii) care and nurturance and iii) obligation or feelings of mutual responsibility. Social support can be provided by a family member or members, husband, peers, community members and healthcare professionals. Findings from Chapter 4 and 5 and the synthesis from Chapter 6 emphasised the importance of receiving support from her

husband and family members as part of a woman's coping strategies. For example, within this PhD study a woman's mother support was shown when she felt obliged to 'save' her daughter from being judged and negatively stigmatised by the society after committing to a premarital pregnancy. Respect and care from each woman's family members and husband could be seen from their acceptance and support towards all the women's pregnancies, which included providing financial, practical and emotional support.

Social support has potential to facilitate the adaptation process when dealing with changes during a certain life event. For example, during the transition to motherhood, pregnant women need to acquire new skills and adjust to new roles. Cutrona & Russell (1987) suggested that during this adjustment process, guidance and reliable alliances had important roles. Guidance and reliable alliances were considered as forms of care and nurturance; components of social support and they were protective resources to be employed against psychological distress (Cutrona, C. E. and Russell, 1987). Support for women from their families and relatives was crucial to achieve a healthy pregnancy; both physically and psychologically (Cutrona, C.E, 1984; O'Hara, 1986). Evidence from Pakistan, Brazil and Malaysia also suggested that social support played an important protective role for women when psychological distress was evident during pregnancy (Rahman, A. et al., 2003; Faisal-Cury et al., 2009; Rashid and Mohd, 2017). Social support which could be helpful for women included the presence of the women's mother and the practical help with childcare.

It was noted that the quality of the women's relationships played a key role in helping them gain relief from their psychological distress. According to US studies on social support during pregnancy, having a confiding relationship with significant others was associated with higher self-esteem and lower anxiety amongst pregnant women (Stevenson et al., 1999; Rini et al., 2006). In Indonesia, a woman having interpersonal conflicts with her husband and/or parents is considered to cross the line of propriety. After entering a marriage, Indonesian women are normatively obliged to follow and obey their husband's wishes and to unquestioningly respect their parents-in-laws. In China and India, it was evident that poor marital quality and difficult relationship with in-laws were risk factors underpinning mental health problems during pregnancy (Lau et al., 2011; Nithin et al., 2017). Thus, those women who had interpersonal conflicts with their husband, parents or in-laws perceived that they had received only limited support. In the context of this study, those having: i) a pregnancy unsupported by the woman's mother, ii) an unplanned

pregnancy, iii) conflict with her husband and/or parents were only able to verbalise their sadness during the interview session, but perhaps that opportunity was better than nothing.

7.3.3.3.2 Using a religious approach as a coping strategy

In this study, comments about the influence of religion came from the women who had mentioned that they tried to accept that everything was destined from God, including their life difficulties and their unplanned pregnancy. The healthcare professionals, regardless of their role to provide healthcare services, were also members of the same society in which their clients existed. Thus midwives in particular adhered to the most common perspective in mental health which considered psychological distress as a sign of personal life difficulties instead of a mental health problem. The midwives' views were demonstrated when they responded to those who had shown signs of psychological distress by using a sociocultural and religious approach; such patients were told they must 'embrace the situation'. Based on the midwives' accounts, they often suggested pregnant women who were psychologically distressed to be patient and pray to God, in the belief that the women will be rewarded once in heaven. This reward will come from their patience when encountering their life difficulties and from being *'nrimo'*: Javanese for being 'wholeheartedly willing to accept the all the conditions'.

A study conducted in Purworejo, a district in Central Java which is located only about 1.5 hours from Yogyakarta, involved an in-depth interviews with 7 women, and found that some women who experienced domestic violence coped through a spiritual approach (Nur Hayati et al., 2013). Domestic violence is considered a chronic and stressful life event which could, and almost certainly does, negatively influence pregnant women's psychological health and wellbeing (Lovisi et al., 2005; Ferri et al., 2007; Karmaliani et al., 2009; Ola et al., 2011; Akçalı Aslan et al., 2014; Castro e Couto et al., 2016). Even though, the number of participants in Nur Hayati's study was relatively small, nonetheless it is interesting that Javanese women commonly referred to prayer and belief in God once they encountered such chronic life difficulties.

Using a religious approach as a coping strategy resonates with findings from this study. This strategy was revealed in the interview data of pregnant women who reported having an unplanned pregnancy, conflict with in-laws, having a physical illness or past experience of trauma due to perinatal loss and complication during pregnancy and childbirth. During the interview with the healthcare professionals, it

was noted that they used spiritual and religious framing to respond the women's life difficulties. On the other hand, there are views which considered prayer as a form of rumination which did not bring advantages for the wellbeing of a person's emotional state (Nolen-hoeksema and Morrow, 1993; Park and Cohen, 1993). Conversely, many studies note that religious coping could have a positive effect on the moods of subjects who experienced stressful life events (Pargament, K. I. et al., 1990; Koenig et al., 1998).

Religious coping is defined as "*the use of religious beliefs or behaviours to facilitate problem-solving to prevent or alleviate the negative emotional consequences of stressful life circumstances*" (Koenig et al., 1998). Based on Pargament et al. (1990,1997), positive religious coping included: a) the belief in a just and benevolent God, b) being involved in religious rituals, c) seeking spiritual support and d) considering God as their supportive partner in coping. Nonetheless, the negative aspect of religious coping for psychological distress came in the guise of: a) punishment from God, b) the influence of demonic forces and c) spiritual discontent.

Meanwhile, any positive impacts from religious coping on psychological distress will depend on personal factors, stressful life events and the wider context and severity of the person's challenges (Pargament, K. I. , 1997). The form of religious coping in this study was indicated from: a) the women's acceptance of their unplanned pregnancy, b) their prayers about relief from their life difficulties and c) their beliefs that a child is a present from God. Various personal factors, different stressful life events and contexts for the difficulties which were experienced by pregnant women in this study, can be seen throughout the findings of this research as important issues which might influence the impacts of religious coping on women's psychological distress. Therefore, healthcare professionals should not offer religion to the women as the *only* coping strategy to manage any psychological distress symptoms they are experiencing.

This study has shown that it is important not to negate or demean the role of the religious approach in order to maximise the women's psychological wellbeing. Studies suggested that as churches now provide a range of services that contribute to their congregation's psychological and physical wellbeing, linking faith communities and healthcare systems might be one possible answer to improving the health outcomes of those communities (Eng et al., 1985; Michael et al., 2002). There is a need to merge religious approaches within the healthcare services in order to improve pregnant women's psychological health, since religious values are

strongly embedded within Indonesian society; to ignore or dismiss those values would almost certainly be counterproductive. This issue will be further discussed in section 7.3.4.

7.3.3.4 Pregnancy and women's vulnerability

Pregnancy is a transition process to parenthood (Lobel, 1998; Deave et al., 2008). Evidence suggests that during this transition process: a) women's cultural beliefs and attitudes, b) socioeconomic status, c) women's preparation and knowledge, and d) communities' and societies' conditions can act as both inhibiting and facilitating factors (Meleis et al., 2000). Within this PhD study women's and their families' socioeconomic conditions shaped their preparedness towards current pregnancy and future parenthood. In addition, multigravida pregnant women also seemed to have a better preparedness to welcome a new family member. The experiences of the multigravida pregnant women in this study regarding their previous pregnancy, childbirth and motherhood can be considered as one of facilitating factors which could help the women during the transition process.

The findings in this current study suggested that pregnant women were also vulnerable to stigma. Pregnant women with psychological ill-health and distress could experience both internal and external stigma (Alderdice and Kelly, 2019). Internal stigma appeared when they felt guilt and shame as they considered themselves to fail in meeting their own expectations. The examples in this study were experienced by women in Case 2 who either had a premarital pregnancy or those who had initially planned to delay pregnancy for financial reasons. The external stigma which had been experienced by women in this study came from others such as families, friends and healthcare professionals. Basically, external stigma, from whatever origin, involves negative appraisals for violating social norms (Alderdice and Kelly, 2019). These include committing to a premarital sexual relationship which resulted in premarital pregnancy, being falsely accused of infidelity and having conflict with parents. The external stigma from healthcare professionals in this current study also included a prejudice to women who have emesis gravidarum in their late stage of pregnancy as being unprepared of the pregnancy and motherhood.

Based on the concept of vulnerability in the perinatal period, inhibiting factors such as poor physical, psychological, and socioeconomic conditions can be attributed as threatening, or generally perceived as threats (Briscoe et al., 2016). A threat is potentially harmful, even though it has not yet taken place, as it could cause

negative emotional responses such as worry, distress, anxiety and fear (Scholtz, 2000; Briscoe et al., 2016). Threat is one attributable key that could help in categorising women's vulnerability in their perinatal period (Briscoe et al., 2016). Most pregnant women in this study verbalised their perceived threats, for example premarital pregnancy, conflict with in-laws and poor financial situations, which caused them to worry and become fearful. These threats, in combination with barriers such as poor or even no social support and lack of access to healthcare, could cause the women in their pregnancy journey to become particularly vulnerable. Thus, this rather negative scenario suggests the need for pregnant women to be assessed thoroughly in relation to their psychological wellbeing, with a detailed enquiry into women's perceived threats and barriers being performed by appropriately trained healthcare professionals. The next section discusses the need to merge the sociocultural and religious aspects informing the assessment of pregnant women's psychological health, as a potential initiative to provide the women's optimal pregnancy experiences.

7.3.4 Embracing sociocultural and religious aspects in pregnant women's psychological health assessments

This section will discuss how to embrace the influence of sociocultural and religious values in relation to other aspects of pregnant women's psychological health within the healthcare system in Indonesia. There is a paucity of research in perinatal psychological health and how to assess this within LMICs, particularly in Indonesia. The researcher is aware that specific cultural contexts exist differently and therefore some studies in perinatal mental health may not translate well across cultures. Nevertheless, this current study confirms that sociocultural and religious values, beliefs and practices not only influence pregnant women's psychological health but also healthcare professionals' practices in conducting psychological health assessments. Hence, integrating sociocultural and religious values into a more holistic clinical pathway in perinatal mental health is a desirable option.

7.3.4.1 Enquiry into risk factors of mental health problems in pregnancy

Risk factor assessment (RFA) during pregnancy, which includes enquiring into some sociocultural risks and religious aspects, should be conducted in Indonesia. Based on a systematic review on prevalence and determinants of common perinatal mental disorders in women in low and LMICs, several such mental-health related factors have been identified. These factors include: a) poor socioeconomic conditions, b) unintended pregnancy, c) adolescent pregnancy, d) premarital

pregnancy, e) poor support from partner, f) conflict with in-laws, g) experience intimate partner violence, h) poor emotional and practical support, i) have history of mental health problem and j) giving birth to a female baby (Fisher et al., 2012a).

Some of the risk factors mentioned in the systematic reviews above were experienced by the women who participated in this study. In addition, these factors were also mentioned by healthcare professionals as risk factors causing psychological distress during pregnancy. This observation indicated the healthcare professionals' awareness regarding potential risk factors causing mental health problems during a woman's perinatal period. Identifying risk factors for psychological distress during the antenatal and postnatal visits is part of the Perinatal Mental Health Project (PMHP) in South Africa. The detail of this programme has been explained in Chapter 2 (section 2.2.3.5.3). The PMHP programme underlined the importance of equipping the healthcare professionals with specific training in perinatal mental health and establishing a pathway of care which integrates mental health services and maternal healthcare in a primary care settings. Risk Factors Assessment (RFA) has been used in South Africa as one of the screening tools for mental health problems during pregnancy and has proved to be an effective screening instrument. This outcome is strengthened if used along with the Edinburgh Postnatal Depression Scale (EPDS) and the 'pathway of perinatal mental health care' (Honikman et al., 2012).

Identifying risk factors associated with or connected to psychological distress could provide the healthcare professionals with the opportunity to recognise those who are at risk. Therefore, it is expected that women with higher risks of psychological distress would be able to access to appropriate care to prevent the development of the more severe psychological distress symptoms. In addition, talking or asking about risk factors of psychological distress can be an opening door for further discussion on women's psychological health during the antenatal visit. Furthermore, providing a psychosocial assessment which includes the evaluation of women's psychosocial circumstances during their perinatal period evidently could improve women's self-awareness and encourage self-management strategies (Darwin et al., 2013). This PhD study also found that pregnant women expected the healthcare professionals to provide space and time to listen to the women's feelings and difficulties, as well as allowing those clients to talk about issues that were important to them. These expectations were also suggested in Darwin's study (2013) which found that women need to talk about their feelings and experiences; therefore, a perinatal psychosocial assessment could also act as a 'listening visit'.

7.3.4.2 Important components for perinatal mental health service delivery: midwives' roles and continuity of midwifery care

The interview data gained in this study supported the evidence of women's openness and willingness to talk to healthcare professionals. Nonetheless, this interaction only occurred when the women were being treated confidently and sensitively during the enquiry into their psychological health. The evidence suggests that the women's perceptions of the midwives' responses and attitudes during routine enquiries into the issue of domestic violence, psychosocial assessment, and screening for depression in the pregnancy period, were influenced by the midwives' performance and styles (Bacchus et al., 2002; Rollans et al., 2013a). As this current study has suggested, midwives were and are the frontline healthcare professionals in maternity care in the two selected research sites; therefore, it is important to develop and improve the quality of the midwives' delivery services in the field of perinatal mental health care.

To undertake effective psychological health assessments and provide appropriate responses to pregnant women so as to manage the symptoms and even causes of those women's psychological distress, midwives must have the confidence to manage the challenge and be equipped with the appropriate and necessary skills (Rollans et al., 2013a; Fontein-Kuipers et al., 2014; Darwin et al., 2015). Yet, it was evident that healthcare professionals, particularly the midwives and the GP who participated in this study, acknowledged their ill-preparedness to function effectively in the field of mental health. They felt they lacked training and skills to perform appropriately sensitive enquiries and effective healthcare services for those who may have risk factors and/or who showed symptoms of psychological distress. Previous studies confirmed that a lack of midwives' skills, knowledge and attitudes is the most common problem associated with a poor quality of service delivery to treat, or at least deal with, perinatal mental health problems (McCauley et al., 2011; Noonan et al., 2017a).

During pregnancy, women need continuous support to optimise their pregnancy outcomes. Continuity of care could provide continuous mental health support during and after pregnancy (Bayrampour et al., 2017; Button et al., 2017; Kildea et al., 2018). Continuity of care in midwifery services is a form of care where a group of midwives works together on a caseload, based on the women's needs (Sandall, 1997). Continuity of care which focuses on a woman-centred care programme should ideally be designed to ensure each woman receives care from the healthcare professionals they have grown to know and trust (Green, J.M. et al.,

2000). This current study also suggested the value of continuity of care as revealed by the respondents who mentioned that they might have been able to disclose their feelings openly if they had been liaising with a healthcare professional they had known before and whom they trusted. It was evident that continuity of care enables the building of relationships through establishing rapport, which is an essential development in perinatal mental health services (Russell, 2017; Viveiros and Darling, 2018). A qualitative meta-synthesis which focused on the public health nurses' role in perinatal mental health in HICs also confirmed the importance of the quality of the relationships between healthcare providers and service users (Noonan et al., 2017b). The study found that it is essential for the service providers to make women feel comfortable with them as it is a form of rapport building, which is a crucial part of the continuity of care. Therefore,. As public health nurses providing care in the women's homes, it was also suggested that the services provided to the women should be more individualised and holistic.

7.3.4.2.1 Public health roles of the midwives

In Indonesia, midwives also have the role of providing healthcare services for women and children in the community, rather than just in local medical centres. They often conduct a home visit to provide more accessible care services to women in rural areas. The public health role of the midwives is supported by the newest Midwifery Law (number 4), which was ratified on the 15th March, 2019. The midwives' roles include educating and involving community members to identify, make action plans and overcome the health problems of women and children. The law also includes empowering communities and conducting health promotion initiatives focused on: a) improving women's and children's health, b) reproductive health care and c) family planning.

Nevertheless, midwives in their local primary healthcare centre will still be required to provide basic and specific midwifery care to reduce or prevent maternal and neonatal deaths. Therefore, it is evident that midwives in Indonesia have a wide range of roles and responsibilities. This current study suggested that when midwives encountered a pregnant woman showing symptoms or verbalising psychological distress, they were afraid of opening the 'Pandora's box'. The midwives' ill-preparedness could be attributed to their lack of adequate training, the lack of qualified support in the form of a clinical psychologist and lack of access to appropriate onward referral routes. Meanwhile, the midwives were aware of their

role in providing psychological support to achieve optimum wellbeing during the women's pregnancy journey.

A UK study suggested that midwives intended to take a role in dealing with perinatal mental health issues when identified in the public health system (Ross-Davie et al., 2006). Furthermore, a meta-synthesis conducted by Noonan et al. (2017) investigated public health nurses' roles in the identification and management of perinatal mental health problems. The research team identified that screening and management of perinatal mental health problems by public health nurses in the community mainly depended on the availability of referral pathways of care (Noonan et al., 2017b). Consequently, healthcare professionals, particularly midwives, do not only need training in perinatal mental health which includes the assessment procedure. A pathway of care in perinatal mental health also needs to be developed in order to optimise the management of such a challenging issue. The section below will discuss the potential interventions or programmes which can be initiated to provide psychological support for women during their perinatal period.

7.3.4.3 Moving forwards: interventions that have the potential to support women with psychological distress during their perinatal period

The Indonesian government already supports the implementation of mental health services in the healthcare system. The policy makers at regional and district levels are already on board. It is the system-wide implementation that needs enhancing through constant improvements to develop resources for the women patients as well as the training and management of healthcare professionals in the field of mental health.

This section presents intervention programmes which might have the potential to be used to improve women's psychological health during the perinatal period. Such programmes could include: a) integrating mental health into maternal and child-health programmes, b) improving healthcare professionals' perinatal mental health literacy and c) involving community participation for optimising the pregnant women's journey and experiences.

7.3.4.3.1 Integrating mental health into maternal and child-health programmes

In 2009, a law was passed (number 36 about health, articles 144 to 151) which is related to general psychological health and wellbeing; legislation that has been approved by the President of the Republic of Indonesia. In general, the articles regulate the responsibility of the government and local government in the efforts of:

i) prevention, ii) promotion, iii) treatment and iv) rehabilitation of people with mental health problems. Law 36 also mentions that the community has the right to receive the correct information and services about mental health; both to be provided by the national government and local governments (*Undang-Undang Republik Indonesia Nomor 36 tahun 2009 tentang Kesehatan* 2009).

Nevertheless, after 9 years there has been only very limited progress made towards this important law's implementation. One example of this shortfall is the absence of mental health professionals located in the primary healthcare centres across Indonesia. Based on the WHO, primary health care services should provide essential healthcare for individuals, families and communities and ***must*** be located as close as possible to where people live and work. In addition, the care provided should be based on the particular needs of the population (WHO, 1978). Integrating specialised health services, including those dealing with mental health issues, into primary healthcare systems is one of the WHO's most fundamental health care recommendations (WHO, 2001).

The WHO also recommended that women should be supported throughout their perinatal period physically, psychologically and emotionally (WHO, 2018). However, to be able to provide the appropriate support that was prescribed and is required, healthcare professionals need to make an accurate and detailed assessment of their patients' mental health and wellbeing. The observation and documentary analysis in this thesis revealed quite clearly that most healthcare professionals in the two chosen study sites did not perform a comprehensive psychological health assessment for the pregnant women who were participating in this study. It has been noted that in order to provide a high quality of care which can meet the patients' needs, a thorough assessment process must be performed by healthcare professionals (Mant, 2001; Rademakers et al., 2011).

This current study revealed that both the written proforma of assessment and healthcare professionals' performance failed to properly address the risk factors associated with women's psychological distress during their pregnancy. In addition, the questions in the proforma and the chance to see the clinical psychologist were only asked and given once to the women during their antenatal visit in the perinatal period. The healthcare professionals, particularly the midwives and GPs in this study, evidently had taken for granted that difficult life events and psychological distress are just part of daily lives; *'things we all have to put up with'*. Therefore, no specific attitudes and actions of healthcare professionals were observed during the data collection stage. Meanwhile, assessing and understanding pregnant women's

risk factors in a sensitive way, particularly when dealing with the sociocultural aspects, renders it essential to address any psychological issues evident during the women's perinatal period (Lancet, 2016). Thus, making appropriate enquiries through respectful, non-judgmental and empathic attitudes and behaviour during the women's visit, would surely be of benefit for both the women and their yet-to-be-born babies (WHO, 2008).

