

**Community Participation for Maternal and Neonatal Health in  
Sukoharjo Regency, Central Java, Indonesia: A Qualitative  
Case Study Design**

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## Dedication

*My Mum (may she rest in peace), an illiterate woman who lived in rural Borneo, Indonesia, delivered all her 10 beloved children assisted by traditional birth attendants. Her first son passed away once born. She needed to travel hours to reach the hospital in the city, by land and water transportation. She was just one of millions of unlucky women in the world who fought every day and who walked several kilometres to fetch clean water to ensure her family was safe and sound.*

*This PhD thesis is dedicated to my Mum and all the unbeatable women in the whole wide world.*

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## Abstract

**Background:** 'Desa SIAGA' (alert village) is a community participation model (CPM) aiming to improve maternal and neonatal health (MNH) outcomes by empowering communities to prepare women for safe birth in Indonesia. However, there is limited evidence exploring the process of CPM within the Desa SIAGA initiative.

**Objectives:** To explore the role of CPM using the exemplar of Desa SIAGA in preparing women for birth and that improving MNH.

**Methods:** A qualitative case study with 23 in-depth interviews was conducted with women and key stakeholders in two cases. Interview data were analysed using thematic analysis. Interpretation was strengthened by non-participant observation, fieldnotes, documentary analysis and cross-case synthesis.

**Findings:** The Desa SIAGA initiative had a potential to improve MNH outcomes. However, several facilitators and barriers influenced its delivery and implementation. Limited empowerment affected the extent to which women and the community participated to succeed the initiative. Unclear roles, workload, and minimal training were identified to affect the key actors in performing their tasks. Meanwhile, support from government and clear guidance appeared to be lacking. Social capital was a motivating factor for the community however, factors such as gender roles hindered effective delivery and implementation of the CPM. Sociocultural and religious beliefs emerged as a cross-cutting theme.

**Conclusion:** Community participation is a complex phenomenon and context specific. Its delivery and implementation need to consider the micro, meso and macro elements that underpin the complexity of MNH. Empowering women and the community are the central of the initiative. A sensitive approach to sociocultural and religious beliefs is needed to allow women and community to accept the importance of a CPM to address MNH problems. Health care system strengthening is essential to deliver and implement the initiative. A strong policy, commitment and cross-sectoral partnership is required to enable the initiative going forward.

**Key words:** Community participation, Desa SIAGA, maternal health, neonatal health

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## List of Abbreviations

ANC	Antenatal Care
ASHA	Accredited Social Health Activists
Askeskin	<i>Asuransi Kesehatan Keluarga Miskin/</i> Health Insurance for Poor Family
AXIS	Appraisal tool for Cross-Sectional Studies
BAPPENAS	<i>Badan Perencanaan Pembangunan National/</i> National Development Planning Agency
BPD	<i>Badan Permusyawaratan Desa/</i> Village Deliberation Agency
BPJS/ SSAH	<i>Badan Penyelenggara Jaminan Sosial Kesehatan/</i> Social Security Agency for Health
CASP	Critical Appraisal Skills Programme
CAQDAS	Computer assisted qualitative data analysis software
CBAS	Community Based-Alert System
CHC	Community Health Committee
CHWs	Community Health Workers/ cadres
CONSORT	Consolidated Standards of Reporting Trials
CPH	Community participation in health
CPM	Community Participation Model
C-RCT	Cluster-Randomised Controlled Trial
CU	Community unit
DASIAT	<i>Pemuda Siaga Sehat /</i> Alert Youth in Health
EmOC	Emergency Obstetric Care
FGDs	Focus Group Discussions
FKD	<i>Forum Kesehatan Desa/</i> Village Health Forum
GIZ	<i>Deutsche Gesellschaft fur Internationale Zusammenarbeit</i>
ICU	Intensive care unit
IMA	Indonesian Midwives Association
INNA	Indonesian National Nurses Association
IPHA	Indonesian Public Health Association
ITT	Intention-to-treat
Jamkesda	<i>Jaminan Kesehatan Daerah/</i> Health District Assurance
Jamkesmas	<i>Jaminan Kesehatan Masyarakat/</i> Social Health Insurance programme
JHPIEGO	Johns Hopkins Program for International Education in Gynecology and Obstetrics
JKN/ NHIS	<i>Jaminan Kesehatan Nasional/</i> National Health Insurance System
JKPMM	<i>Jaminan Pemeliharaan Kesehatan Masyarakat Miskin/</i> Health Safety Net for the Poor Programme
KADARZI	<i>Keluarga sadar gizi/</i> awareness of family towards good nutrition
LMICs	Low-Income and Middle-Income Countries
LHW	Lady Health Worker
MDGs	Millennium Development Goals
MIDIRS	Maternity & Infant Care Database