7.3.4.3.2 Improving healthcare professionals' perinatal mental health literacy and strengthening the pathway of perinatal mental health care

Mental health literacy has been defined as *"knowledge and beliefs about mental disorders which aid their recognition, management or prevention"* (Jorm et al., 1997). This definition was firstly introduced to describe the public members' ability to recognise the different types of psychological distress and specific disorders which impacted the public's acceptance of the treatment offered by clinicians. It should be noted that mental health literacy is also important for healthcare professionals, as their performance in providing support for those who have mental health problems is based on, and informed by, their knowledge and beliefs. Studies reveal that there are different levels of healthcare professionals' confidence, knowledge, skill and attitude in perinatal mental health in both HICs and LMICs. Yet, all of the studies suggested that healthcare professionals need to be supported through a continuous learning programme; having access to resources of knowledge and skill improvement, as well as appropriate referral pathways (Jomeen et al., 2009; McCauley et al., 2011; Mathibe-Neke et al., 2014; Noonan et al., 2018).

To date, there are no formal curricula for midwifery students or specific training for qualified midwives that embrace the recognition, assessment and management of common mental health problems during a woman's perinatal period in Indonesia. Meanwhile, midwives in Indonesia are the main provider of maternity care. One indicator of the unavailability of this specific curricula or training emerges from the healthcare professionals involved in this study. Those in the study were ignorant of suitable screening tools or other instruments designed to assess mental health problems. Examples of such tools are: i) the Edinburgh Postnatal Depression Scale (EPDS), ii) the Hospital Anxiety and Depression Scale (HADS), iii) Beck Depressive Inventory (BDI) and Self-Reporting Questionnaire (SRQ-20). All of these instruments have been validated in pregnant women's populations and have been widely used in many countries. However, performing a screening or assessment without providing an appropriate pathway of care and system to support a

satisfactory service conclusion is unlikely to improve outcomes (Gilbody et al., 2008). The meta-analysis carried out by Gilbody et al. emphasised that stand-alone screening or assessment programmes for depression had limited or no benefit either for depression management or depression outcomes. Thus, supporting healthcare professionals by specifically equip them with confidence, knowledge, attitude and skills in perinatal mental health management, as well as developing perinatal mental health system within maternity care, are the two programmes with the highest priorities, if Indonesia's goal is to optimise women's journeys during their perinatal period.

The findings from this current study suggested that integrating perinatal mental health care into maternity care was a feasible ambition. This feasible integration was confirmed through the availability of a new proforma which, whilst as yet unable to assess women's psychological health appropriately, has shown that the district level policy makers have started to pay more attention to the issue of perinatal mental health. In addition, the availability of clinical psychologists in several healthcare centres also shows there is improvement in the mental health care service offered at the primary level of healthcare. Furthermore, all healthcare professionals in this study agreed that they should take perinatal mental health into consideration rather than focusing only on physical health in providing perinatal care.

7.3.4.3.3 Community empowerment and participation: bridging the gaps in the mental health services

Community empowerment has been defined as a way to strengthen and empower individuals, groups or communities who or which initially did not have the ability or authority to access information, knowledge and skills in order to make the best decisions to control and deal with their health problems (Laverack, 2006; Rosato et al., 2008). Whilst the term participation referred to either passive or active involvement in the healthcare-related programmes, the term empowerment can refer to a process or outcome (Rosato et al., 2008). Community participation and empowerment have been widely discussed as essential components of primary healthcare, particularly in poor community settings, as they are designed to improve the health outcomes of the communities (Rifkin, 2009).

There are models of community participation which are designed to support women in Indonesia. One example of such a programme is *Desa Siaga* (DS) or 'Alert Village'. DS is a national healthcare programme established in 2010, which involves

all aspects in a community or village in an attempt to overcome any and all of their health problems (IMoH, 2010a). Within this programme there is active involvement and collaboration of the community at the grass roots' level; that involvement combines with the healthcare professionals in the primary healthcare centre in order to create a broad-ranging healthcare programme. In DS, community health workers are trained to undertake community-based disease surveillance, which includes screening and support for women. Those workers are also trained to respond to health emergencies and natural disasters. However, it is important to stress that mental health is nowhere mentioned in the main guidelines of the DS initiative; it is as if the designers felt that mental distress or disorders were excluded from the health issues in Indonesian villages,

Some stakeholders such as universities, provincial and regional departments of health initiated a programme namely *Desa Siaga Sehat Jiwa* (DSSJ) or 'Mentally Healthy Alert Village'. This initiative aimed to reduce the problem of limited access to mental healthcare services in rural communities (Wasniyati et al., 2014). The programme was initiated as part of the 'Indonesia Free from Shackles' movement. The community health worker(s) and the healthcare professionals such as midwives were trained to be able to conduct early screening of mental health problems and provide psychological support; for example by involving the mental healthcare professionals from the Purwo Healthcare Centre in patients' treatment. This is an advancement programme out of DS, which included mental health aspects. Nevertheless, DSSJ does not include maternal mental health in its programme, since the focus is on the general population.

A recent paper has reviewed the role of community healthcare workers in recognising perinatal depression in Surabaya, Indonesia presenting results from research which took place in one DSSJ location in East Java, Indonesia. The study involved 62 interviews with programme managers from the health office and the community, healthcare professionals, community health workers, mental health specialist and women (Surjaningrum et al., 2018). This paper explored the possibility of task-sharing between community healthcare workers and healthcare professionals in identifying perinatal depression within the integrated mental health programme. The paper also concluded that involving community healthcare workers to identify perinatal depression is a feasible policy and initiative. Nonetheless, inadequate support systems and a lack of practical guidelines remains a challenge to the implementation. Even though the study was conducted in a single setting (one district) which might have impact on the transferability of the

study, however, Surjaningrum's paper supports the findings of this thesis which highlights the importance of establishing a perinatal mental healthcare system in primary healthcare centres.

Community participation in the DS and DSSJ programmes in Indonesia usually involved both community leaders and religious leaders. Improving mental health awareness amongst community members through community healthcare workers and community leaders is important to raise communities' consciousness about their mental health wellbeing. Involving religious leaders and community leaders are also potential options to improve pregnant women's psychological health within the community. Previous studies from Indonesia confirmed that knowledge about mental health was associated with public stigma towards people with any mental health issues (Rüsch et al., 2005; Hartini et al., 2018). Involving religious and community leaders, and providing them with factual information about mental health, could help to reduce the stigma of mental health problems in Indonesian society (Pen and Couture, 2002). In an Indonesian context, religious and community leaders are respected by the general population and they often have both the ability and authority to persuade societal behaviour over certain issues; for example, by giving a speech during a social event. These social events can include routine religious and women's organisation gatherings, which usually happen every month in every village. In addition, women could gain significant benefit if the community around their residence could provide emotional support during their pregnancy (Raymond, 2009).

7.4 Strengths and limitations of the study

Strengths: The aim of this research was to understand pregnant women's psychological health assessment during antenatal booking visit, based on the perspectives of women and healthcare professionals in two health centres in Indonesia. A qualitative case study approach was used to achieve that aim as it allows the researcher to access deeper levels of understanding and to explore mental health assessment procedures as part of the routine practices in midwifery; an aspect of the maternity service which is evidently underdeveloped in Indonesia. This study involved both pregnant women as well as the healthcare professionals employed to care for them. This 'hands-on' population could be one of the strengths of this study as its members revealed the real problems faced by healthcare resources and systems when trying to implement psychological health assessments

in LMICs during clients' antenatal visits, particularly in Indonesia. In this study, pregnant women's voices were captured to gain a more meaningful understanding about their perspectives regarding the issue of psychological health and risk factors associated with mood variations during their pregnancies. It was anticipated that the knowledge gap of women's life experiences would be addressed in this study. Thus, it is expected that this study will provide a new analytical interpretation of pregnant women's experiences of their psychological distress and allied mental health issues.

Additionally, this study was conducted in two different study sites, where different pathways of care and different social settings, informed by financial factors, appeared. Moreover, as this research employed a qualitative case study as its model, multiple data collection methods such as: a) in-depth interviews, b) non-participant observations, c) documentary analysis and d) field notes were employed to gather information. Thus, data obtained from this research are rich and this richness has enhanced the credibility and confirmability of the study. Though this study used an overt non-participant observation approach, those observations were considered to be successful. This conclusion was supported by the fact that after the researcher had finished the data collection, several participants mentioned that they had not realised that they were being observed, even though all participants had read and signed the consent form prior to data collection. Furthermore, all the transcripts were translated from Bahasa Indonesia to English; some then went through a back translation process, thus allowing the supervisors of this thesis to review the emerging themes. Hence, the credibility of the study was strived for (Silverman, 2006; Burns et al., 2012). The researcher is a midwife and started this study without mental health experience (similar to the midwives in this study). Therefore, having a distress protocol and being able to have a debriefing session with a supervisor with expertise in mental health were also core strengths for this researcher and her research. Further explanation about the debriefing session is explained the section 7.5 below.

Limitations: Nonetheless, despite the strengths of the study, this study also has some limitations to consider. First, it involved a relatively small number of participants. There might be issues on the transferability of the study considering the geographical situation of Indonesia as the largest archipelagic country with diverse ethnicities and cultures. However, this study offers the depth and the richness of the data which might have been difficult to achieve if the researcher decide to involve a larger number of participants. In addition, the number of primary

healthcare centres to represent the centres in two districts were quite small (two in total) compared to the total number of healthcare centres in Yogyakarta (121 primary healthcare centres, consist of 43 centres provide inpatient services and 78 centres without inpatient services). Second, no self-report or clinician led measurements of the pregnant women's mental health state were made or taken and nor were the women screened for psychological distress or common mental health problems in pregnancy, such as anxiety and depression. This information could strengthen the data on women's psychological distress by providing more objective evidence and information on the type and level of distress that the women were experiencing. Third, even though this study listened to the women's voices in their life difficulties, and their perspective on mental health during pregnancy, the women's partners/ husbands and families were not involved. Therefore, the evidence from this study could not compare and contrast the women's and their husbands and other family members' experiences regarding their life challenges. Fourth, as there was no policy maker participating in this study the idea of creating a new antenatal form for use in the Setaman clinic could not be investigated. Fifth, given the specific location, which was Yogyakarta, Indonesia, there might be a limitation in the context of transferability. However, the data has been shown to fit other contexts, such as the role of social support and economic conditions in pregnant women's psychological health; variables which are not only limited to LMICs. Lastly, as the researcher is a Javanese and a midwife by background, who lives in Yogyakarta, being an 'insider' can also be a disadvantage during the research (Chavez, 2008). The data interpretations of this study might have been influenced by participants' similar background to the researcher. Nonetheless, as mentioned in section 3.8, steps to ensure the rigour of the research have been taken.

7.5 Researcher's reflexivity

This research was my first experience in undertaking a qualitative study in perinatal mental health. The process of this PhD study has been a transformational journey for myself. I was innately a pragmatic midwife and academic. At the beginning of my PhD study, I had to give up the knowledge and understanding that I thought were right and I invested a lot of time to open my mind to learn how to a new literature and ways of thinking about psychological health and wellbeing. Letting go of my initial pragmatic and literal thoughts has been a difficult process for me. When

I was not encouraged to think in a more academic way by my supervisors, I sometimes reverted back to my pragmatic thinking.

With no background in mental health, I had to gain a deeper understanding of mental health in general and perinatal mental health in particular. During this stage of my 'development' I was also advised to explore issues relating to mental health problems either from the DSM or the ICD. In the first year of my study, I undertook a module in qualitative research. The module was compulsory for PhD students who plan to undertake a qualitative study and included doing a qualitative interview as one of the topics. In addition, two months before data collection, I attended a training session in qualitative interviewing organised by the Health Experiences Research Group, University of Oxford. The module and training were beneficial to develop my skills and confidence in conducting interviews to meet the standard for a PhD candidate at the University Leeds and facing the difficult situation during an interview where some participants could be reluctant or unwilling to talk freely.

Prior to data collection, it was suggested I prepare a distress protocol, in anticipation of some unexpected situations arising during the interview, particularly with the women. Yet, as a qualified midwife, I experienced both personal and professional conflict following interviews with some of the participants. These women showed psychological distress symptoms and yet could not receive any help from the healthcare professionals in the centre. When the pregnant women showed psychological distress symptoms during the interview, even though the distress protocol had been implemented, the women refused to talk to the psychologist and did not want their experiences to be disclosed to other healthcare professionals. This difficult issue has created for me a distressing moral conflict, as I could not provide the counselling or healthcare service to the women, apart from my background as a midwife. This moral distress was caused by my intention to remain 'objectively detached' and so avoid any emotional attachment to the participants.

During the observation, I also felt frustrated when I noticed some insensitive attitudes shown by healthcare professionals to the pregnant women who were exhibiting risk factors of psychological distress. To overcome the situation, routine post-interview Skype meetings with my supervisor who has expertise in mental health were conducted and the supervisor provided me psychological support. Reflective field notes were also made to help me in managing my distress and keeping the balance of my multiple roles as a midwife, a woman, a mother and a researcher. The reflective field notes have allowed me to express my feelings and

maintaining my status as a researcher. The debriefing sessions, writing, re-reading and re-assessing the reflective field notes had changed me. Previously I blamed myself and my midwife colleagues for failing to provide support to distressed women but I changed to become an individual with determination to complete my PhD study for the sake of better midwifery services in Indonesia. I was then fully aware of my role and as a result I acquired more confidence with the nuances of a qualitative researcher. I am now very sure that my PhD study could contribute to the improvement of maternity care and midwifery services in Indonesia.

During data collection, I was also cognisant of the benefits as an insider with my background as a midwife and as a Javanese. The benefits included the ability to better understand the issue(s) in question, as well as being able to engage with and to obtain true and in-depth information from the participants. My calm yet friendly attitude might also be factors informing the participants' openness during the interviews. My experience as a midwife and ability to actively listen and be patient were contributors the favourable results obtained from the interviews and observations.

I also found that conceptual thinking has been a part of my challenging and difficult journey, especially during the stages after data collection. Unexpectedly, interpreting words and phrases took a lot of time and personal efforts; issues which sometimes caused me frustration and disappointment. During this difficult time, my supervisors kept pulling me back and encouraged me to be able to stand back and think deeply about 'What is the data telling me?' Thinking objectively and conceptually have become the most useful skills which I could learn during this PhD journey and I need to keep practising these skills or I will lose them. At the end, I believe that this PhD journey is just a beginning for the 'new me', a new person who could illuminate her own understanding and prejudices and a person who will always move forward and keep motivated by frustration.

7.6 Implications of the research

The main implication of the findings emerging from this research is to inform practice, future research and policy to improve Indonesia's midwifery service. The main goal is to prevent or modify adverse outcomes of psychological distress and mental health problems during pregnancy to the mothers, babies and families. This goal could be achieved by improving both healthcare professionals' and the general public's perinatal mental health literacy and establishing an easily accessible, well-

staffed perinatal mental healthcare system. This improvement should include: i) raising awareness, knowledge and skills enabling the recognition, prevention and management of mental health problems during the perinatal period, ii) providing access to mental health services, iii) providing adequate information for pregnant women and their families and iv) providing referral pathways and access to relevant support and psychological therapies for women. The improvement is aimed to facilitate women's help-seeking behaviour when they encounter symptoms of psychological distress or mental health problems, including to improve the onwards referral systems of perinatal mental health in Indonesia.

Based on the researcher's personal reflections as a midwifery lecturer in two different universities for almost 8 years, the issues of specific mental health assessment and psychological distress and illness screening are not integrated into the curricula of midwifery education in Indonesia. In addition, in the 2019 Midwifery Law, perinatal mental health is not mentioned as one of the midwives' required competencies. This omission indicates that the field of perinatal mental health has not been a priority in midwifery care services in Indonesia. Thus, integrating perinatal mental health into the formal curricula and providing adequate support for training healthcare professionals, particularly midwives, are essential initiatives needing implementation. Further details of this suggestion will be presented in the recommendations section (below).

7.7 Recommendations

The following recommendations are proposed, informed by the findings from the research reported in this thesis. The recommendations focus on promotional and preventive strategies to raise the public's and healthcare professionals' awareness regarding the issue of mental health. The ultimate goal will be to prevent or modify adverse outcomes of mental health problems from developing during the perinatal period, in order to protect the women, their babies and families.

7.7.1 Recommendations for practice and education

The researcher is aware that tit will take time to change the current midwifery services in Indonesia. However, big changes start with small steps. To initiate those small steps, the recommendation and plan will include:

a. Raising perinatal mental health awareness amongst healthcare professionals is essential. In order to achieve this, a dissemination plan has been created (see section 7.8 for detail). The strategies will consist of:
   - Dissemination of the findings of this study to the midwives' professional organisation (IMA) and via the IMA national meeting, which is usually held every year and is attended by midwives from all provinces of Indonesia. The dissemination of the research findings is also planned to be delivered at both provincial and district levels of the IMA in Yogyakarta. As the researcher is part of the IMA membership of Yogyakarta and Indonesia, these plans are feasible.
   - Dissemination of the findings of this study in the two study sites (Purwo and Setaman). The researcher plans to prepare a summary of the findings without identifiable direct quotations in the presentation. This strategy is expected to initiate further discussion and plan amongst healthcare professionals, including further research to integrate perinatal mental health into routine maternity care.

b. Designing a curriculum for training and education in perinatal mental health which incorporates training for effective task sharing in perinatal mental health management. This initiative will include: a) basic knowledge on perinatal mental health and management issues, b) counselling skills, c) psychosocial assessment and d) strategies to maximise optimum referral and follow up. A care pathway is required when a perinatal mental health problem occurs:
   - *Rapport*: establishing good communication and relationships to build trust between healthcare professionals and their female clients is essential.
   - *Report* : which includes collaborative working amongst healthcare professionals in the primary healthcare centres to decide the best management for the women with perinatal mental health problems.
   - *Record*: documenting the process of assessment and management that has been done and/or planned as the source of service evaluation.
   - *Refer*: the referral process should be employed if it is needed. Options for working collaboratively with mental health specialists at the tertiary level of healthcare services should be established.
   - *Recovery* : which involves the women's family members and the midwives who will provide services for those women throughout their perinatal period.

The development of this training module is planned to utilise the productive research funding from the Indonesian Endowment Fund for Education of the Ministry of Finance. Opportunities for funding and grants to support further research, training and education have been identified. These sources include regional and national grants, Sanofi Espoir, the Society of Reproductive and Infant Psychology (SRIP) and the ICM research grant. Furthermore, a collaborative arrangement (underpinned by a Memorandum of Understanding) between the researcher's institution in Indonesia, 'Aisyiyah University of Yogyakarta and the School of Healthcare, University of Leeds, UK has been initiated. Therefore, further work in developing curricula and research projects in perinatal mental health in Indonesia will involve experts from the University of Leeds.

c. It is expected that following the development of the training module in perinatal mental health, the researcher would be able to provide recommendations to the IMA to incorporate perinatal mental health topics in a Midwifery Update programme. Midwifery Update is a mandatory programme for midwives who need to renew their practice license after every five years. This is a national programme from the IMA and IMoH. The programme usually runs for three full days in each province in Indonesia and includes the most up-to-date information regarding the clinical practice of antenatal, labour, postnatal and neonatal care. The plan for incorporating the topic of perinatal mental health into the update programme can be initiated following the dissemination of this study to the central board of the IMA.
d. As the researcher is a lecturer in a midwifery programme in Indonesia, she also plans to incorporate detailed perinatal mental health topics in the curricula for the Diploma, Bachelor and Master of Midwifery programmes. The three curricula will adopt the same crucial topics as planned in strategy (b) above.
e. Continuity of midwifery care needs to be initiated, as this model of care evidently has positive advantages for women, their pregnancy outcomes and for the midwives themselves. In Indonesia, midwives have implemented continuity of care in their own midwifery private practice. However, such model of care has not been implemented in the primary healthcare centres. Meanwhile, implementing a continuity of midwifery care in a primary healthcare centre is feasible to do. Small action that can be initiated is by informing the women on the schedule of each midwife who will provide care in everyday work

shift in the healthcare centre. Therefore the women can choose to see the midwife that they prefer to providing care during the perinatal period.

f. Using social media as a platform to provide evidence-based and trusted information about perinatal mental health to increase the women's and their families' levels of mental health literacy. This strategy is being planned after taking into account the nature of Indonesia's challenging geographical situation. The researcher has discussed the possibility of designing helpful resources, using the principles of self-management to support women with perinatal mental health issues and their families. The plan will involve MotherHope Indonesia. MotherHope is a Facebook community group which aims to support mothers and families who experience perinatal mental health problems. MotherHope also aims to increase awareness amongst public and other healthcare professionals related to perinatal mental health problems. MotherHope helps women during their pregnancy and one year after childbirth to be able to access to mental health services by providing on-line and off-line peer group support, free online call, private psychoeducational sessions either in hospital or midwifery private practice, volunteer training, radio broadcasting, online seminar through Youtube and other social media such as Whatsapp group discussion. At the moment, Motherhope Facebook page has more than 25,000 members. The researcher is also a volunteer midwife and a Youtube programme coordinator for MotherHope.

7.7.2 Recommendations for research

There is very little research investigating or service development for perinatal mental health in Indonesia. Thus, further research is crucially needed to refine the services targeted for pregnant women and to improve healthcare professionals' performance in service delivery to this neglected aspect of maternal health. It is anticipated such research could increase the quality and the coverage of mental health services for women during their perinatal period. With regards to limitations of the currents study, further investigation needs to be undertaken in the following areas:

a. Research into the extent of perinatal mental health problems in Indonesia, their determinants and associated outcomes. By conducting research in this topic, the prevalence of perinatal mental health problems can be identified. Thus such data could provide strong evidence and support for further research into the area of perinatal mental health in Indonesia.

b. Research into women's perinatal mental health problems involving the husband and/or other family members, such as the woman's mother. It is expected that research in this topic could provide a more in-depth understanding of the women's psychological health during their perinatal period. Involving the husband and/or other family members could also provide insights regarding the opportunity of providing a 'safety net' for women with perinatal mental health problems. In addition, support needed by the husband and/or family members, when women are experiencing psychological distress, also can be identified.
c. Research which involves the policy makers to identify the challenges, barriers and supporting factors of integrating a perinatal mental healthcare system within the maternity care services.
d. There are many studies have illuminated the important roles of community participation in improving women and child health through an 'Alert Village' programme in Indonesia. Thus, conducting research which investigates community participation in perinatal mental health could also provide information on how perinatal mental health issues are being addressed in the community level. The research could involve community healthcare workers, community leaders and religious leaders.

7.7.3 Recommendations for policy

The placement of clinical psychologists in primary healthcare centres has been implemented in several provinces in Indonesia. In 2019, the researcher was informed that in some more primary healthcare centres in Yogyakarta, including in Purwo Primary Healthcare Centre, a clinical psychologist is now available to provide accessible mental healthcare services in the community. Yet, most of the psychologists' services are not incorporated into the integrated antenatal or perinatal care programmes. The findings of this research could be used to inform the need to integrate perinatal mental healthcare into Indonesia's maternity services. Furthermore a pathway of care, including its referral system, also needs to be established to optimise women's experience during their perinatal period. However, even if clinical psychologist are more available, the frontline carers for pregnant women is the midwife. Therefore, raising awareness on perinatal mental heatlh and upskilling midwives to address this area remains a priority.

7.8 Dissemination of the research

During the development of this thesis a number of conferences and 'showcases' have been attended. There is also a need to disseminate the research to multiple stakeholders, as part of knowledge translation to facilitate the uptake of research evidence (WHO, 2014a). Tables 7.2 and 7.3 below present the list of some parts of this research that have been disseminated in conferences, as well as offering future conference and the dissemination plans.

Conferences and showcase in the UK:

1. Pratiwi, C.S., Hirst, J., McGowan, L. 2017. Healthcare professionals' assessment of pregnant women psychological health in Indonesia: A qualitative case study. In: *International Day of Midwives, Royal College of Midwives, St James Hospital and Leeds General Infirmary*
2. Pratiwi, C.S., Hirst, J., McGowan, L. 2017. Healthcare professionals' assessment of pregnant women psychological health in Indonesia: A qualitative case study. In: *Postgraduate Research Conference, School of Healthcare University of Leeds*.
3. Pratiwi, C.S., Hirst, J., McGowan, L. 2018. Listen to me: pregnant women's expectations of psychological health assessment. In: *Leeds Doctoral Showcase, University of Leeds*.
4. Pratiwi, C.S., Hirst, J., McGowan, L. 2018. Healthcare professionals' assessment of pregnant women psychological health in Indonesia: A qualitative case study. In: *Postgraduate Research Conference, Faculty of Medicine and Health University of Leeds*.

Congress in Indonesia:

1. Pratiwi, C.S. 2016. Women's health and development in Indonesia. In: *National Women's Congress, Yogyakarta, Indonesia*.

International Conferences:

1. Pratiwi, C.S., Hirst, J., McGowan, L. 2017. Healthcare professionals' assessment of pregnant women psychological health in Indonesia: A qualitative case study. In: *31st Triennial ICM Conference, Toronto, Canada*.
2. Pratiwi, C.S., Hirst, J., McGowan, L. 2018. Listen to me: women's expectations of psychological health assessment during pregnancy. In: *38th Annual Society for Reproductive and Infant Psychology Conference, University of Lodz, Poland*.

Online Media:

Pratiwi, C. S. 2019. 'A quarter of women depressed after childbirth, but the management is not yet optimum. Why?' *The Conversation*. 20th May 2019. https://theconversation.com/seperempat-ibu-depresi-setelah-melahirkan-tapi-penanganannya-belum-optimal-mengapa-117205

Future conference plans:

1. The 32nd Triennial ICM conference (21st-25th June 2020)
2. The Marce Society Conference
3. The 40th SRIP Conference

Table 7-2: Conferences and future conference plans

Publication		Target Journals/ Events/ Media
Academic	***Paper 1***: Synthesis of healthcare professionals' perspectives and women's voices in psychological health assessment	1. Women and Birth 2. Midwifery 3. Journal of Psychosomatic Obstetrics and Gynaecology 4. Journal of Reproductive and Infant Psychology
	Paper 2: Scoping review of healthcare professionals assessment of pregnant women's psychological health in LMICs	
	Paper 3: Healthcare professionals' performance in antenatal mental health assessment within the healthcare system	
	Paper 4: Case study in a healthcare research in Indonesia	
Professionals	Psychological health assessment of pregnant women in Yogyakarta	1. Annual Scientific Meeting of IMA (PIT Bidan) 2. Regional (provincial) and district meetings of IMA Yogyakarta
Public dissemination	Women's psychological needs during their perinatal period	Social media: Webinar in YouTube page and Whatsapp group discussion of MotherHope Indonesia
	Psychological health assessment of pregnant women in Indonesia: A qualitative case study	The awardee of Indonesia Endowment Fund for Education of Ministry of Finance Annual meeting

Table 7-3: Dissemination plans

7.9 Summary

This chapter has presented an overview of the study, which included an overarching discussion of the main findings, strengths, limitations and implications of the research. In addition, the researcher's reflexivity, recommendations and disseminations, which included a dissemination plan, have also been presented.

7.10 Conclusion

Psychological distress and mental health problems during pregnancy can cause adverse outcomes for both mother and baby if such conditions remain undetected, unscreened and therefore untreated. This study has explored the way in which healthcare professionals in Yogyakarta, Indonesia assess pregnant women's psychological health, at a time when a perinatal mental healthcare policy has not yet been established or implemented within Indonesia's healthcare system. The scoping review had identified that in many LMICs biopsychosocial factors influence women's psychological health during the perinatal period. The inadequate training of healthcare professionals, poor or ineffective organisational support, as well as social stigma about mental health problems, were all identified as barriers to sensitive and appropriate antenatal psychological health assessment in the literature sourced from both LMICs and HICs.

The research adopted a qualitative case study research model in order to provide an in-depth understanding of pregnant women's psychological health and its assessment in two primary level healthcare centres. Findings from the two study cases highlighted that sociocultural and religious contexts exert a strong influence on shaping healthcare professionals' and pregnant women's perceptions regarding health and illness. Socio-cultural context including economic condition and interpretation of some religious teachings affecting pregnant women in perceiving their life difficulties and psychological distress. Social support and reassurance from their religion were mentioned by the study's pregnant respondents as coping strategies which could possibly modify the negative outcomes of psychological distress during the perinatal period. Hence, there is a necessity to inform people about perinatal mental health issues, informed by their sociocultural and religious context.

This PhD study highlights the importance of improving healthcare professionals' perinatal mental health literacy through continuous training and education as well

as establishing appropriate pathways of care within the maternity care area of practice in Indonesia. Presented were: a) the strengths and limitations of this study, b) researcher's reflexivity, c) implications of the study and d) recommendations for practice and education, research and policy, as well as e) suggestions for improving the perinatal mental health services currently offered in Indonesia. Dissemination of this study has included presentations of some parts of the research in local and international conferences. Publication plans have been developed which target publishing in peer-reviewed journals as well as presenting in academic and professional meetings. The researcher will present her findings and key recommendations to policy makers, stakeholders, local and international NGOs, as well as academics. Finally, there is the plan to use social media to reach a wider community- based audience, particularly to increase levels of awareness in members of the general public about perinatal mental health.

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Appendix A

World Bank Country Classifications, 2018

Source: https://datahelpdesk.worldbank.org/knowledgebase/articles/906519

Low Income Countries ($1,000 tuition)			
Afghanistan	Ethiopia	Mali	**Syrian Arab Republic**
Benin	Gambia, The	Mozambique	**Tajikistan**
Burkina Faso	Guinea	Nepal	Tanzania
Burundi	Guinea-Bissau	Niger	Togo
Central African Republic	Haiti	Rwanda	Uganda
Chad	Korea, Dem. People's Rep.	Senegal	**Yemen, Rep.**
Comoros	Liberia	Sierra Leone	Zimbabwe
Congo, Dem. Rep	Madagascar	Somalia	
Eritrea	Malawi	South Sudan	

Middle Income Countries ($1,500 tuition)					
Albania	China	Guatemala	Macedonia, FYR	Papua New Guinea	Timor-Leste
Algeria	Colombia	Guyana	Malaysia	Paraguay	Tonga
American Samoa	Congo, Rep.	Honduras	Maldives	Peru	Tunisia
Angola	Costa Rica	India	Marshall Islands	Philippines	Turkey
Armenia	Côte d'Ivoire	Indonesia	Mauritania	Romania	Turkmenistan
Azerbaijan	Cuba	Iran, Islamic Rep.	Mauritius	Russian Federation	Tuvalu
Bangladesh	Djibouti	Iraq	Mexico	Samoa	Ukraine
Belarus	Dominica	Jamaica	Micronesia, Fed. Sts.	São Tomé and Principe	Uzbekistan
Belize	Dominican Republic	Jordan	Moldova	Serbia	Vanuatu
Bhutan	Ecuador	Kazakhstan	Mongolia	Solomon Islands	Venezuela, RB
Bolivia	Egypt, Arab Rep.	Kenya	Montenegro	South Africa	Vietnam
Bosnia and Herzegovina	El Salvador	Kiribati	Morocco	Sri Lanka	West Bank and Gaza
Botswana	Equatorial Guinea	Kosovo	Myanmar	St. Lucia	Zambia
Brazil	Fiji	Kyrgyz Republic	Namibia	St. Vincent and the Grenadines	
Bulgaria	Gabon	Lao PDR	Nauru	Sudan	
Cabo Verde	Georgia	Lebanon	Nicaragua	Suriname	
Cambodia	Ghana	Lesotho	Nigeria	Swaziland	
Cameroon	Grenada	Libya	Pakistan	Thailand	

High Income Countries ($2,000 tuition)					
Andorra	Cayman Islands	Gibraltar	Latvia	**Panama**	St. Martin (French part)
Antigua and Barbuda	Channel Islands	Greece	Liechtenstein	Poland	Sweden
Argentina	Chile	Greenland	Lithuania	Portugal	Switzerland
Aruba	Curaçao	Guam	Luxembourg	Puerto Rico	Taiwan, China
Australia	**Croatia**	Hong Kong SAR, China	Macao SAR, China	Qatar	Trinidad and Tobago
Austria	Cyprus	Hungary	Malta	San Marino	Turks and Caicos Islands
Bahamas, The	Czech Republic	Iceland	Monaco	Saudi Arabia	United Arab Emirates
Bahrain	Denmark	Ireland	Netherlands	Seychelles	United Kingdom
Barbados	Estonia	Isle of Man	New Caledonia	Singapore	United States
Belgium	Faroe Islands	Israel	New Zealand	Sint Maarten (Dutch part)	Uruguay
Bermuda	Finland	Italy	Northern Mariana Islands	Slovak Republic	Virgin Islands (U.S.)
British Virgin Islands	France	Japan	Norway	Slovenia	
Brunei Darussalam	French Polynesia	Korea, Rep.	Oman	Spain	
Canada	Germany	Kuwait	Palau	St. Kitts and Nevis	

Appendix B

Literature Searching Strategy History

PsycInfo

Number	Keywords	Hits
1	assessment.mp. [mp=ti, ab, tx, ct, hw, tc, id, ot, tm]	419465
2	enquiry.mp. [mp=ti, ab, tx, ct, hw, tc, id, ot, tm]	3223
3	screening.mp. [mp=ti, ab, tx, ct, hw, tc, id, ot, tm]	88894
4	psychological wellbeing.mp. [mp=ti, ab, tx, ct, hw, tc, id, ot, tm]	1334
5	psychological disorder.mp. [mp=ti, ab, tx, ct, hw, tc, id, ot, tm]	1540
6	psychological illness.mp. [mp=ti, ab, tx, ct, hw, tc, id, ot, tm]	374
7	psychological health.mp. [mp=ti, ab, tx, ct, hw, tc, id, ot, tm]	87
8	mental disorder.mp. [mp=ti, ab, tx, ct, hw, tc, id, ot, tm]	13577
9	mental illness.mp. [mp=ti, ab, tx, ct, hw, tc, id, ot, tm]	47406
10	mental distress.mp. [mp=ti, ab, tx, ct, hw, tc, id, ot, tm]	1794
11	anxiety.mp. [mp=ti, ab, tx, ct, hw, tc, id, ot, tm]	245583
12	depression.mp. [mp=ti, ab, tx, ct, hw, tc, id, ot, tm]	330956
13	depressive disorder.mp. [mp=ti, ab, tx, ct, hw, tc, id, ot, tm]	26809
14	pregnan*.mp. [mp=ti, ab, tx, ct, hw, tc, id, ot, tm]	53084
15	antenatal.mp. [mp=ti, ab, tx, ct, hw, tc, id, ot, tm]	3465
16	developing countr*.mp. [mp=ti, ab, tx, ct, hw, tc, id, ot, tm]	11162
17	low-middle income countr*.mp. [mp=ti, ab, tx, ct, hw, tc, id, ot, tm]	300
18	1 or 2 or 3	481136
19	4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13	513128
20	14 or 15	54068
21	16 or 17	11359
22	18 and 19 and 20 and 21	74

Embase

Number	Keywords	Hits
1	assessment.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word]	2356011
2	enquiry.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word]	6141
3	screening.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word]	960077
4	psychological wellbeing.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word]	2138
5	psychological disorder.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word]	959
6	psychological illness.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word]	354
7	psychological health.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word]	26
8	mental health problem.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word]	1242
9	mental disorder.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word]	11275
10	mental illness.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word]	34543

11	mental distress.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word]	1777
12	anxiety.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word]	332014
13	depression.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word]	629905
14	depressive disorder*.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word]	47483
15	pregnan*.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word]	1014110
16	antenatal.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word]	46256
17	developing countr*.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word]	129174
18	low-middle income countr*.mp. [mp=title, abstract, heading word, drug trade name, original title, device manufacturer, drug manufacturer, device trade name, keyword, floating subheading word, candidate term word]	969
19	1 or 2 or 3	3190839
20	4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14	836452
21	15 or 16	1027439
22	17 or 18	129991
23	19 and 20 and 21 and 22	80

Medline

Number	Keywords	Hits
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2	enquiry.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	3594
3	screening.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	538756
4	psychological wellbeing.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	1043
5	psychological disorder.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	628
6	psychological illness.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	229
7	psychological distress.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	16416

8	psychological health.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	20
9	mental health problem.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	969
10	mental disorder.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	7714
11	mental illness.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	25009
12	mental distress.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	1487
13	anxiety.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	209288
14	depression.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	363470

15	depressive disorder*.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	107447
16	pregnan*.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	945813
17	antenatal.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	32055
18	developing countr*.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	117493
19	low-middle income countr*.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	702
20	1 or 2 or 3	1692589
21	4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14 or 15	554849
22	16 or 17	951703
23	18 or 19	118033
24	20 and 21 and 22 and 23	59

Global Health

Number	Keywords	Hits
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2	enquiry.mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes]	3376
3	screening.mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes]	114799
4	psychological wellbeing.mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes]	173
5	psychological disorder.mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes]	106
6	psychological illness.mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes]	30
7	psychological distress.mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes]	2254
8	psychological health.mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes]	6
9	mental health problem.mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes]	159
10	mental disorder.mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes]	1162
11	mental illness.mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes]	35330
12	mental distress.mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes]	342
13	anxiety.mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes]	15769
14	depression.mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes]	34753
15	depressive disorder*.mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes]	2212
16	pregnan*.mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes]	116254
17	antenatal.mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes]	14450

18	developing countr*.mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes]	888013
19	low-middle income countr*.mp. [mp=abstract, title, original title, broad terms, heading words, identifiers, cabicodes]	225
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21	4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14 or 15	66973
22	16 or 17	119783
23	18 or 19	888086
24	20 and 21 and 22 and 23	258

Maternity and Infant care

Number	Keywords	Hits
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4	psychological wellbeing.mp. [mp=abstract, heading word, title]	57
5	psychological disorder.mp. [mp=abstract, heading word, title]	11
6	psychological illness.mp. [mp=abstract, heading word, title]	4
7	psychological distress.mp. [mp=abstract, heading word, title]	392
8	psychological health.mp. [mp=abstract, heading word, title]	2
9	mental health problem.mp. [mp=abstract, heading word, title]	28
10	mental disorder.mp. [mp=abstract, heading word, title]	85
11	mental illness.mp. [mp=abstract, heading word, title]	458
12	mental distress.mp. [mp=abstract, heading word, title]	42
13	anxiety.mp. [mp=abstract, heading word, title]	3995
14	depression.mp. [mp=abstract, heading word, title]	7285
15	depressive disorder*.mp. [mp=abstract, heading word, title]	301
16	pregnan*.mp. [mp=abstract, heading word, title]	109476
17	antenatal.mp. [mp=abstract, heading word, title]	20561

18	prenatal.mp. [mp=abstract, heading word, title]	21347
19	developing countr*.mp. [mp=abstract, heading word, title]	12768
20	low-middle income countr*.mp. [mp=abstract, heading word, title]	46
21	1 or 2 or 3	32108
22	4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 or 14 or 15	10106
23	16 or 17 or 18	118792
24	19 or 20	12804
25	21 and 22 and 23 and 24	42

Scopus

Keywords	Hits
(assessment OR screening OR enquiry AND mental AND health AND wellbeing OR psychological AND distress OR mental AND distress OR mental AND health AND problem OR mental AND disorder OR psychological AND disorder OR psychological AND distress OR depression AND pregnancy AND developing AND country)	26

ASSIA

Keywords	Hits
ab(assessment of screening practices) AND ab(psychological) OR ab(mental health) OR ab(anxiety OR anxiety disorder OR anxiety symptoms) OR ab(depressi*) AND ab(pregnan*) AND ab(developing countr* OR low-middle income countr*)	122

Appendix C

Criteria for quality of the paper appraisal

Hawker, S. et al. 2002. Appraising the evidence: Reviewing disparate data systematically. *Qualitative Health Research.* **12**(9), pp. 1284-1299.

1. Abstract and title: Did they provide a clear description of the study?

Good	: Structured abstract with full information and clear title.
Fair	: Abstract with most of the information.
Poor	: Inadequate abstract.
Very	: Poor No abstract.