MMAT	Mixed Methods Appraisal Tool
MMD	<i>Musyawah Mufakat Desa/ Village Community Meeting</i>
MMR	Maternal Mortality Ratio
MNH	Maternal and Neonatal Health
MoH	Ministry of Health
NMR	Neonatal Mortality Rate
NGOs	Non-government organisations
NTB	Nusa Tenggara Barat/ West Nusa Tenggara
P4K sticker	<i>Program Perencanaan Persalinan dan Pencegahan Komplikasi / birth preparedness and complication readiness programme sticker</i>
PHBS	<i>Perilaku hidup bersih dan sehat/ healthy and clean lifestyle</i>
PHC	Primary Health Care
PhD	Doctor of Philosophy
PIL	Participant Information Leaflet
PKD	<i>Pos kesehatan desa/ village health post</i>
PKK	<i>Pemberdayaan dan Kesejahteraan Keluarga/ Family Welfare Movement</i>
PLA	Participatory Learning and Action
Polindes	<i>Pondok Bersalin Desa/ Village Birth Centre</i>
Posyandu	<i>Pos Pelayanan Terpadu/ integrated health service post</i>
PSN	<i>Pemberantasan sarang nyamuk/ eradication of mosquito nests</i>
Puskesmas	<i>Pusat Kesehatan Masyarakat/ community health centre</i>
Pustu	<i>Puskesmas Pembantu/ auxiliary health centres</i>
RCT	Randomised Controlled Trial
SBAs	Skill Birth Attendants
SDGs	Sustainable Development Goals
SHREC	School of Healthcare Research Ethics Committee
SMD	<i>Survey Mawas Diri/ Community Self Survey</i>
SIAGA	<i>Slap, Antar, jaGA/ ready, to take, to transport, to guard</i>
TBAs	Traditional Birth Attendants
UK	United Kingdom
UNDP	United Nation Development Programme
UN	United Nation
UNICEF	United Nations Children's Fund
UKBM	<i>Upaya Kesehatan Bersumberdaya Masyarakat/ Community based-resources health efforts</i>
WHO	World Health Organisation

## Glossary of Terms

Term	Definition
Maternal death	The death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and the site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management, but not from accidental or incidental causes (WHO, 2011:183)
Maternal morbidity	Refers to women who have a physical or mental illness or disability or severe life-threatening obstetric complication due to pregnancy or birth (Say et al., 2004).
Community participation in health	The process by which individuals and families assume responsibility for their own health and welfare and for those of the community and develop the capacity to contribute to their and the community's development. They come to know their own situation better and are motivated to solve their common problems. This enables them to become agents of their own development instead of passive beneficiaries of development aid. They therefore need to realize that they are not obliged to accept conventional solutions that are unsuitable but can improvise and innovate to find solutions that are suitable (WHO, 1978:50)
Participatory learning and action	A family of approaches, methods, attitudes, behaviours and relationships, which enable and empower people to share, analyse and enhance their knowledge of their life and conditions, and to plan, act, monitor, evaluate and reflect (Thomas, 2004)



## **Chapter 1 Background and Study Context**

### **1.1 Introduction**

This first chapter provides the background of the underlying reasons to conduct the study. An overview of global maternal and neonatal health (MNH) and its determining factors will be presented. The context of the study will be described to provide information related to Indonesia, its MNH problems, the health system, and the policy strategies to improve MNH. The community participation overview and the specific initiative of 'Desa SIAGA' or 'Alert Village' as a form of community participation model (CPM) will be explained. The aim and objectives of the study as well as the study question will be presented.