2. Introduction and aims: Was there a good background and clear statement of the aims of the research?

Good	: Full but concise background to discussion/study containing up-to-date literature review and highlighting gaps in knowledge. Clear statement of aim AND objectives including research questions.
Fair	: Some background and literature review. Research questions outlined.
Poor	: Some background but no aim/objectives/questions, OR Aims/objectives but inadequate background.
Very Poor	: No mention of aims/objectives.

3. Method and data: Is the method appropriate and clearly explained?

Good	: Method is appropriate and described clearly (e.g., questionnaires included). Clear details of the data collection and recording.
Fair	: Method appropriate, description could be better. Data described.
Poor	: Questionable whether method is appropriate. Method described inadequately. Little description of data.
Very Poor	: No mention of method, AND/OR method inappropriate, AND/OR No details of data.

4. Sampling: Was the sampling strategy appropriate to address the aims?

Good	: Details (age/gender/race/context) of who was studied and how they were recruited. Why this group was targeted. The sample size was justified for the study. Response rates shown and explained.
Fair	: Sample size justified. Most information given, but some missing.
Poor	: Sampling mentioned but few descriptive details.
Very Poor	: No details of sample.

5. Data analysis: Was the description of the data analysis sufficiently rigorous?

Good : Clear description of how analysis was done.

Qualitative studies: Description of how themes derived/ respondent validation or triangulation.

Quantitative studies: Reasons for tests selected hypothesis driven/ numbers add up/statistical significance discussed.

Fair : Qualitative: Descriptive discussion of analysis.

Quantitative.

Poor : Minimal details about analysis.

Very Poor : No discussion of analysis.

6. Ethics and bias: Have ethical issues been addressed, and what has necessary ethical approval gained? Has the relationship between researchers and participants been adequately considered?

Good : Ethics: Where necessary issues of confidentiality, sensitivity, and consent were addressed. Bias : Researcher was reflexive and/or aware of own bias.

Fair : Lip service was paid to above (i.e., these issues were acknowledged).

Poor : Brief mention of issues.

Very Poor : No mention of issues.

7. Results: Is there a clear statement of the findings?

Good : Findings explicit, easy to understand, and in logical progression.

Tables, if present, are explained in text.

Results relate directly to aims.

Sufficient data are presented to support findings.

Fair : Findings mentioned but more explanation could be given.

Data presented relate directly to results.

Poor : Findings presented haphazardly, not explained, and do not progress logically from results.

Very Poor : Findings not mentioned or do not relate to aims.

8. Transferability or generalizability: Are the findings of this study transferable (generalizable) to a wider population?

Good : Context and setting of the study is described sufficiently to allow comparison with other contexts and settings, plus high score in

Question 4 (sampling).

Fair : Some context and setting described, but more needed to replicate

or compare the study with others, PLUS fair score or higher in

Question 4.

Poor : Minimal description of context/setting.

Very Poor : No description of context/setting.

9. Implications and usefulness: How important are these findings to policy and practice?

Good : Contributes something new and/or different in terms of understanding/insight or perspective.

Suggests ideas for further research.

Suggests implications for policy and/or practice.

Fair : Two of the above (state what is missing in comments).

Poor : Only one of the above.

Very Poor : None of the above.

Appendix D

Reviewed papers

No	Paper	Aim	Sample and Setting	Design	Instruments	Findings	Conclusion/ Comments	Score
1	Rashid et al. (2017) Poor social support as a risk factor for antenatal depressive symptoms among women attending public antennal clinics in Penang, Malaysia.	To determine the risk of antenatal depressive symptoms due to poor social support.	3000 pregnant women from 20 selected health clinics in Malaysia	A cross-sectional study	EPDS ≥12 and Oslo-3 Social Support Scale (OSS-3)	The prevalence of depressive symptoms was 20%. Social support was found to be significantly associated with depressive symptoms.	The research did not consider the respondents based on their gestational age and parity of which might affect support given to the women.	30
2	Biratu et al. (2015) Prevalence of antenatal depression (AND) and associated factors among pregnant women in Addis Ababa, Ethiopia: a cross-sectional study.	To determine the prevalence of antenatal depression and associated factors amongst pregnant women in Addis Ababa, Ethiopia.	393 pregnant women attending antenatal care service in Addis Ababa 6 selected public health centres, Ethiopia	A cross-sectional study	EPDS cut off score ≥13	Prevalence of AND was 24.94%. History of depression, unplanned pregnancy and poor support from baby's father were associated of antenatal depression.	Respondents mostly have low socioeconomic status, hence the result are more likely to be representative in certain population.	31
3	Al Azri et al. (2016) Prevalence and Risk Factors of Antenatal Depression among Omani Women in a	To identify the prevalence of antenatal depression and the risk factors associated with its development	959 Pregnant women ≥ 32 gestational weeks in primary healthcare	Descriptive cross-sectional study	EPDS cut-off score≥13	24.3% of pregnant women were found to have AND. AND was significantly associated with unplanned	Only included pregnant women in the third trimester without explaining the reason. Meanwhile, AND could be experienced	31

	Primary Care Setting.	amongst Omani women.	centres in Muscat			pregnancies and marital conflict.	by pregnant women at any time during pregnancy.	
4	Rahman et al. (2007) Outcome of prenatal depression and risk factors associated with persistence in the first postnatal year: prospective study from Rawalpindi, Pakistan.	To identify factors predicting the persistence of prenatal depression beyond the first few postnatal months.	701 women and 129 women completed follow-up from a rural sub-district of Pakistan	Prospective study	Schedules for Clinical Assessment in Neuropsychiatry (SCAN for mental state assessment; Psychological symptoms were assessed using Self-Reporting Questionnaire (SRQ-20), Disability was assessed using Brief Disability Questionnaire (BDQ), brief life events and difficulties were assessed adopted from LEDS	56% women were depressed at all points of assessment. Persistent depression was significantly associated with poverty, having more than 5 children, uneducated husband and poor social support/ lack of confidant relationship.	This is a population-based study. Only include women in rural sub-district. Hence the result are more likely to be representative in certain population.	32

5	Babu et al. (2018) Sociodemographic and medical risk factors associated with antepartum depression.	To estimate the prevalence of antenatal mental distress and the correlation of sociodemographic, obstetric factors, and physiological wellbeing in pregnant women attending public health facilities in Bengaluru, South India.	823 pregnant women in two public referral hospitals.	Cohort study	Kessler Psychological Distress (K-10 scale) to assess maternal depression. Cut-off score ≥20	8.7% of the women exhibited symptoms of antenatal depression. Sociodemographic characteristics: respondents' occupation, husband's education, husband's occupation, total family income showed significance to associate with antenatal depression. First time pregnancy, anaemia, and high blood pressure were also associated with mental distress.	Study was conducted in referral hospitals thus it the number of prevalence results might have been influenced by the condition of the women.	30

6	Baron et al. (2015) Patterns of use of a maternal mental health service in a low-resource antenatal setting in South Africa.	To investigates whether pregnant women's patterns of use of a counselling service at a primary level obstetric facility are associated with demographics, severity and risk of depressive symptoms.	3311 pregnant women were screened in their antenatal booking visit	A prospective study	EPDS cutoff score ≥13 and Risk Factors Assessment (RFA)	Gestation, age, higher EPDS score and having more than three risk factors are associated with women's patterns in accepting and attending counselling. Risk factor assessment score were associated with screening positive on the EPDS.	This study revealed that younger women tend to refuse to accept the offer for counselling. Further research is needed.	32
7	Castro et al. (2016) Provider report of the existence of detection and care of perinatal depression: quantitative evidence from public obstetric units in Mexico.	To provide evidence on perinatal mental health- care in Mexico.	211 public obstetric unit	A cross-sectional study	NA	Over half (64.0%) of units offer mental healthcare; fewer offer perinatal depression (PND) detection (37.1%) and care (40.3%). More units had protocols/ guidelines for PND detection and for care, respectively, in Mexico City-Mexico state (76.7%; 78.1%) than in Southern (26.5%; 36.4%), Northern (27.3%;	The study potential to have bias as data collection was only through asking the unit chief. It did not explore the actual services.	21

						28.1%) and Central Mexico (50.0%; 52.7%).		
8	Faisal-Cury et al. (2009) Common mental disorders during pregnancy: prevalence and associated factors among low-income women in São Paulo, Brazil.	To estimate the prevalence of common mental disorders (CMD) and factors associated with these disorders among pregnant women of low socio-economic status (SES) in São Paulo.	831 women in their 20th to 30th weeks of pregnancy	A cross-sectional study	The Clinical Interview Schedule - Revised Version (CIS-R) ≥12	The prevalence of CMD was 20.2%. Age at current pregnancy and at first delivery, current obstetric complications, not having friends in the community, living in a crowded household, lower occupational status and history of previous psychiatric treatment were all independently associated with increased prevalence of CMD.	The assessment of psychiatric status was made at only one point in time during pregnancy, raising questions as to whether the observed symptoms started before or remained unchanged during pregnancy.	26
9	Faisal-Cury et al. (2017) Unplanned pregnancy and risk of maternal depression: secondary data analysis from a prospective pregnancy cohort.	To evaluate the relationship between unplanned pregnancy (UP) and maternal depression (MD).	701 women	Secondary analysis of prospective cohort study	Self-Reported Questionnaire (SRQ) > 7	Women with UP had 2.5 more risk of being depressed during both assessments (during pregnancy and postpartum) when compared to women with a	There was a risk for recall bias as depressed women tend to evaluate their pregnancy intention differently from women without depression.	30

						planned pregnancy. In the adjusted models, women with UP were significantly more likely to have persistent depression.		
10	Ferri et al. (2007) The impact of maternal experience of violence and Common Mental Disorders (CMDs) on neonatal outcomes: a survey of adolescent mothers in Sao Paulo, Brazil.	To investigate the independent and interactive effects of maternal exposures upon neonatal outcomes amongst pregnant adolescents in a disadvantaged population from Sao Paulo, Brazil.	930 pregnant teenagers	A cross-sectional study	Violence was assessed using the Californian Perinatal Assessment. Mental illness was measured using the Composite International Diagnostic Interview (CIDI)	Lifetime violence was strongly associated with CMDs. Violence during pregnancy and threat of physical violence and any CMDs (as well as depression, anxiety and PTSD separately) were independently associated with low birth weight.	The study did not explain the recruitment procedures and how the respondents were approached.	24
11	Humayun et al. (2013) Antenatal depression and its predictors in Lahore, Pakistan.	To determine the prevalence and risk factors for antenatal depression among women attending for antenatal care at an urban	506 pregnant women	A cross-sectional study	EPDS using cut-off score ≥10	53 (10.5%) scored 10–12 and 327 (64.6%) had EPDS scores > 12. Depression scores (≥ 10) were more common in mothers aged < 20 years (93.7%) than	Lack of information about the context of the study. Did not mention about the recruitment process of the respondent. The relations between researcher and respondents was	27

		tertiary care hospital in Lahore, Pakistan.				those aged > 35 years (55.0%). Fear of childbirth and separation from husband were identified as significant risk factors for developing antenatal depression, while family history of psychiatric illness was significant protective factor.	not adequately considered.	
12	Iheanacho et al. (2015) Integrating mental health screening into routine community maternal and child health activity: experience from prevention of mother-to-child HIV transmission (PMTCT) trial in Nigeria.	To determine the feasibility and acceptability of integrating mental health screening into an existing community-based program for prevention of mother-to-child transmission of HIV targeted at pregnant	4747 pregnant women and their partner	Pilot study of a programme	General Health Questionnaire (GHQ-12)	Overall, 21.7 % of the respondents scored above the threshold of 11 indicating significant psychological distress, with women having significantly higher scores than men.	The absence of a formal evaluation of the health advisors' competence in administering the survey.	28

		women and their male partners.						
13	Iranfar et al. (2005) Is unintended pregnancy a risk factor for depression in Iranian women? (Special issue: Maternal and child health).	to determine the association between unintended pregnancy and prenatal and postpartum depression in women in Kermanshah city, Islamic Republic of Iran.	163 pregnant women	prospective study	BDI cut-off score >10	Women with unintended pregnancy were more depressed during their pregnancy and postpartum period.	The measurement was conducted at the 3rd trimester and within 10 days after the childbirth which in many studies. Women were found to experience mood variations due to the childbirth and role changes.	20
14	Karmaliani et al. (2009) Prevalence of anxiety, depression and associated factors among pregnant women of Hyderabad, Pakistan.	To determine the prevalence of anxiety and depression and evaluate associated factors, including domestic violence, among pregnant women in an urban community in Pakistan.	1368 pregnant women	prospective observational study	Aga Khan University Anxiety Depression Scale (AKUADS) cut-off score≥13	Eighteen per cent of the women were anxious and/or depressed. Psychological distress was associated with husband's unemployment, lower household wealth, having 10 or more years of formal education, a first and an unwanted pregnancy. The strongest factors associated with depression/ anxiety	As the form of domestic violence are categorised into several types, the researcher only grouped the DV measurement in to 3 types; no abuse, verbal abuse only, physical and/or sexual abuse. There are other types of abuse, such as economic abuse and emotional abuse.	30

						were physical/sexual and verbal abuse.		
15	Lovisi et al. (2005) Poverty, violence and depression during pregnancy: a survey of mothers attending a public hospital in Brazil.	To identify the prevalence and risk factors for depression during pregnancy, in particular the association with poverty and violence, in a Brazilian setting.	230 pregnant women	A cross-sectional study	Composite International Diagnostic Interview (CIDI) for major depression and Krause-Markides Index to assess social support	The 12-month prevalence of depression was 19.1%. On multivariate analyses, having been educated beyond primary school was protective. Risk factors were: being divorced or widowed; a history of depression before pregnancy; loss of an intimate relationship, experienced financial difficulties and having been exposed to violence in the previous year.	No information provided on how the respondents were approached by the researcher. The study was conducted at the 3rd trimester, however, the prevalence of depression was assessed within the previous 12 months.	30

16	Lukose et al. (2014) Nutritional factors associated with antenatal depressive symptoms in the early stage of pregnancy among urban South Indian women.	To assess the prevalence of antenatal depressive symptoms in early pregnancy, and to identify the demographic and nutritional factors associated with these symptoms in a sample of urban South Indian pregnant women.	365 pregnant women in their first trimester	A cross-sectional study	Kessler Psychological Distress (K-10 scale) to assess pregnant women depression. Cut of ≥6	The presence of antenatal depressive symptoms in the first trimester were positively associated with vomiting, prevalence ratio and negatively with anaemia. Nutrient intakes, serum vitamin B12, methyl-malonic acid, homocysteine and red cell folate levels were not associated with measures of depression.	The researcher did not adjust other possible cofounding variables, e.g.: history of mental health problems in the family or previous perinatal depression.	30

17	Mahenge et al. (2015) The prevalence of mental health morbidity and its associated factors among women attending a prenatal clinic in Tanzania.	To establish the prevalence of symptoms of anxiety, depression, and post-traumatic stress disorder (PTSD) among women attending prenatal care in Tanzania, and identify associated factors.	1180 pregnant women	A cross-sectional study	The Hopkins Symptoms Checklist (HSCL-25) cut-off point 1.06 and The Post-Traumatic Stress Disorder (PTSD) Diagnostic Scale which categorised into: none, mild (1-10), moderate (11-20), moderate to severe (21-30) and severe (36-51)	905 (76.7%) had symptoms of anxiety, 923 (78.2%) had symptoms of depression, and 58 (4.9%) had moderate/severe PTSD symptoms. After adjustment for women's sociodemographic characteristics, age of the woman and their partner, educational level of the woman and their partner, relationship duration, employment, and marital status were associated with symptoms of at least one of the three mental disorders.	No information provided on how to recruit and approach the participants. Consent to involve in the study only obtained verbally.	27

18	Malqvist et al. (2016) Screening for antepartum depression through community health outreach in Swaziland.	To measure the burden of antepartum depression and identify risk factors among women in a peri urban community in Swaziland.	1038 pregnant women in the third trimester	A cross-sectional study	EPDS cut-off score ≥13	Depression was not associated with HIV status, age or employment status. However, women with multiple socioeconomic stressors were found to be more likely to have higher EPDS score.	No formal ethic or written approval obtained.	27
19	Manikkam et al. (2012) Antenatal depression and its risk factors: an urban prevalence study in KwaZulu-Natal.	To determine the prevalence and risk factors associated with antenatal depressive symptoms in a KwaZulu-Natal population.	387 pregnant women	A cross-sectional study	EPDS cut-off score≥13	Of the participants, 149 (38.5%) suffered from depression and 38.3% had thought of harming themselves in the preceding 7 days. Risk factors for depression included HIV sero-positivity (p=0.02), a prior history of depression (p=0.02), recent thoughts of self-harm (p<0.000), single marital status (p=0.04) and unplanned	No information on how the researcher approach the respondents. Direct approach may cause the women felt being coerced, criteria for sampling can be explained better.	28

						pregnancy (p=0.01).		
20	Manzolli et al. (2010) Violence and depressive symptoms during pregnancy: a primary care study in Brazil.	To estimate the prevalence of violence, depressive symptoms, and associated factors during pregnancy in women attending antenatal care in Brazil.	627 pregnant women	A cross-sectional study	Violence was assessed using a modified version of the abuse assessment screen (ASS), and depressive symptoms were evaluated using the primary care evaluation of mental disorders (PRIME-MD) cut-off score ≥6.	The presence of depressive symptoms during pregnancy was associated with low educational levels, living in a household with five or more people, and with higher consumption of alcohol during pregnancy. 27.8% respondents showed depressive symptoms.	The author did not consider about the relationship between researcher and respondents. No detail about the instrument (ASS) which was used to measure violence. The discussion could be explained better.	22

21	Ghaffar et al. (2017) Frequency and predictors of anxiety and depression among pregnant women attending tertiary healthcare institutes of Quetta City, Pakistan.	To find out the frequency and predictors of anxiety and depression among pregnant women attending a tertiary healthcare institutes in the city of Quetta, in the Balochistan province, Pakistan.	750 pregnant women	A cross-sectional study	Hospital Anxiety and Depression Scale (HADS)	Age was highlighted as a predictor of Anxiety and Depression in pregnancy.	Involving participants aged 15 years but the paper did not mention about the researcher consideration of the respondents as children/ teenager. Research in children/ teenager should consider the ethical aspect regardless the cultural differences, i.e.: obtaining the approval from the parents.	30

22	Mathibe-Neke et al. (2014) The perception of midwives regarding psychosocial risk assessment during antenatal care.	To explore and describe the perception of psychosocial risk assessment and psychosocial care by midwives providing antenatal care to pregnant women.	16 midwives divided in to three focus groups	An interpretive and descriptive qualitative approach	FGD with interview guide with an open-ended questions	The study revealed that midwives are aware of the high prevalence of psychosocial problem in the pregnancy period and the importance of psychosocial care for women. However they were ill-prepared to provide care and support.	This is a qualitative case study. Data collection was gained through focus group discussions which all participants knew each other. The credibility can be improved through one-to-one in-depth interview to assure that the participants' perception did not influenced by their colleagues. Themes selection could be better developed.	30
23	Pereira et al. (2009) Depression during pregnancy: prevalence and risk factors among women attending a public health clinic in Rio de Janeiro, Brazil.	To estimate the prevalence and risk factors for major depression among women receiving prenatal care in a public health clinic in Rio de Janeiro, Brazil.	331 pregnant women	A cross-sectional study	Composite International Diagnostic Interview (CIDI)	The prevalence of depression during pregnancy was 14.2% and AND associated factors included: previous history of depression and any psychiatric treatment, unplanned pregnancy, serious physical illness and casual jobs.	The participants were mostly come from low socioeconomic background. Hence the result are more likely to be representative in certain population.	28