### **1.2 Background**

#### **1.2.1 Maternal and neonatal mortality and morbidity in low-and middle-income countries**

It is calculated that worldwide, 830 women die every day due to complications of pregnancy, labour, and delivery (WHO et al., 2015). Reducing the number of maternal deaths and improving maternal health is a global concern (WHO, 2010) and is clearly outlined, as a priority goal within the United Nations (UN) Sustainable Development Goals (SDGs) programme (UNDP, 2017). In goal three (ensuring healthy lives and promoting well-being for all at all ages), one of the targets is to decrease the maternal mortality ratio (MMR) globally to less than 70 per 100,000 live births (UN, 2016). The MMR is defined as "the number of maternal deaths during a given time period per 100,000 live births during the same time period" (WHO et al., 2019, pp. 9). Globally, there has been a 38% decline in MMR over the past 20 years, from 342 maternal deaths per 100,000 live births in 2000 to 211 per 100,000 in 2017 (WHO et al., 2019). However, there is still more work to be done to reach the SDGs targeted rate of less than 70 maternal deaths per 100,000 live births by 2030. The vast majority of this burden of death is in low to middle income countries (LMICs). On average, the MMR in LMICs is still 20 times higher than in high income countries (WHO et al., 2015), and 40 times higher than in Europe (WHO et al., 2019).

The burden of poor maternal health outcomes is not only captured by maternal death but also by maternal morbidity (Hardee et al., 2012). The causes of maternal morbidity are very complex, yet most cases occur due to lack of access to good quality care, which is often the case for poor women in LMICs (Maternal Morbidity Working Group,

2013). For example, studies show that almost two million women have obstetric fistula caused by obstructed delivery and 12% of women suffer from anaemia as a result of haemorrhage that may be caused by a delay in accessing emergency obstetric care (EmOC) (AbouZahr, 2003; de Bernis, 2007). Furthermore, perinatal mental illness such as depression is a common cause of maternal morbidity, affecting between 10-13% of pregnant and postnatal women worldwide (WHO, 2017). These rates are even higher amongst women in LMICs where almost 20% of women experience mental disorders in the pregnancy and postnatal period, potentially leading to maternal suicide (WHO, 2017).

Both maternal mortality and morbidity are likely to result in complex consequences in terms of social and economic impact as well as family livelihoods (Storeng et al., 2010; Koblinsky et al., 2012). In addition, literature shows that there is strong relationship between maternal deaths and neonatal mortality (Hug et al., 2019). Neonatal death is defined as “deaths among live births during the first 28 completed days of life; subdivided into early neonatal deaths, occurring during the first seven days of life, and late neonatal deaths, occurring after the seventh day but before 28 completed days of life” (WHO, 2020a). In the SDGs, reducing neonatal death is also one of the goals. One of the indicators for observing the progress is neonatal mortality rate (NMR) which measured by the deaths per 1,000 live births. By 2030, the goal aims to reduce the neonatal mortality by 12 per 1,000 live births (WHO, 2021).

Globally, there was reduction of neonatal deaths from 5.0 million in 1990 to 2.5 million in 2017. During the same period, the NMR decreased by 51% from 36.6 deaths per 1,000 live births in 1990 to 18.0 deaths per 1,000 live births in 2017 (Hug et al., 2019). Most neonatal mortality occurs in LMICs where maternal mortality is high (WHO, 2020b; Hug et al., 2019). Most of the causes of the deaths are due to poor maternal health and poor management during delivery (WHO, 2020b). Evidence showed that women who had good health behaviour during pregnancy might decrease the NMR (Tunçalp et al., 2015). For instance, a cluster randomised controlled trial (C-RCT) in Nepal found that the increased number of women attending antenatal care (ANC) and the increase of breastfeeding could lead to the decrease of neonatal deaths (Manandhar et al., 2004). Therefore, addressing maternal health problems is likely to lead to better neonatal health outcomes (Hug et al., 2019).