24	Ravele et al. (2015) Contributory Factors to Antenatal Depression as Perceived by Pregnant Women in Vhembe District, Limpopo Province.	To explore factors contributing to antenatal depression as perceived by pregnant women who were discharged from the psychiatric ward at one Hospital at Vhembe district in Limpopo Province.	10 pregnant women	Qualitative approach Exploratory and descriptive	In-depth interview	Socio-economic, obstetric and psychological factors contributes to AND.	This is a qualitative study which revealed the influencing factors of AND based on the women's perspective. The recruitment process was not explained detailed in the paper.	25
25	Tefera et al. (2015) Perinatal depression and associated factors among reproductive aged group women at Goba and Robe Town of Bale Zone, Oromia Region, South East Ethiopia.	To determine the prevalence of perinatal depression and its associated factors among reproductive age group women at Goba and Robe town of Bale zone; Oromia Region, South East Ethiopia.	357 pregnant women and mothers with child aged under 1 year	cross-sectional study	SRQ-20 ≥6	Prevalence of PND was 31.5%. Maternal perceived difficulty of child care, family History of mental illness, family visit during the perinatal period, history of child death and husband smoking status were found as independent predictors of perinatal depression.	The study did not consider the respondents' HIV/AIDS status.	26

26	Bisetegn et al. (2016) Prevalence and predictors of depression among pregnant women in Debretabor Town, Northwest Ethiopia.	to determine prevalence and associated factors with antenatal depression.	527 pregnant women	cross-sectional study	Edinburgh Postnatal Depression Scale (EPDS) cut-off≥12. The List of Threatening Experiences questionnaire (LTE-Q) and the Oslo Social Support Scale (OSS-3) cut-off score <9 for poor or no support.	The prevalence of antenatal depression was found to be 11.8%. Having debt, unplanned pregnancy, history of stillbirth, history of abortion, being in the third trimester of pregnancy, presence of a complication in the current pregnancy, and previous history of depression were factors significantly associated with antenatal depression.	Involved respondent aged 17 years which categorised as children. This should be raised as issues in ethics.	26
27	Mossie et al. (2017) Prevalence of antenatal depressive symptoms and associated factors among pregnant women in Maichew, North Ethiopia: an institution based study.	To assess the magnitude of antenatal depressive symptoms and associated factors among women at Maichew Town, North Ethiopia.	196 pregnant women	A cross-sectional study	Beck Depressive Inventory (BDI) cut-off score ≥14	Prevalence of AND was 31.1%. Pregnant women with low level of income, unmarried and house wives were risk groups for depression.	Only one clinic used in this study hence influence the generalisability of the findings.	30

28	Zhou et al. (2017) Social capital and antenatal depression among Chinese primiparas: a cross-sectional survey.	To examine the prevalence of antenatal depression, and the association between social capital and antenatal depression during the third trimesters of Chinese primiparas.	1471 pregnant women in the 3rd trimester	A cross-sectional study	EPDS cut-off score ≥9 and Social capital Assessment Questionnaire (C-SCAQ)	Pregnant women's antenatal depression was significantly associated with Social Trust, Social Reciprocity (SR), Social Network (SN), and Social Participation (SP). Prevalence of AND was 26.2%.	The paper focussed on social aspect (relationship, capital, trust etc.) on the pregnant women's depression. It also revealed the importance of community participation and social reciprocity in improving pregnant women's psychological health.	29
29	Akcali et al. (2014) Prevalence of depressive disorders and related factors in women in the first trimester of their pregnancies in Erzurum, Turkey.	To examine the prevalence of depression in women in the first trimester of their pregnancies in Erzurum.	463 pregnant women in the 1st trimester	Quantitative study	EPDS (cut off score 12-13) and SCID-I	Depressive disorder rate was 16.8% in the first trimester. History of previous mental illness including during pregnancy, exposure to IPV, unplanned pregnancy and unemployed spouse were predictors for depressive disorder.	EPDS was self-administered. Ethics did not addressed some important issues such as how to approach the participants etc.	28

30	Fadzil et al. (2013) Risk factors for depression and anxiety among pregnant women in Hospital Tuanku Bainun, Ipoh, Malaysia.	To estimate the prevalence of anxiety and depression among pregnant mothers using both screening and clinical interview and to examine the association with socio-demographic and obstetric factors.	175 pregnant women	cross-sectional study	HADS) (cut off score ≥8) and M.I.N.I	The prevalence of anxiety and depression disorders among antenatal mothers using diagnostic clinical interview were 9.1% and 8.6%, respectively. Being unmarried, history of mental illness, gestational age less than 20 weeks, unplanned pregnancy and depressive comorbidity were factors associated with antenatal anxiety. GA less than 20 weeks was a significant factors in depressive disorder.	The study was conducted in tertiary hospitals of which might have influence the prevalence number of AND.	31
31	Couto et al. (2016) Brazil Antenatal depression: Prevalence and risk factor patterns across the gestational period.	To investigate patterns of antenatal depression prevalence and risk factors in a Brazilian sample.	148 pregnant women in the 2nd and 3rd trimester	Quantitative study	MINI as gold standard, EPDS (cut off point ≥11) BDI (cut off score ≥15)	The prevalence of AD using the MINI was 13.5% and 10.1% in the second and third trimester, respectively. History of depressive episode	Most of the respondents were in the 2nd and 3rd trimester and mainly came from the low-income women.	31

						and IPV were remained as risk factors for antenatal depression across the gestational period		
32	Ola et al.(2011) Factors associated with antenatal mental disorder in West Africa: across-sectional survey.	To investigate factors associated with mental illness in a Sub-Saharan setting.	189 pregnant women	Cross-sectional study	SRQ20 and WHO Multi-country Study on Women's Health and Domestic Violence Questions	The rate of mental disorder among pregnant women was 7%. History of domestic violence in the last 12 months and number of previous female children were significantly increase the risk for common mental disorder during pregnancy.	The study have some potential bias, such as selection bias as the women participated in this study was taken from a tertiary/ referral hospital.	27
33	Honikman et al. (2012) South Africa Stepped Care for Maternal Mental Health: A Case Study of the Perinatal Mental Health Project in South Africa.	To evaluate the Perinatal Mental Health Project as a routine programme in public obstetrics facilities in Cape Town.	6347 pregnant women	Programme report	EPDS and RFA	EPDS and RFA were used as universal screening to all pregnant women who have first antenatal booking visit. Women who have EPDS score more than 12 and RFA more than 2, were referred to psychologist to have an counselling	This is a report which evaluate the programme implementation and the feasibility of PMHP in LMIC.	30

						session based on the needs of the women. PHMP enable feasible and acceptable approach to provide mental healthcare at the primary care level for women.		
34	Andajani-Sutjahjo, S et al. (2007) Complex emotions, complex problems: Understanding the experiences of perinatal depression among new mothers in Urban Indonesia.	To explore how Javanese women identify and speak of symptoms of depression in late pregnancy and early postpartum and describe their subjective accounts of mood disorders.	41 pregnant women and postpartum women who scored 12/13 on the EPDS	Qualitative study	EPDS and in-depth interview	Women attributed their mood variations to multiple causes including: premarital pregnancy, chronic illness in the family, marital problems, lack of support from partners or family networks, their husband's unemployment, and insufficient family income due to giving up their own paid work.	The only qualitative paper that was found in Indonesia and it revealed the possible factors which influence women's psychological health in their perinatal period.	30
35	Lee at al. (2007) Prevalence, course and risk factors for antenatal anxiety and depression	To estimate the prevalence and course of antenatal anxiety and depression across different	357 pregnant women	A prospective longitudinal design	EPDS and HADS	More than one half (54%) and more than one third (37.1%) of the women had antenatal anxiety and	Risk factors were slightly different at different stages. It reveals the uniqueness of mental health problems in pregnancy that no	29

		stages of pregnancy, risk factors at each stage, and the relationship between antenatal anxiety and depression and postpartum depression.				depressive symptoms, respectively, in at least one antenatal assessment. Anxiety was more prevalent than depression at all stages. A mixed-effects model showed that both conditions had a nonlinear changing course (P<.05 for both), with both being more prevalent and severe in the first and third trimesters. Young age as associated factor of A&D, history of drinking, lower self-esteem. UP significant predictor of depression in 1st trimester. Marital satisfaction and social support also associated with A&D.	single factor could trigger mental health problems during pregnancy.	

Appendix E

Critical appraisal results

No	Author	1. Abstract and title	2. Introduction and aims	3. Method and data	4. Sampling	5. Data analysis	6. Ethics and bias	7. Findings/ results	8. Transferability/ generalizability	9. Implications and usefulness	Score
1	Rashid et al. (2017)	4	4	4	3	3	2	4	3	3	30
2	Biratu et al. (2015)	4	3	4	4	4	2	4	3	3	31
3	Al Azri et al. (2015)	4	4	4	3	4	2	4	3	3	31
4	Rahman et al. (2007)	4	4	4	3	4	2	4	3	4	32
5	Babu et al. (2018)	4	4	4	2	4	2	4	3	3	30
6	Baron et al. (2015)	4	4	4	3	3	2	4	4	4	32
7	Casto et al (2015)	3	3	2	3	2	1	3	2	2	21
8	Faisal-Cury et al. (2009)	4	3	4	2	3	1	4	2	3	26
9	Faisal-Cury et al. (2017)	4	4	3	3	4	1	4	3	4	30
10	Ferri et al. (2007)	4	3	4	2	2	1	3	2	3	24

11	Humayun et al. (2013)	4	4	3	3	2	1	4	3	3	27
12	Iheanacho et al. (2015)	3	4	4	3	2	1	4	3	4	28
13	Iranfat et al. (2005)	2	2	3	2	2	1	3	2	3	20
14	Karmaliani et al. (2009)	4	4	3	3	3	3	3	3	4	30
15	Lovisi et al. (2005)	4	3	3	3	4	2	4	3	4	30
16	Lukose et al. (2014)	4	4	3	3	3	3	3	3	4	30
17	Mahenge et al. (2015)	4	2	3	2	4	1	4	2	3	25
18	Malqvist et al. (2016)	3	3	3	3	3	3	3	2	4	27
19	Manikkam et al. (2012)	3	4	3	3	4	2	3	2	4	28
20	Manzolli et al. (2010)	3	2	2	2	3	2	3	2	3	22
21	Ghaffar et al. (2017)	4	4	3	3	4	1	4	3	4	30
22	Mathibe-Neke et al. (2014)	4	4	2	3	4	3	3	3	4	30

23	Pereira et al. (2009)	3	3	4	3	4	2	3	2	4	28
24	Ravele et al. (2015)	4	3	3	2	2	2	3	2	4	25
25	Tefera et al. (2015)	3	3	3	3	3	3	2	3	3	26
26	Bisetegn et al. (2016)	4	4	3	2	3	2	3	2	3	26
27	Mossie et al. (2017)	4	4	3	3	2	4	4	3	3	30
28	Zhou et al. (2017)	3	3	3	4	3	2	4	3	4	29
29	Akcali et al. (2014)	3	3	4	3	3	1	4	3	4	28
30	Fadzil et al. (2013)	4	4	4	3	3	2	4	3	4	31
31	Couto et al. (2016)	4	3	4	3	4	2	4	3	4	31
32	Ola et al.(2011)	4	3	3	3	3	2	3	2	4	27
33	Honikman et al. (2012)	4	3	3	2	4	2	4	4	4	30
34	Andajani-Sutjahjo et al. (2007)	3	3	3	3	4	3	4	3	4	30
35	Lee at al. (2007)	3	3	3	3	3	3	4	3	4	29

Appendix F

Interview Guide

In-depth Interview Topic Guide

Participants	Topic Guide
Healthcare *Professionals*	Healthcare professionals' practice and experience in pregnant women's psychological health assessment Healthcare professionals' practice and experience in pregnant women with mental health problems Healthcare professionals' perception in pregnant women's psychological health assessment during routine antenatal care visit Healthcare professionals' recognition of mental health problems in pregnancy and their attitudes towards supporting women Healthcare professionals' understanding and perception of their role and responsibility in perinatal mental health The factors that might facilitate or act as barriers to healthcare professionals to provide effective perinatal mental health service Healthcare professionals' educational needs in supporting women with mental health problems
Pregnant Women	Women's experience in psychological health assessment during antenatal booking visit Women's perception in psychological health assessment during antenatal booking visit Women's perception in mental health problem during pregnancy and perinatal period Women's psychological needs during pregnancy that should be provided by healthcare professionals The factors that might facilitate or act as barriers to women for disclosing their feeling and needs Women's expectation towards their healthcare providers

Appendix G

Spradley (1980) Descriptive Question Matrix observation sheet

	SPACE	OBJECT	ACT	ACTIVITY	EVENT	TIME	ACTOR	GOAL	FEELING
SPACE	**Can you describe in detail all the *places*?**	What are the ways space is organized by objects?	What are the ways space is organized by acts?	What are the ways space is organized by activities?	What are the ways space is organized by events?	What spatial changes occur over time?	What are all the ways space is used by actors?	What are all the ways space is related to goals?	What places are associated with feelings?
OBJECT	Where are objects located?	**Can you describe in detail all the *objects?***	What are all the ways objects are used in acts?	What are all the ways objects are used in activities?	What are all the ways that objects are used in events?	How are objects used at different times?	What are all the ways objects are used by actors	How are objects used in seeking goals?	What are all the ways objects evoke feelings?
ACT	Where do acts occur?	How do acts in-corporate the use of objects?	**Can you describe in detail all the *acts*?**	How are acts a pat of activities?	How are acts a part of events?	How do acts vary over time?	What are all the ways acts are performed by actors?	What are all the ways acts are related to goals?	What are all the ways acts are linked to feelings?
ACTIVITY	What are all the places activities occur?	What are all the ways activities incorporate objects?	What are all the ways activities incorporate acts?	**Can you describe in detail all the activities?**	What are all the ways activities are part of events?	How do activities vary at different times?	What are all the ways activities involve actors?	What are all the ways activities involve goals?	How do activities involve feelings?
EVENT	What are all the places events occur?	What are all the ways activities incorporate objects?	What are all the ways events incorporate acts?	What are all the ways events incorporate activities?	**Can you describe in detail all the *events*?**	How do events occur over time? Is there any sequencing?	How do events involve the various actors?	How are events related to goals?	How do events involve feelings?
TIME	Where do time periods occur?	What are all the ways time affects object?	How do acts fail into time periods?	How do activities fall into time periods?	How do events fall into time periods?	**Can you describe in detail all the *time periods*?**	When are all the times actors are “on stage”?	How are goals related to time periods?	When are feelings evoked?
ACTOR	Where do actors place themselves?	What are all the ways actors use objects?	What are all the ways actors use acts?	How are actors involved in activities?	How are actors involved in events?	How do actors change over time or at different times?	**Can you describe in detail all the *actors*?**	Which actors are linked to which goals?	What are the feelings experienced by actors?
GOAL	Where are goals sought and achieved?	What are all the ways goals involve use of objects?	What are all the ways goals involve acts	What activities are goal seeking or linked to goals?	What are all the ways events are linked to goals?	Which goals are scheduled for which times?	How do the various goals affect the varius actors?	**Can you describe in detail all the *goals*?**	What are all the ways goals evoke feelings?
FEELING	Where do the various feeling states occur?	What feelings lead to the use of what objects?	What are all the ways feelings affect acts?	What are all the ways feelings affect activities?	What are all the ways feelings affect events?	How are feelings related to various time periods?	What are all the ways feelings involve actors?	What are the ways feelings influence goals?	**Can you describe in detail all the *feelings*?**

Appendix H

Ethical Approval from School Healthcare Research Ethics Committee (SHREC)

Faculty of Medicine and Health

Research Office

University of Leeds
Worsley Building
Clarendon Way
Leeds LS2 9NL
United Kingdom

✆ +44 (0) 113 343 31642

UNIVERSITY OF LEEDS

26 August 2016

Ms Cesa Septiana Pratiwi
PhD student
School of Healthcare
Faculty of Medicine and Health
School of Healthcare
Post Graduate Research Suite
Baines Wing
University of Leeds
LEEDS LS2 9JT

Dear Cesa

Ref no: HREC15-058

Title: Healthcare Professionals' Assessment of Pregnant Women's Mental Health Wellbeing in Indonesia: A Qualitative Case Study

Thank you for submitting your documentation for the above project. Following review by the School of Healthcare Research Ethics Committee (SHREC), I can confirm a favourable ethical opinion based on the documentation received at date of this letter:

Document Received	*Version*	*Date Submitted*
Ethical_Review_Form	2.0	24/08/2016
Consent Form – Observation for Healthcare Professionals and Women	2.0	29/07/2016
Consent Form – Interviews for Healthcare Professionals and Women	2.0	29/07/2016
Participant Information Sheet for Healthcare Professionals	2.0	29/07/2016
Participant Information Sheet for Women	2.0	29/07/2016
Distress Protocol	1.0	10/05/2016
CPratiwi_Fieldwork_RA	1.0	10/05/2016
CPratiwi_Lone_working_RA	1.0	10/05/2016
Bantul_Approval	1.0	29/07/2016
Sleman_approval	1.0	29/07/2016
Invitation Poster	1.0	29/07/2016
Invitation leaflet	1.0	29/07/2016

Please notify the committee if you intend to make any amendments to the original research as submitted at date of this approval. This includes recruitment methodology and all changes must be ethically approved prior to implementation. Please contact the Faculty Research Ethics Administrator for further information FMHUniEthics@leeds.ac.uk

Ethical approval does not infer you have the right of access to any member of staff or student or documents and the premises of the University of Leeds. Nor does it imply any right of access to the premises of any other organisation, including clinical areas. The SHREC takes no responsibility for you gaining access to staff, students and/or premises prior to, during or following your research activities.

Please note: You are expected to keep a record of all your approved documentation, as well as documents such as sample consent forms, and other documents relating to the study. This should be kept in your study file, and may be subject to an audit inspection. If your project is to be audited, you will be given at least 2 weeks notice.

It is our policy to remind everyone that it is your responsibility to comply with Health and Safety, Data Protection and any other legal and/or professional guidelines there may be.

The committee wishes you every success with your project.

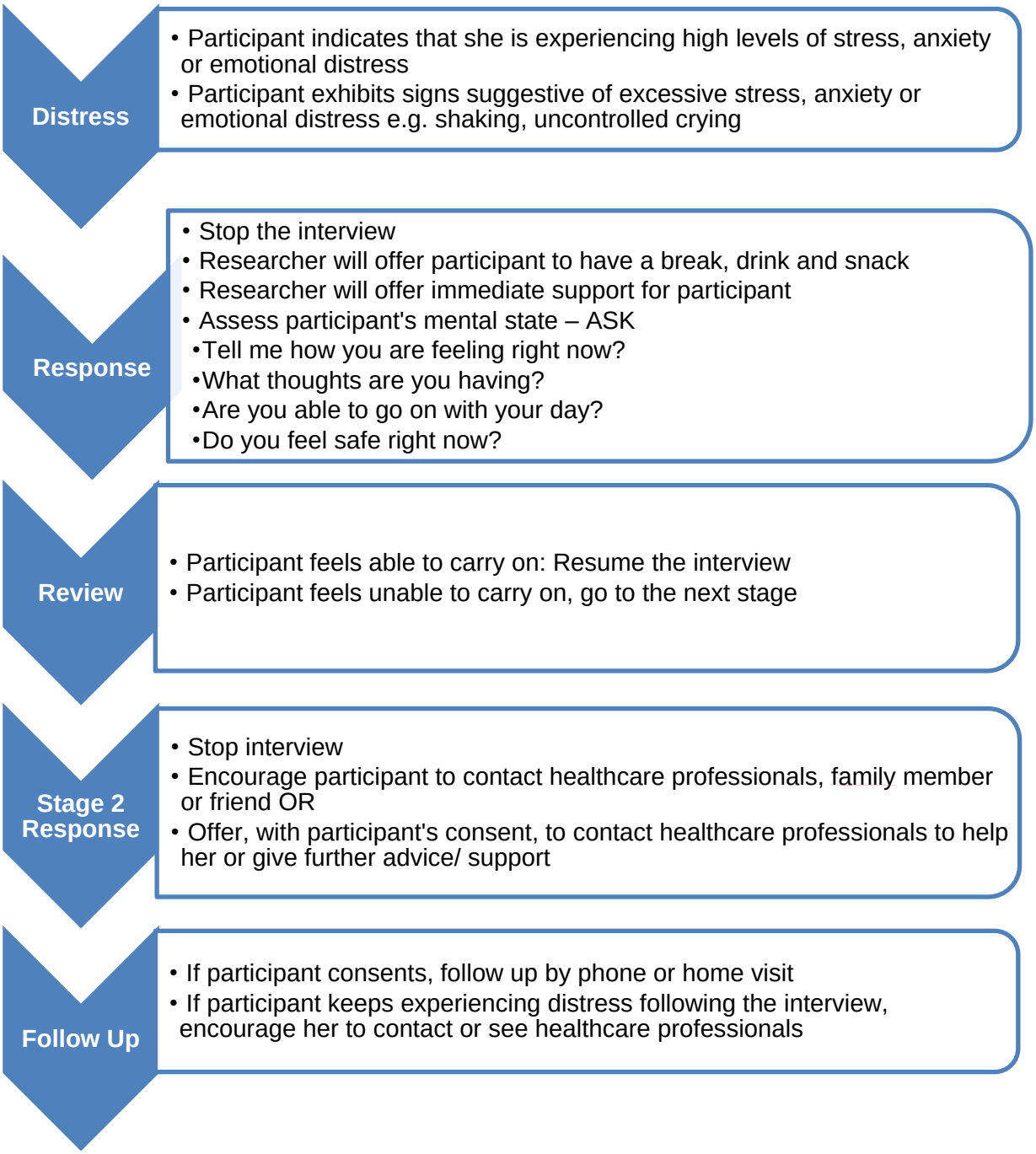
Yours sincerely

Dr Kuldip Bharj, OBE
Chair, School of Healthcare Research Ethics Committee

Appendix I

Distress Protocol: the protocol for managing distress during the one-to-one interview session

Adopted from Draucker, C. B., Martsolf, D. S. and Poole, C. 2009. Developing Distress Protocols for research on Sensitive Topics. *Archives of Psychiatric Nursing.* **23**(5) pp 343-350 and Haigh, C. & Witham, G. Distress Protocol for Qualitative data collection. 2015. Manchester Metropolitan University.



Appendix J

Research Approval from Regional Planning and Development Board

PEMERINTAH KABUPATEN BANTUL
BADAN PERENCANAAN PEMBANGUNAN DAERAH
(B A P P E D A)
Jln.Robert Wolter Monginsidi No. 1 Bantul 55711, Telp. 367533, Fax. (0274) 367796
Website: bappeda.bantulkab.go.id Webmail: bappeda@bantulkab.go.id

SURAT KETERANGAN/IZIN
Nomor : 070 / Reg / 2589 / S3 / 2016

Menunjuk Surat : Dari : Universitas Aisyiyah Yogyakarta (UNISA) Nomor : 356/UNISAYOGYA/Ad/V/2016
Tanggal : 30 Mei 2016 Perihal : **Permohonan Ijin Penelitian**

Mengingat :
a. Peraturan Daerah Nomor 17 Tahun 2007 tentang Pembentukan Oganisasi Lembaga Teknis Daerah Di Lingkungan Pemerintah Kabupaten Bantu sebagaimana telah diubah dengan Peraturan Daerah Kabupaten Bantul Nomor 16 Tahun 2009 tentang Perubahan Atas Peraturan Daerah Nomor 17 Tahun 2007 tentang Pembentukan Oganisasi Lembaga Teknis Daerah Di Lingkungan Pemerintah Kabupaten Bantul;
b. Peraturan Gubernur Daerah Istimewa Yogyakarta Nomor 18 Tahun 2009 tentang Pedoman Pelayanan Perijinan, Rekomendasi Pelaksanaan Survei, Penelitian, Pengembangan, Pengkajian, dan Studi Lapangan di Daerah Istimewa Yogyakarta;
c. Peraturan Bupati Bantul Nomor 17 Tahun 2011 tentang Ijin Kuliah Kerja Nyata (KKN) dan Praktek Lapangan (PL) Perguruan Tinggi di Kabupaten Bantul.

Diizinkan kepada

Nama	:	**CESA SEPTIANA PRATIWI, S.ST., M. MID**
P. T / Alamat	:	**Universitas Aisyiyah Yogyakarta (UNISA) Kampus Terpadu:Jl. Ring Road Barat 63 Mlangi, Nogotirto Gamping Sleman 55292 Daerah Istimewa Yogyakarta**
NIP/NIM/No. KTP	:	**10.09.102**
Nomor Telp./HP	:	**085876166869**
Tema/Judul Kegiatan	:	**PENILAIAN TENAGA KESEHATAN TERHADAP KESEHATAN MENTAL IBU HAMIL DI INDONESIA: STUDI KASUS KUALITATIF**
Lokasi	:	Puskesmas Kretek, Bantul, Yogyakarta
Waktu	:	**25 Juni 2016 s/d 06 September 2016**

Dengan ketentuan sebagai berikut :

1. Dalam melaksanakan kegiatan tersebut harus selalu berkoordinasi (menyampaikan maksud dan tujuan) dengan institusi Pemerintah Desa setempat serta dinas atau instansi terkait untuk mendapatkan petunjuk seperlunya;
2. Wajib menjaga ketertiban dan mematuhi peraturan perundangan yang berlaku;
3. Izin hanya digunakan untuk kegiatan sesuai izin yang diberikan;
4. Pemegang izin wajib melaporkan pelaksanaan kegiatan bentuk *softcopy* (CD) dan *hardcopy* kepada Pemerintah Kabupaten Bantul c.q Bappeda Kabupaten Bantul setelah selesai melaksanakan kegiatan;
5. Izin dapat dibatalkan sewaktu-waktu apabila tidak memenuhi ketentuan tersebut di atas;
6. Memenuhi ketentuan, etika dan norma yang berlaku di lokasi kegiatan; dan
7. Izin ini tidak boleh disalahgunakan untuk tujuan tertentu yang dapat mengganggu ketertiban umum dan kestabilan pemerintah.

Dikeluarkan di : B a n t u l
Pada tanggal : 01 Juni 2016

A.n. Kepala,
Kepala Bidang Data Penelitian dan Pengembangan, u.b. Kasubbid. Litbang

Heny Endrawati, S.P., M.P.
NIP: 197106081998032004

Tembusan disampaikan kepada Yth.
1. Bupati Kab. Bantul (sebagai laporan)
2. Kantor Kesatuan Bangsa dan Politik Kab. Bantul
3. Ka. Dinas Kesehatan Kab. Bantul
4. Ka. Puskesmas Kretek Kab. Bantul
5. Rektor Universitas Aisyiyah Yogyakarta (UNISA)
6. Yang Bersangkutan (Pemohon)

PEMERINTAH KABUPATEN SLEMAN
BADAN PERENCANAAN PEMBANGUNAN DAERAH
Jalan Parasamya Nomor 1 Beran, Tridadi, Sleman, Yogyakarta 55511
Telepon (0274) 868800, Faksimilie (0274) 868800
Website: www.bappeda.slemankab.go.id, E-mail : bappeda@slemankab.go.id

SURAT IZIN

Nomor : 070 / Bappeda / 2491 / 2016

TENTANG
PENELITIAN

KEPALA BADAN PERENCANAAN PEMBANGUNAN DAERAH

Dasar : Peraturan Bupati Sleman Nomor : 45 Tahun 2013 Tentang Izin Penelitian, Izin Kuliah Kerja Nyata, Dan Izin Praktik Kerja Lapangan.

Menunjuk : Surat dari Kepala Kantor Kesatuan Bangsa Kab. Sleman
Nomor : 070/Kesbang/2382/2016 Tanggal : 08 Juni 2016
Hal : Rekomendasi Penelitian

MENGIZINKAN :

Kepada	:
Nama	: CESA SEPTIANA PRATIWI
No.Mhs/NIM/NIP/NIK	: 1009102
Program/Tingkat	: S3
Instansi/Perguruan Tinggi	: Universitas 'Aisyiyah Yogyakarta
Alamat instansi/Perguruan Tinggi	: Jl. Lingkar Barat Mlangi Gamping
Alamat Rumah	: Jl. Arimbi Gumilir Cilacap Jateng
No. Telp / HP	: 085876166869
Untuk	: Mengadakan Penelitian / Pra Survey / Uji Validitas / PKL dengan judul **PENILAIAN TENAGA KESEHATAN TERHADAP KESEHATAN MENTAL IBU HAMIL DI INDONESIA: STUDI KASUS KUALITATIF**
Lokasi	: Puskesmas Mlati Sleman
Waktu	: Selama 3 Bulan mulai tanggal 08 Juni 2016 s/d 07 September 2016

Dengan ketentuan sebagai berikut :

1. *Wajib melaporkan diri kepada Pejabat Pemerintah setempat (Camat/ Kepala Desa) atau Kepala Instansi untuk mendapat petunjuk seperlunya.*
2. *Wajib menjaga tata tertib dan mentaati ketentuan-ketentuan setempat yang berlaku.*
3. *Izin tidak disalahgunakan untuk kepentingan-kepentingan di luar yang direkomendasikan.*
4. *Wajib menyampaikan laporan hasil penelitian berupa 1 (satu) CD format PDF kepada Bupati diserahkan melalui Kepala Badan Perencanaan Pembangunan Daerah.*
5. *Izin ini dapat dibatalkan sewaktu-waktu apabila tidak dipenuhi ketentuan-ketentuan di atas.*

Demikian izin ini dikeluarkan untuk digunakan sebagaimana mestinya, diharapkan pejabat pemerintah/non pemerintah setempat memberikan bantuan seperlunya.

Setelah selesai pelaksanaan penelitian Saudara wajib menyampaikan laporan kepada kami 1 (satu) bulan setelah berakhirnya penelitian.

Dikeluarkan di Sleman
Pada Tanggal : 8 Juni 2016
a.n. Kepala Badan Perencanaan Pembangunan Daerah
Sekretaris
u.b.
Kepala Bidang Statistik, Penelitian, dan Perencanaan

ERNY MARYATUN, S.IP, MT
Pembina, IV/a
NIP 19720411 199603 2 003

Tembusan :
1. Bupati Sleman (sebagai laporan)
2. Kepala Dinas Kesehatan Kab. Sleman
3. Kabid. Sosial & Pemerintahan Bappeda Kab. Sleman
4. Camat Mlati
5. Kepala UPT Puskesmas Mlati 1 & 2
6. Rektor Universitas 'Aisyiyah Yogyakarta
7. Yang Bersangkutan

Appendix K

Information Sheet of Study (for Healthcare Professionals)

Healthcare Professionals' Assessment of Pregnant Women's Psychological health in Indonesia: A Qualitative Case Study

You are being invited to take part in the above named study but before you decide, please read the following information.

What is the purpose of this study?
The purpose of the study is to investigate and explore the assessment of pregnant women's psychological health, from the perspective of healthcare professionals and women in Indonesia, in primary healthcare settings during a routine antenatal booking. It is anticipated that the findings of this study will inform practice and policy of perinatal mental health system in Indonesia.

Who is doing the study?
This study is being undertaken by Mrs Cesa Septiana Pratiwi as part of her PhD studies and is supervised by Dr Janet Hirst and Professor Linda McGowan from the School of Healthcare, University of Leeds.

Why have I been asked to participate?
You have been invited in this study because you are healthcare professional and provide maternity care in primary healthcare and Indonesian resident.

What will be involved if I take part in this study?
If you choose to participate in the study, you will be observed while providing antenatal service during antenatal booking visit as this study aims to explore the real context of pregnant women's mental health assessment. Thus the observation becomes one of procedure for data collection. You also will be invited to one to one in depth interview which will last approximately one hour and will be audio-recorded. The interview aims to investigate your perceptions as healthcare professionals in the ways in which pregnant women's mental health is assessed during a routine antenatal booking visit. The interview will take place in one of rooms of public health centre.

What are the advantages and disadvantages of taking part?
There may not be a direct benefit to you for taking part in this study, but your views will help us understand the issues that are important in changes in shaping health and social services relating to mental health service provided for pregnant women.

Do I have to take part?
It is up to you to decide whether or not to take part in this study. If you do decide to take part you will be given this information sheet to keep and be asked to sign a consent form.

Can I withdraw from the study at any time?
You are free to withdraw at any time before or during the observation and interview without giving a reason. If after or during the observation you decide to withdraw from the study, you may choose to withdraw your data. During the interview you are free to withdraw but you will be offered to choose whether you want to withdraw your data or not, meanwhile after you have an interview you cannot withdraw your data.

Will the information obtained in the study be confidential?
All information obtained from you will be kept strictly confidential. Your name will be removed from the interview transcription, which means only researchers (Dr Janet Hirst, Prof. Linda McGowan and I) may have access to the observation checklist, audio interview, field notes and transcripts for the purpose of verification of transcription and analysis. However, all your personal identifiable details will be removed before granting them access to your data. The digitalised record of your interview will be deleted after transcription and the transcript held in a password protected secure network of the University of Leeds for a period of seven years, after which, it will be securely and irreversibly deleted from the device on which it is stored.

What will happen to the results of the study?
Your responses and that of other participants will be analysed. Some quotes will be used from all participants' responses to illustrate the views of participants. However, these quotes will not be associated with your name. The results of this study will form part of my PhD thesis and will also be published in a scientific journal and be presented at a conference.

Who has reviewed this study?
Ethical approval has been granted by the School of Healthcare Research Ethics Committee *(state project reference number and date).*

If you agree to take part, would like more information or have any questions or concerns about the study please contact:
Cesa Septiana Pratiwi
PhD Student
University of Leeds
LS2 9UT, Leeds, UK.
Telp : 081585426407 or email hccsp@leeds.ac.uk

Information Sheet of Study (for Women)

Healthcare Professionals' Assessment of Pregnant Women's Psychological health in Indonesia: A Qualitative Case Study

You are being invited to take part in the above named study but before you decide, please read the following information.

What is the purpose of this study?
The purpose of the study is to investigate and explore the assessment of pregnant women's psychological health, from the perspective of healthcare professionals and women in Indonesia, in primary healthcare settings during a routine antenatal booking. It is anticipated that the findings of this study will inform practice and policy of perinatal mental health system in Indonesia.

Who is doing the study?
This study is being undertaken by Mrs Cesa Septiana Pratiwi as part of her PhD studies and is supervised by Dr Janet Hirst and Professor Linda McGowan from the School of Healthcare, University of Leeds.

Why have I been asked to participate?
You have been invited in this study because you are pregnant women who visit a primary healthcare to have an antenatal booking visit and Indonesian resident.

What will be involved if I take part in this study?
If you choose to participate in the study, you will be observed while healthcare professionals providing antenatal service during your antenatal booking visit as this study aims to explore the real context of pregnant women's mental health assessment. Thus the observation becomes one of procedure for data collection. You also will be invited to one to one in depth interview which will last approximately one hour and will be audio-recorded. The interview aims to investigate your perceptions as service user in the ways in which your mental health is assessed during a routine antenatal booking visit. The interview will take place in one of rooms of public health centre.

What are the advantages and disadvantages of taking part?
There may not be a direct benefit to you for taking part in this study, but your views will help us understand the issues that are important in changes in shaping health and social services relating to mental health service provided for pregnant women.

Do I have to take part?
It is up to you to decide whether or not to take part in this study. If you do decide to take part you will be given this information sheet to keep and be asked to sign a consent form.

Can I withdraw from the study at any time?
You are free to withdraw at any time before or during the observation and interview without giving a reason. If after or during the observation you decide to withdraw from the study, you may choose to withdraw your data. During the interview you are free to withdraw but you will be offered to choose whether you want to withdraw your data or not, meanwhile after you have an interview you cannot withdraw your data.

Will the information obtained in the study be confidential?
All information obtained from you will be kept strictly confidential. Your name will be removed from the interview transcription, which means only researchers (Dr Janet Hirst, Prof. Linda McGowan and I) may have access to the observation checklist, audio interview, field notes and transcripts for the purpose of verification of transcription and analysis. However, all your personal identifiable details will be removed before granting them access to your data. The digitalised record of your interview will be deleted after transcription and the transcript held in a password protected secure network of the University of Leeds for a period of seven years, after which, it will be securely and irreversibly deleted from the device on which it is stored.

What will happen to the results of the study?
Your responses and that of other participants will be analysed. Some quotes will be used from all participants' responses to illustrate the views of participants. However, these quotes will not be associated with your name. The results of this study will form part of my PhD thesis and will also be published in a scientific journal and be presented at a conference.

Who has reviewed this study?
Ethical approval has been granted by the School of Healthcare Research Ethics Committee *(state project reference number and date).*

If you agree to take part, would like more information or have any questions or concerns about the study please contact:
Cesa Septiana Pratiwi
PhD Student
University of Leeds
LS2 9UT, Leeds, UK.
Telp : 081585426407 or email hccsp@leeds.ac.uk

Appendix L

Informed Consent for Observation (for Healthcare Professionals and Women)

Consent to take part in Healthcare Professionals' Assessment of Pregnant Women's Psychological health in Indonesia: A Qualitative Case Study

	Add your initial
I confirm that I have read and understand the information sheet dated 29/08/2016 explaining the above research project and I have had the opportunity to ask questions about the project	
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.	
I understand that I am free to decide when I need or want to have a break during the observation	
I agree to be given 24 hours to decide whether I want to withdraw my data. However, after 24 hour following the observation and interview, I understand that the data cannot be withdrawn	
I understand that if an unsafe practice is observed during the antenatal care, the researcher will contact and report it to the Midwife Supervisor to discuss steps that will be taken to deal with the incident	
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. I understand that my responses will be kept strictly confidential	
I agree for the data collected from me to be stored for five years and used in relevant future research [in an anonymised form]	
I understand that other genuine researchers will have access to this data only if they agree to preserve the confidentiality of the information as requested in this form.	
I understand that other genuine researchers may use my words in publications, reports, web pages, and other research outputs, only if they agree to preserve the confidentiality of the information as requested in this form.	
I understand that relevant sections of the data collected during the study, may be looked at by individuals from the University of Leeds or from regulatory authorities where it is relevant to my taking part in this research. I give permission for these individuals to have access to my data.	

I agree to take part in the above research project and will inform the lead researcher should my contact details change.	

Name of Participant	
Participant's signature	
Date	
Name of lead researcher	Cesa Septiana Pratiwi
Signature	
Date*	

*To be signed and dated in the presence of the participant. Once this has been signed by all parties the participant should receive a copy of the signed and dated participant consent form, the letter/ pre-written script/ information sheet and any other written information provided to the participants. A copy of the signed and dated consent form should be kept with the project's main documents which must be kept in a secure location.

Informed Consent for Interview (for Healthcare Professionals and Women)

Consent to take part in Healthcare Professionals' Assessment of Pregnant Women's Psychological health in Indonesia: A Qualitative Case Study

	Add your initial
I confirm that I have read and understand the information sheet dated 29/08/2016 explaining the above research project and I have had the opportunity to ask questions about the project	
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.	
I understand that I am free to decide when I need or want to have a break during the interview	
I agree to be given 24 hours to decide whether I want to withdraw my data. However, after 24 hour following the observation and interview, I understand that the data cannot be withdrawn	
I understand that if an unsafe practice is observed during the antenatal care, the researcher will contact and report it to the Midwife Supervisor to discuss steps that will be taken to deal with the incident	
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. I understand that my responses will be kept strictly confidential	
I agree for the data collected from me to be stored for five years and used in relevant future research [in an anonymised form]	
I understand that other genuine researchers will have access to this data only if they agree to preserve the confidentiality of the information as requested in this form.	
I understand that other genuine researchers may use my words in publications, reports, web pages, and other research outputs, only if they agree to preserve the confidentiality of the information as requested in this form.	
I understand that relevant sections of the data collected during the study, may be looked at by individuals from the University of Leeds or from regulatory authorities where it is relevant to my taking part in this research. I give permission for these individuals to have access to my data.	
I agree to take part in the above research project and will inform the lead researcher should my contact details change.	

Name of Participant	
Participant’s signature	
Date	
Name of lead researcher	Cesa Septiana Pratiwi
Signature	
Date*	

*To be signed and dated in the presence of the participant. Once this has been signed by all parties the participant should receive a copy of the signed and dated participant consent form, the letter/ pre-written script/ information sheet and any other written information provided to the participants. A copy of the signed and dated consent form should be kept with the project’s main documents which must be kept in a secure location.

Appendix M

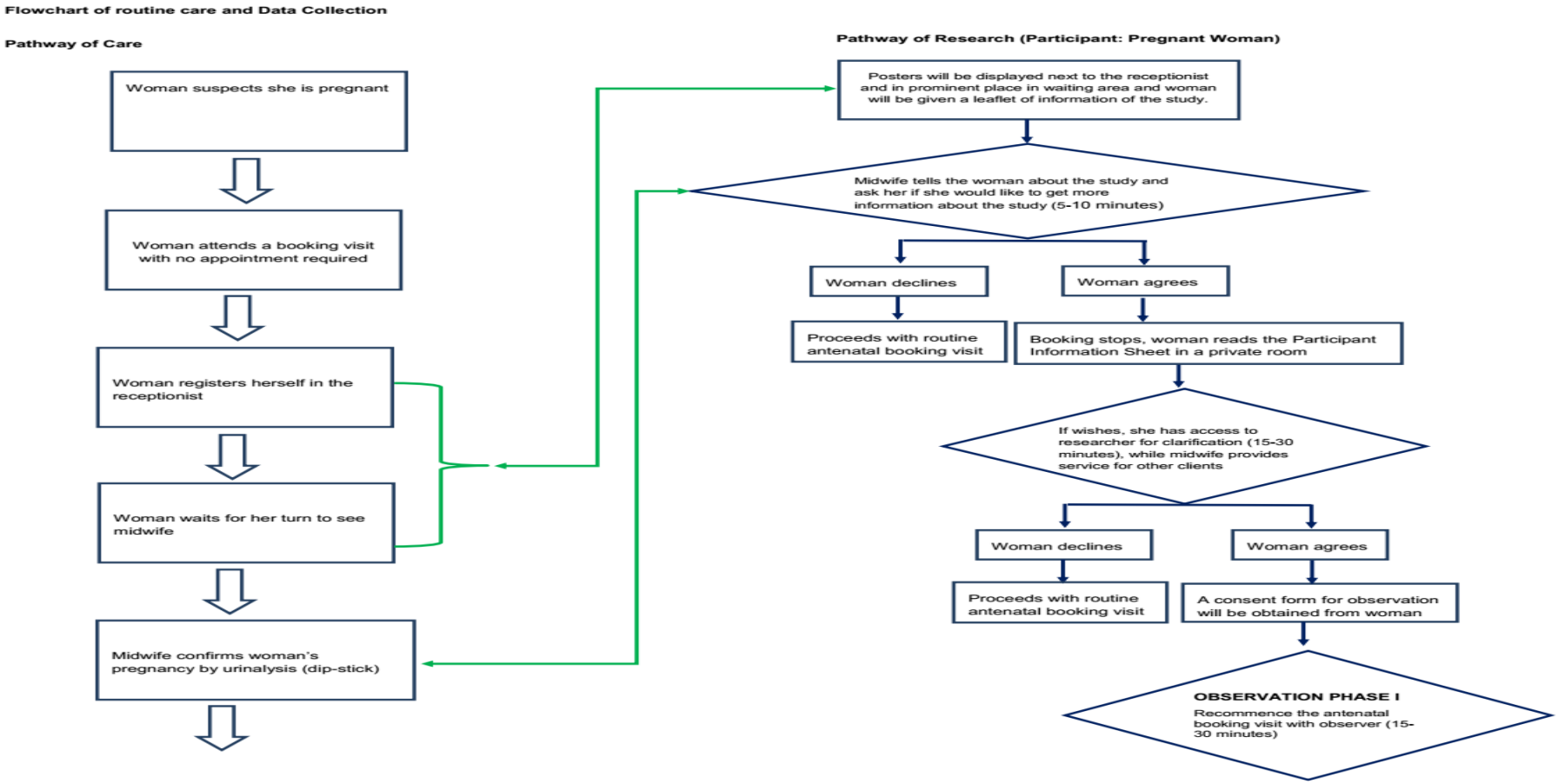
Standing- banner and leaflet as instruments to recruit the participants

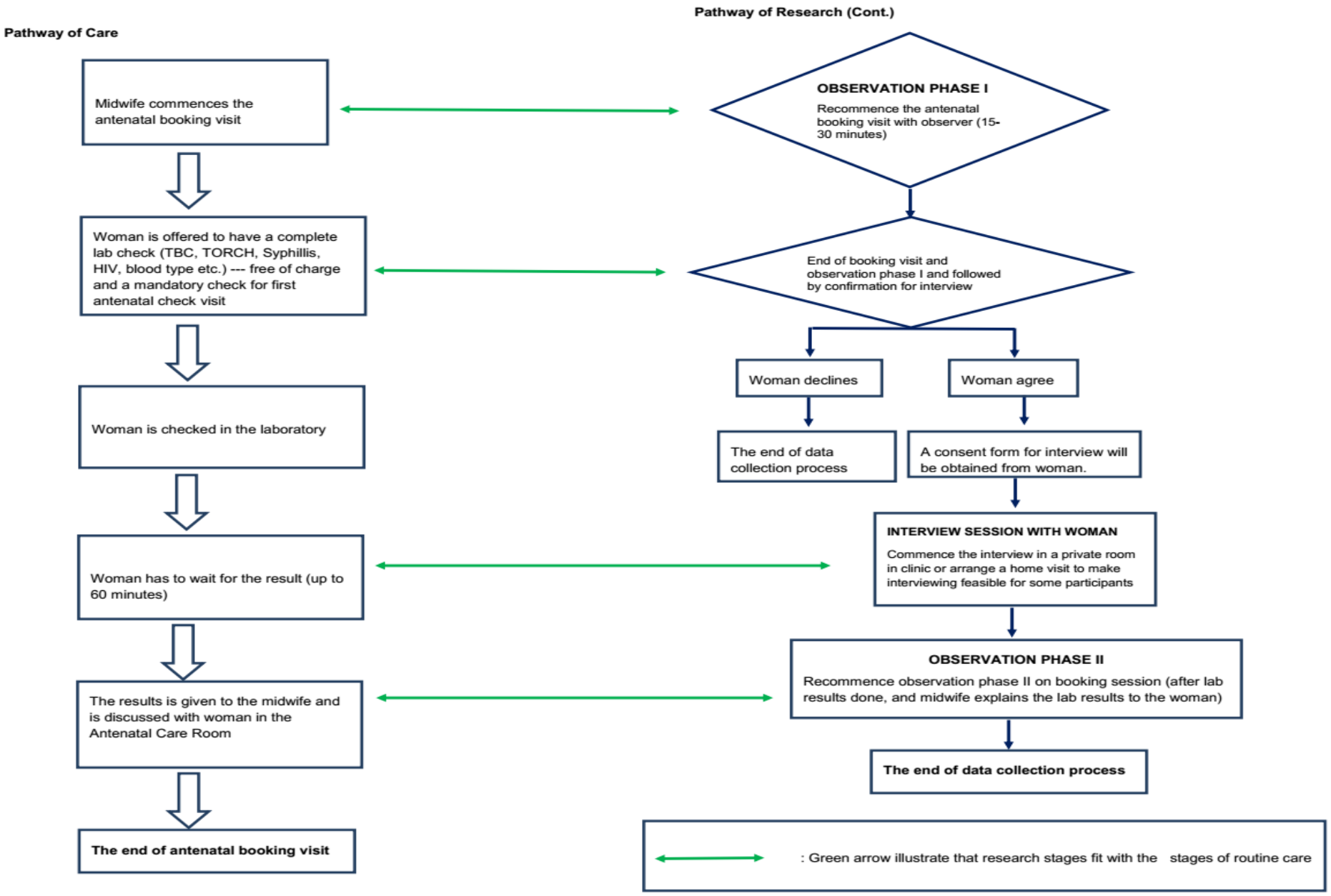
This picture was taken in Setaman Primary Healthcare Centre, Southern District, Yogyakarta

Leaflet for participant recruitment

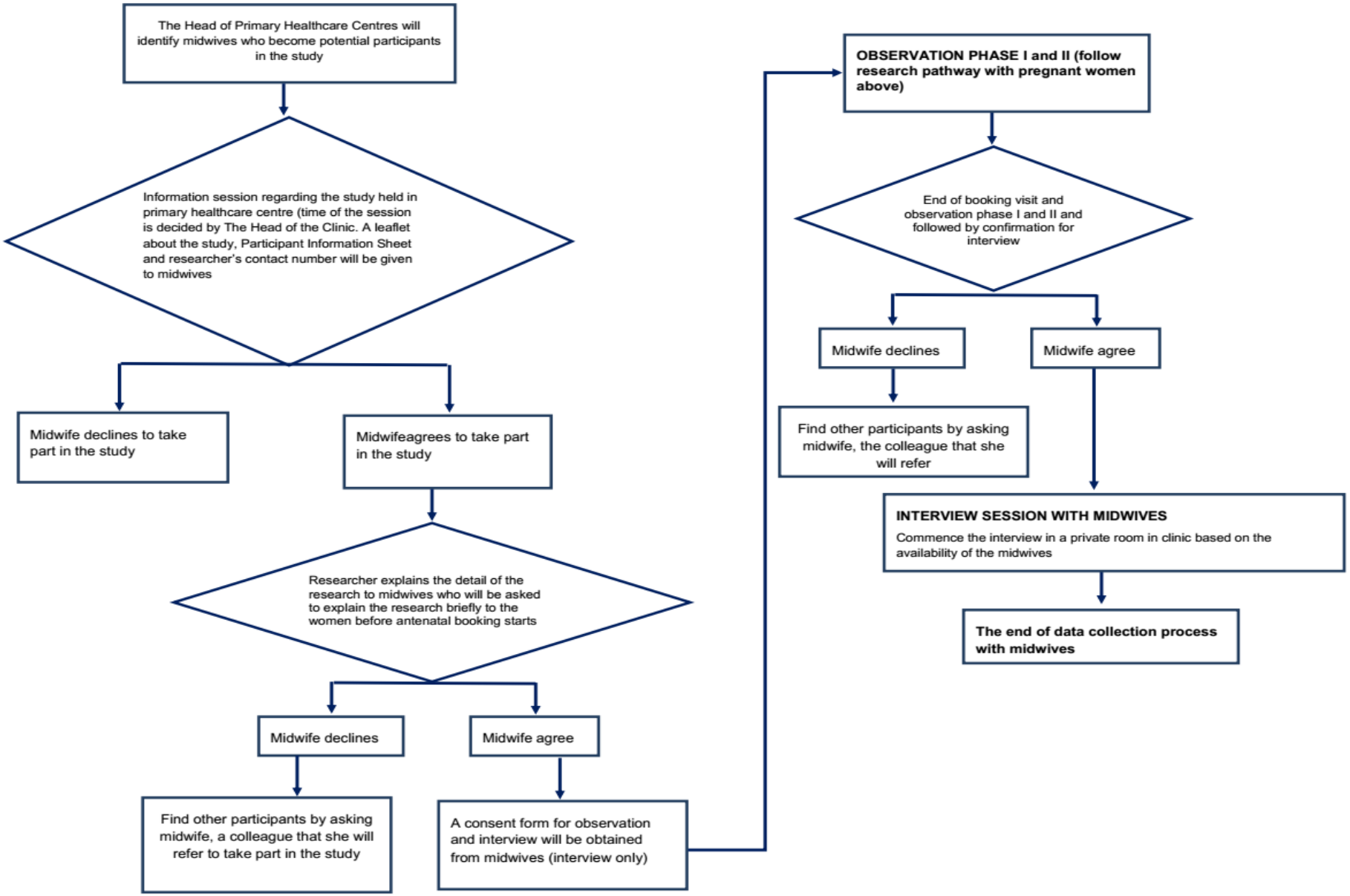
Appendix N

Flowchart of Data Collection Process

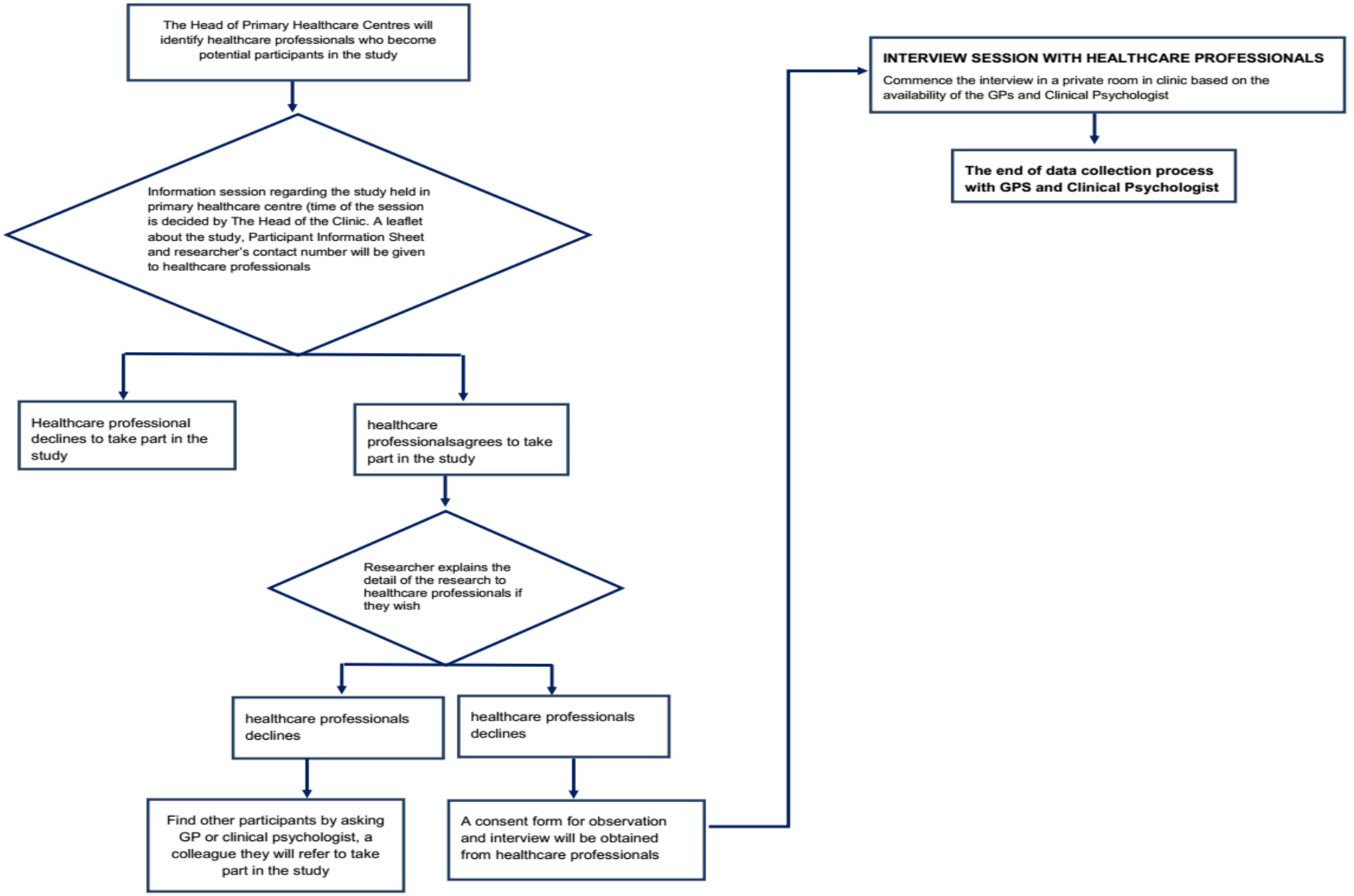



Pathway of Care
Midwife commences the antenatal booking visit
Woman is offered to have a complete lab check (TBC, TORCH, Syphillis, HIV, blood type etc.) --- free of charge and a mandatory check for first antenatal check visit
Woman is checked in the laboratory
Woman has to wait for the result (up to 60 minutes)
The results is given to the midwife and is discussed with woman in the Antenatal Care Room
The end of antenatal booking visit
Pathway of Research (Cont.)
OBSERVATION PHASE I
Recommence the antenatal booking visit with observer (15-30 minutes)
End of booking visit and observation phase I and followed by confirmation for interview
Woman declines
Woman agree
The end of data collection process
A consent form for interview will be obtained from woman.
INTERVIEW SESSION WITH WOMAN
Commence the interview in a private room in clinic or arrange a home visit to make interviewing feasible for some participants
OBSERVATION PHASE II
Recommence observation phase II on booking session (after lab results done, and midwife explains the lab results to the woman)
The end of data collection process
: Green arrow illustrate that research stages fit with the stages of routine care

Pathway of Research (Participant: Midwives)



Pathway of Research (Participant: General Practitioners and Clinical Psychologist)



Appendix O

Updated Training List

Training/Workshop	Date/ Time	Provider	Status
Essential Course			
Induction Day	9th April 2015 (10.00-15.00)	School of Healthcare	Completed
Data Protection and Research	10th November 2015 10.00-12.30	SDDU	Completed
Research with Human Participants	15th January 2016 10.00-12.00	SDDU	Completed
NVivo Part 1	4th November 2015 10.00-13.00	IT	Completed
NVivo Part 2	12th November 2015 10.00-13.00	IT	Completed
Advanced Literature Searching	4th November 2015 13.30-15.30	Faculty of Medicine and Health	Completed
Introduction to Research Impact	16h December 2015 9.30-12.30	SDDU	Completed
Getting Started in Health Research (MEDR5320M)	16-18 October 2015	LIHS	Completed
Introduction to Qualitative Interviewing	18th May 2016	HERG University of Oxford	Completed
Analysing Qualitative Interview	19th&20th January 2017	HERG University of Oxford	Completed
Compulsory Modules			
Introduction to Qualitative Research Method (HECS5237 M)	12th and 19st October 2nd & 30th Nov 2015	School of Healthcare	Completed
Capturing and Handling Data in Research (MEDR5320M)	29th & 30th Oct & 16th & 17th Nov 2015	School of Healthcare	Completed
General Course			
Introduction of Effective Writing	21st April 2015 (14.00-16.00)	SDDU	Completed
Writing for Research Students in the Sciences	7th May 2015 (09:30-16:15)	SDDU	Completed
Working effectively with your supervisor	3 June 2015 (09.30-12.30)	SDDU	Completed
UELT (University English language	22 May 2015	The Language Centre	Completed Score 66% (Students with a score of 60% or above do not

			need support through the in-sessional (writing) courses offered in the Language Centre)
Word for Thesis Part 1	14th September 2015 09.30-15.30	IT Training	Completed
Powerpoint techniques	27th November 09.30-15.00	IT Training	Completed
Preparing for your transfer	24th November 2015 9.30-12.30	SDDU	Completed
Preparing for your transfer (Medicine and Health only)	14th January 2016 13.00-16.00	SDDU: faculty Coordinated Researcher Devt	Completed
Project Managing Your Research Degree	18th February 2016 09.30-12.30	SDDU	Completed
Effective Poster Presentation	26th February 2016 09.30-12.30	SDDU	Completed
Ownership Confidentiality and Secrecy	23rd February 2016 14.00-16.00	SDDU	Completed
How to read a paper	1st February 2017 09.30-12.30	SDDU	Completed
Word for Thesis Part 2	20th April 2018 09.30-12.30	IT Training	Completed
The Finishing Thesis Writer	24th May 2018 09.30-11.30	ODPL	Completed

Appendix P

Example of Transcription

Interview Woman 2 (W2), G2 P1 A0, met Midwife R, participant 2, who asked the mental health questions to her. W2 has a conflict with her father in law and her sister in law. She lives with the family of her husband. During the history taking, the midwife asked her about the woman's feeling. The midwife asked the woman about the woman's feeling, history of mental health in the family, and other mental health related questions straightforward. The woman told honestly that she felt traumatised for having childbirth in the Hospital. Instead of exploring more on the cause of her trauma, the midwife diverted the questions about the woman's feeling toward the pregnancy, i.e: "but you are happy, aren't you?", "You planned the pregnancy, don't you?". The midwife avoided to make eye contact when asking mental health related questions and asked for an excuse before asking the questions.

When the lab result was ready, everything was fine but urinary bacterial showed (+++), the woman then was given a counselling to drink much water and keep the clean of her genitalia. She was then referred to the GP and got the antibiotics for 5 days and was asked to return to the healthcare centre to have a re-examination. One week after the first antenatal booking visit, the woman came to the healthcare centre and have a lab-re-check, the result showed that the bacteria still remain in her urine.

C: *Mbak,* good afternoon, thank you for your availability and time for doing this interview, before we start, midwife R already explained to you regarding this interview and the research. Do you have any questions about the participant information sheet that you have read and the consent form that you've just sign in?

W2: No.

C: Alright, we're about to start the interview then. You have been asked and examined by the midwives in regards of your pregnancy and currently you are waiting for the result of your lab test. Would you please tell me about what do you feel right now for it has been confirmed that you are pregnant now. What do you feel about that?

W2: I am happy *mbak* (ahahaha-laughing). I felt surprised as well at the beginning, but I also thought that I am 35 (yo) now, so... I want to get pregnant. My husband

also wanted to have more child since my first daughter is turning 4 years old this year. So I stopped the injection (contraception) and start the pregnancy programme since April (5 months ago).

C: Well, that sounds your programme have succeeded, congratulation though. Okay, you have just been asked by the midwives whether you feel scared and you said that you felt traumatised. Why was that?

W2: I feel scared… for the childbirth

C: What happened to you? Do you mind to share it?

W2: my first childbirth was referred to *Pansep (Panembahan Senopati Hospital-District Hospital in Southern district).* I felt stressed like… ehm… how should I tell it… the care provided, the doctor, the nurses and midwives, they are quite fierce. So since the beginning of the childbirth I felt like pretty tense.

C: May I know why did you get referred to the hospital?

W2: That was because I experienced a leucorrhoea, but it was just *pyok* (*Javanese-to express something that has suddenly broken or come up- usually a liquid based).* I didn't know at the beginning. I thought it was amniotic fluid, then I went to Midwife N (a private practice midwife), she said, there's nothing to worry, so I asked for a referral then at the hospital I was checked and (the cervix) was dilated to 1 -2 cm. So, (I would) have a childbirth at the hospital.

C: What did you experience when you were at the hospital?

W2: Ya.. (I feel) traumatised… (cough), fierce midwives. And I had an induction. It was really hurt. I don't like to go back to the hospital (again)

C: So, where is your planning for the childbirth of this pregnancy then?

W2: Yaa.. I hope I plan to have a labour at the midwife (private practice), if there is anything to worry. But we don't know what happen in the future.

C: Okay, I am going to ask about your experience when you were asked many things by midwife R. Midwife R asked you about the history of the pregnancy, including the health history of your family. She also asked you about your feeling. How do you feel when you were asked the questions?

W2: Ya… I am happy with the questions

C: Why?

W2: Because I can share my mind particularly regarding this second pregnancy. So I could get more information, that's my expectation.

C: Do you have any other feeling other than feel surprised and happy with this pregnancy?

W2: Ehm…. (Thinking)

C: Maybe something that make you think of it redundantly?

W2: If it is stress related to this pregnancy, I don't think that I have it, but it is a stress like a… well understand me that I (still) live with my parent in law, so it is my burden, stress like that, because I live with my parent in law.

C: Do you have any conflict or kind of misfit with your parent in law?

W2: Well, there must be a kind of misfit between daughter in law and her parent in law, mustn't it? I already told it to my husband too and he just said, "don't think about it, just enjoy it". Because, actually I take care of my parent in law so I have more burden, in addition he (father in law) is sick. He has kidney stone and not only my father in law who live with me, but also my sister in law, so, I get stress because of it when I am at home. My sister in law, she doesn't work yet, and she just keep complaining when the food provided (by me) is not what she likes.

C: What do you usually do when you have a problem with them?

W2: All I can do is just, keep- being silent, silent and silent. And if I want to talk to someone I only can do it with my mother, I usually visit her once a month.

C: What do you feel after talking to your mom?

W2: I just feel like very relieved when I see my parents at home. There is no burden in my mind, it feels relieved, but when I return to my home, my mind just like pilling up the burden.

C: what about your relationship with your husband?

W2: *alhamdulillah (praise to God)*, we are fine, but because we are living in my parents in law's home so there is an awkward feeling.

C: Do you mind to talk to me about your relationship with your father in law?

W2: Well… It's a.. It is very common for a little child for being naughty (*naughty child usually refer to very active and creative child in Indonesia*), isn't it? But my father in law- when he talk to my child, his words just beyond the limits,

exaggerating… I feel like I cannot accept that… Till… (Stopping, sobbing, and taking a deep breath)

C: (Offered a drink)

W2: (weeping, taking a deep breath for about 1.5 minute)

C: do you want to continue? It will be totally fine if you want to stop our conversation.

W2: It's fine *mbak (a calling name for woman- usually used to respect the others or those who is considered to have older age)* but, if he (father in law) expresses the words about my child, it was… (stopping, sobbing, taking a deep breath again). I feel so sad, those words are just hurtful, very painful. Whereas me or my mother never say that words to our child or to our grandchild, never. But I could only keep being silent… silent… (sobbing). My father in law's words are very rough, violent. When the first time I came to the home, he told me that I am a daughter in law who couldn't do anything. When he said that to me, I felt like… down, then I have child, my child is growing up, it is okay for them to be naughty. But his words is very offensive. My parents never said such words to me, I told my daughter, "O Allah, I could bear with this because I have you (her daughter), if you aren't here with me, I just want to go away from this house". But my husband wants me to stay there, so, yes my burden is my father in law.

C: Have you talked to your husband about this?

W2: Yes, I did, but my husband.. he just said… it's okay, you just need to be patient, I already told everything to my mother and my family, all of my family said that it's good for me to get out from the house, just move out, but my husband wants to live there. And all I can do is just keep quiet, quiet and quiet. Actually I want to talk to my husband's family, but his family is just like countryman, who live in the village, I am afraid if I talk it may get worse, misunderstanding, so I don't want it to be complicated. I just want in this pregnancy, I don't want to think about this, just go with a flow, don't hear any offensive words from them, just don't hear them. It's all what I want *mbak*.

C: Yes, that's good actually to have such motivation. Do you know why pregnant women have to feel alright on their mind?

W2: Yaa.. because If I get stress, I am afraid there will be problems with my pregnancy.

C: Do you think that it is important for midwife to ask the questions about your feeling and problems? Just like what we do now?

W2: Yes, it is very important.

C: Why didn't you tell the midwife about your feeling or your burden that may cause you thinking more about?

W2: Well, because… It seems like the midwife was in a hurry, and at the (examination-maternity) room, there are many people in it, so I feel uncomfortable to talk to her.

C: What do you think about talking about your feeling to the midwife, like talking about your previous history of childbirth?

W2: Ya.. a little bit, a bit relieved. But, my father in law, it's like those who usually live with him is different from those who live far from him

C: What do you mean with that?

W2: It seems like everything done by my husband is worthless compared to other small thing conducted by his other children who live far from us. He always flatter his other children, but he cannot open his eyes, that his son (her husband) is the one who always help him, feed him, but my husband is always demeaned by my father in law. And I as a wife of my husband cannot accept it, but again I can only keep silent. I have never spoken a word, never.

My husband only said, that we need to be patience, be patience, but patience has limits, hasn't it? Since the first pregnancy and this second pregnancy, my husband's family become my burden. My sister in law, she's not working, she only sleeps, watch TV, have fun, doesn't work at all every day. When she doesn't like the food I cooked, she complained. she never help me to do the house chores. Never.

C: What is your expectation from midwives or other healthcare providers in the primary healthcare centre regarding to your feeling now?

W2: Ya, it will be very good if I can talk to midwife like we do now, to share our mind with the midwives like this, so I feel relieved after talking about this problem, in addition I don't want to have a conflict or making a fuss with my husband's family. Well maybe there won't be a real way out (provided by healthcare professionals), but at least by talking and sharing about my problem, it could help me to comfort my heart and my mind. That is my expectation *mbak.*

C: Do you have more comments or something to add? Since your lab result is ready now we are about to end our interview.

W2: No, nothing. But thank you *mbak*, I have a relief feeling after talking about this to you. Thank you very much *mbak*

C: I am the one who should thank for your willingness to involve in my study. I hope the interview will be very useful for the development of perinatal mental health system in Indonesia in the future. Thank you,

W2: My pleasure *mbak*. (End of interview).

Appendix Q

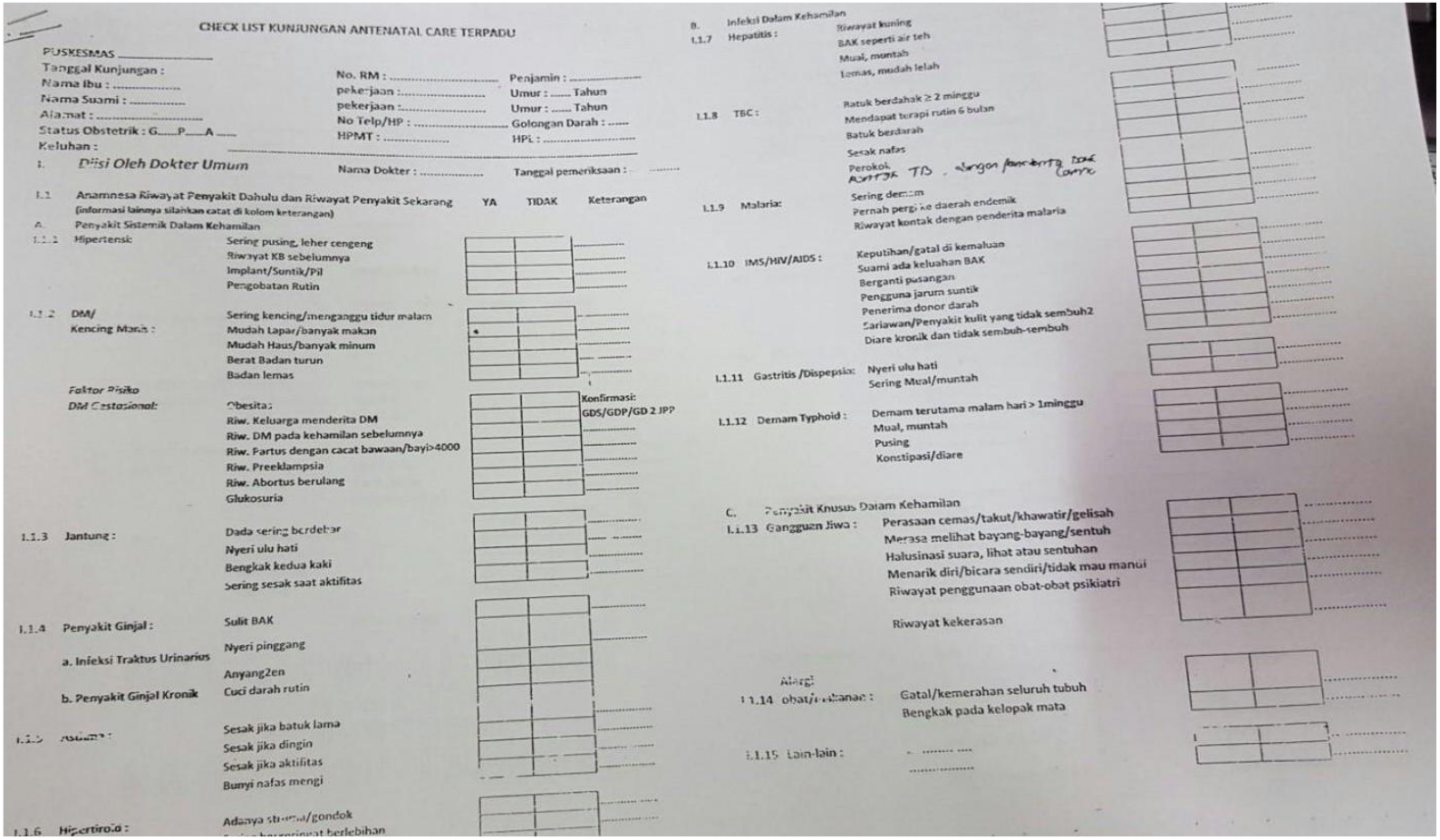
Example of coding, organising and development of themes

No	Participants' quotes	Coding	Subtheme	Initial themes	Themes
1	*Surprised. Because I am not ready yet (to get pregnant) since the beginning (of the marriage). I planned to get pregnant at least a year after getting married… I actually wanted to gain more money so that I could have our own house.*	• Unplanned pregnancy • Feeling surprised • Financial expectation	Women's personal life difficulties: premarital and unplanned pregnancy and economic problem	Pregnancy as the problem	My pregnancy added more burden
2	*I cannot explain it, because I had not married yet (at that time). And I wasn't getting pregnant with my boyfriend. It is somebody else I cheated with. I am afraid.*	• Unplanned pregnancy • Pregnancy out of wedlock • Feeling scared	Women's personal life difficulties: premarital and unplanned pregnancy	Pregnancy as the problem	My pregnancy added more burden
3	*I was confused and scared. Because I had not married yet.*	• Unplanned pregnancy • Pregnancy out of wedlock • Feeling scared	Women's personal life difficulties: premarital and unplanned pregnancy	Pregnancy as the problem	My pregnancy added more burden
4	*Yes, it is important. Because pregnant women's mood are keep changing. Sometimes we are too happy and too excited, but sometimes we want to cry…sad.*	• Aware of mood and emotional changing • The emotional changings need to be acknowledged	• Pregnant women's emotional feelings • Women's expectations	Women's awareness of their psychological health and needs for support	• My pregnancy added more burden • I needed more
5	*Yes, I do. I don't know why. Maybe because I wasn't in a good mood… I feel like I want my husband to give more attention to my pregnancy too, not only (focussing on) to my first child.*	• Aware of mood and emotional changing • Need for attention from husband	• Pregnant women's emotional feelings • Women's expectations	Women's awareness of their psychological health and needs for support	• My pregnancy added more burden • I needed more

6	*Well, I believe that in every trimester there will be different problems. I think it is important so that the woman will be calmer and well-prepared approaching the due date of childbirth, to give us motivation, to support and encourage us.*	• Aware of mood and emotional changing in pregnancy • Needs for support	• Pregnant women's emotional feelings • Women's expectations	Women's awareness of their psychological health and needs for support	• My pregnancy added more burden • I needed more

Appendix R

Original form of history taking and its translated version



CHECK LIST KUNJUNGAN ANTENATAL CARE TERPADU

PUSKESMAS _____
Tanggal Kunjungan :
Nama Ibu : .....
Nama Suami : .....
Alamat : .....
Status Obstetrik : G.....P.....A .....
Keluhan :

No. RM : ..... Penjamin : .....
pekerjaan :..... Umur : ..... Tahun
pekerjaan :..... Umur : ..... Tahun
No Telp/HP : ..... Golongan Darah : .....
HPMT : ..... HPL : .....

I. *Diisi Oleh Dokter Umum* Nama Dokter : ..... Tanggal pemeriksaan : .....

I.1	Anamnesa Riwayat Penyakit Dahulu dan Riwayat Penyakit Sekarang (informasi lainnya silahkan catat di kolom keterangan)	YA	TIDAK	Keterangan
A.	Penyakit Sistemik Dalam Kehamilan			
I.1.1	Hipertensi:	Sering pusing, leher cengeng Riwayat KB sebelumnya Implant/Suntik/Pil Pengobatan Rutin		
I.1.2	DM/ Kencing Manis :	Sering kencing/menganggu tidur malam Mudah Lapar/banyak makan Mudah Haus/banyak minum Berat Badan turun Badan lemas		
	Faktor Risiko DM Gestasional:	Obesita: Riw. Keluarga menderita DM Riw. DM pada kehamilan sebelumnya Riw. Partus dengan cacat bawaan/bayi>4000 Riw. Preeklampsia Riw. Abortus berulang Glukosuria		Konfirmasi: GDS/GDP/GD 2 JPP
I.1.3	Jantung :	Dada sering berdebar Nyeri ulu hati Bengkak kedua kaki Sering sesak saat aktifitas		
I.1.4	Penyakit Ginjal :	Sulit BAK		
	a. Infeksi Traktus Urinarius	Nyeri pinggang Anyang2en		
	b. Penyakit Ginjal Kronik	Cuci darah rutin		
I.1.5	Asma :	Sesak jika batuk lama Sesak jika dingin Sesak jika aktifitas Bunyi nafas mengi		
I.1.6	Hipertiroid :	Adanya struma/gondok [illegible] berlebihan		
B.	Infeksi Dalam Kehamilan			
I.1.7	Hepatitis :	Riwayat kuning BAK seperti air teh Mual, muntah Lemas, mudah lelah		
I.1.8	TBC :	Batuk berdahak ≥ 2 minggu Mendapat terapi rutin 6 bulan Batuk berdarah Sesak nafas Perokok ADA DR TB, dengan pengobatan obat lama		
I.1.9	Malaria:	Sering demam Pernah pergi ke daerah endemik Riwayat kontak dengan penderita malaria		
I.1.10	IMS/HIV/AIDS :	Keputihan/gatal di kemaluan Suami ada keluahan BAK Berganti pasangan Pengguna jarum suntik Penerima donor darah Sariawan/Penyakit kulit yang tidak sembuh2 Diare kronik dan tidak sembuh-sembuh		
I.1.11	Gastritis /Dispepsia:	Nyeri ulu hati Sering Mual/muntah		
I.1.12	Demam Typhoid :	Demam terutama malam hari > 1minggu Mual, muntah Pusing Konstipasi/diare		
C.	Penyakit Khusus Dalam Kehamilan			
I.1.13	Gangguan Jiwa :	Perasaan cemas/takut/khawatir/gelisah Merasa melihat bayang-bayang/sentuh Halusinasi suara, lihat atau sentuhan Menarik diri/bicara sendiri/tidak mau mandi Riwayat penggunaan obat-obat psikiatri Riwayat kekerasan		
I.1.14	Alergi obat/makanan :	Gatal/kemerahan seluruh tubuh Bengkak pada kelopak mata		
I.1.15	Lain-lain :	.....		

INTEGRATED ANTENATAL CARE VISIT CHECK LIST
(Translated Version)

PRIMARY HEALTHCARE CENTRE:…..

Date of visit : MR number:

Guarantor:

Mother's name : Job : Age:

Husband's name : Job : Age:

Address : mobile/ph : Blood group:

Obstetric State : G…P…A… LMP : EDD:

Complaints :……

1. *Filled by the GP* GP's name: Date of examination:

1.1. History taking previous and current illness YES NO Description (other information please write on description)

A. Systemic illness in pregnancy

1.1.1 Hypertension
- Frequent dizziness, neck stiffness
- Previous family planning history
- Implant/ injection/ Pil
- Routine medication

1.1.2 Diabetes Mellitus
- frequent urination/ interfere sleeping time
- Eat a lot
- Drink a lot
- Loss gain weight
- Weak body

Risk factor

Gestational Diabetes
- Obesity
- Family history of DM
- History of childbirth with congenital defect/ Baby> 4000 grams
- History of Preeclampsia
- History of Frequent Miscarriage
- Glycosuria

1.1.3 Heart Disease:
- Palpitated
- Heartburn
- Swollen leg
- Shortness of breath

1.1.4 Renal Disease
- Difficult to passing urine
- Backache
- UTI Dysuria
- Chronic renal disease Routine haemodialysis

1.1.5 Asthma
- Shortness of breath after long cough

	Shortness of breath when cold Shortness of breath when doing activities Wheezing
1.1.6 Hyperthyroid	Enlarged thyroid gland Excessive sweating Palpitated
B.	Infection in pregnancy
1.1.7 Hepatitis:	Jaundice Dark urine Nausea and vomiting Weakness and fatigue
1.1.8	Tuberculosis: Coughing that lasts ≥ 2 weeks Get routine treatment for 6 months Coughing up blood Shortness of breath Smoking Contact with person with TBC
1.1.9 Malaria:	Often to get fever Went to endemic area Contact with person with Malaria
1.1.10 STD/HIV/AIDS	Leucorrhoea/ vaginal itching Husband has urinate problem Promiscuity Inject drugs *using needles* *Blood recipients* *Oral thrush/ unrecovered skin thrush* *Chronic diarrhoea*
1.1.11 Gastritis/ Dyspepsia:	*Heartburn* *Nausea and vomiting*
1.1.12 Typhoid fever:	*Fever, particularly at night ≥1 week* *Nausea and vomiting* *Dizziness* Constipation/ Diarrhoea

C. Specific illness in Pregnancy

1.1.13 Mental Illness: Feeling anxious/ fear/ scared/ restless
Feel seeing the shadows/ touch
Voice hallucination, see or the touch
Social withdraw/talk to themselves/refuse to take bath
History of psychotropic medication
History of violence

1.1.14 Drug/ food: Itchiness/ redness all over body
Swollen eye

1.1.15 Others: ……..