### **1.2.2 Determining factors**

There are complex and multifaceted factors that may determine inadequate MNH. Various factors are considered to contribute to maternal mortality and morbidity, such as obstetric complication, women's health condition, poor health services, inadequate referral systems, poor education, gender inequalities, and socioeconomic constraints (McAlister and Baskett, 2006; Ronsmans and Graham, 2006; Tunçalp et al., 2015). In

terms of obstetric complications, there are five major (potentially preventable) direct causes leading to maternal mortality, namely: severe postpartum haemorrhage, severe pre-eclampsia, severe systemic infection, obstructive labour, and complications from abortion (Say et al., 2014; WHO et al., 2015).

Low education, gender discrimination, and poor socioeconomic status are associated with many of the issues leading to maternal mortality and morbidity (Ahmed et al., 2010). Poor socio-economic conditions place mothers at a higher risk of morbidity and mortality by decreasing their ability to purchase good health care services and increasing exposure to poor housing, water, sanitation, and inadequate nutrition (Bhutta et al., 2010). Poor nutritional status can lead to increased risk of ill-health and death of both the mother and new-born (Black et al., 2013). Poverty prevents many women from accessing good education and employment, which may affect their knowledge related to maternal and child health (WHO and UNICEF, 2012). This condition is worse in poorer countries that are not able to provide good health care systems and infrastructure to their people (Marmot et al., 2008). Furthermore, gender discrimination and cultural factors, such as women having no power in decision-making, and entering marriage and childbearing at an early age, can have a considerable effect on poor MNH outcomes (Starrs, 2006).

### **1.3 Study context**

This section provides general information about Indonesia and the situation of maternal mortality and morbidity within the country and the study location. An overview relates to the health system in Indonesia and the policy strategies to improve MNH will be explained. Community participation is one of the strategies and as the focus of this study will be presented. Desa SIAGA programme as a form of community participation approach that is implemented in Indonesia will be explained. An overview of Indonesian midwives will be provided as the midwives are key actors in improving MNH in the Indonesian context.

#### **1.3.1 General information on Indonesia**

Indonesia, officially the Republic of Indonesia, is located in Southeast Asia, lying between the Indian Ocean and Pacific Ocean. The country is the biggest archipelago in the world and consists of more than 17,000 islands. There are five big islands namely, Sumatera, Java, Borneo, Sulawesi, and Papua (Central Bureau of Statistics of Indonesia, 2018). With a population of about 270.2 million, Indonesia is listed as the fourth most populous nation in the world (World Bank, 2020). Most of the citizens reside in Java Island where Jakarta, the capital city, is situated. There are more than 1300 ethnic groups within the country with Javanese as the largest group (Central Bureau of Statistics of Indonesia, 2015). The national language is Indonesian or

Bahasa Indonesia, yet there are about 2500 regional languages across the country (Central Bureau of Statistics of Indonesia, 2010).

In terms of the economic condition, Indonesia has experienced growth in the past two decades (Central Bureau of Statistics of Indonesia, 2018). Recently in 2020, Indonesia was just listed as one of the upper-income countries (World Bank, 2020). However, the human capital index remains low (World Bank, 2020), the prosperity is not equal across the country and there is a gap between the richest and the rest (Wicaksono et al., 2017; Suryahadi, 2018; Lindsey and Mann, 2020). Despite the improving economic condition, Indonesia still faces many problems such as poor access to good education, poor infrastructures mainly in rural areas, low wages, and unequal health care access (BAPPENAS, 2017; BAPPENAS, 2019; Legatum Institute, 2019). It is suggested that Indonesia failed to achieve its Millennium Development Goals (MDGs) in 2015 by reducing its MMR (192 maternal death per 100,000 live births) (World Bank, 2016). The greatest challenge was the poor quality of maternal health care, the competency of health care providers and adequate health facilities (BAPPENAS, 2017). The political circumstances, corruption, and geographical conditions are suggested to challenge the equality of health care services, across the country (Mahendradhata et al., 2017; Agustina et al., 2018; BAPPENAS, 2019; Legatum Institute, 2019).

The current study was conducted in Sukoharjo Regency, a part of Central Java Province (Figure 1-1). The study location was chosen due to several reasons, including its MNH problems and the community participation model (CPM) that was implemented in the area to overcome MNH issues. Further details regarding this rationale are provided in the next few following sections.

**Figure 1-1: Map of Indonesia indicating the location of Sukoharjo**



Source: Worldometers.info, 2017

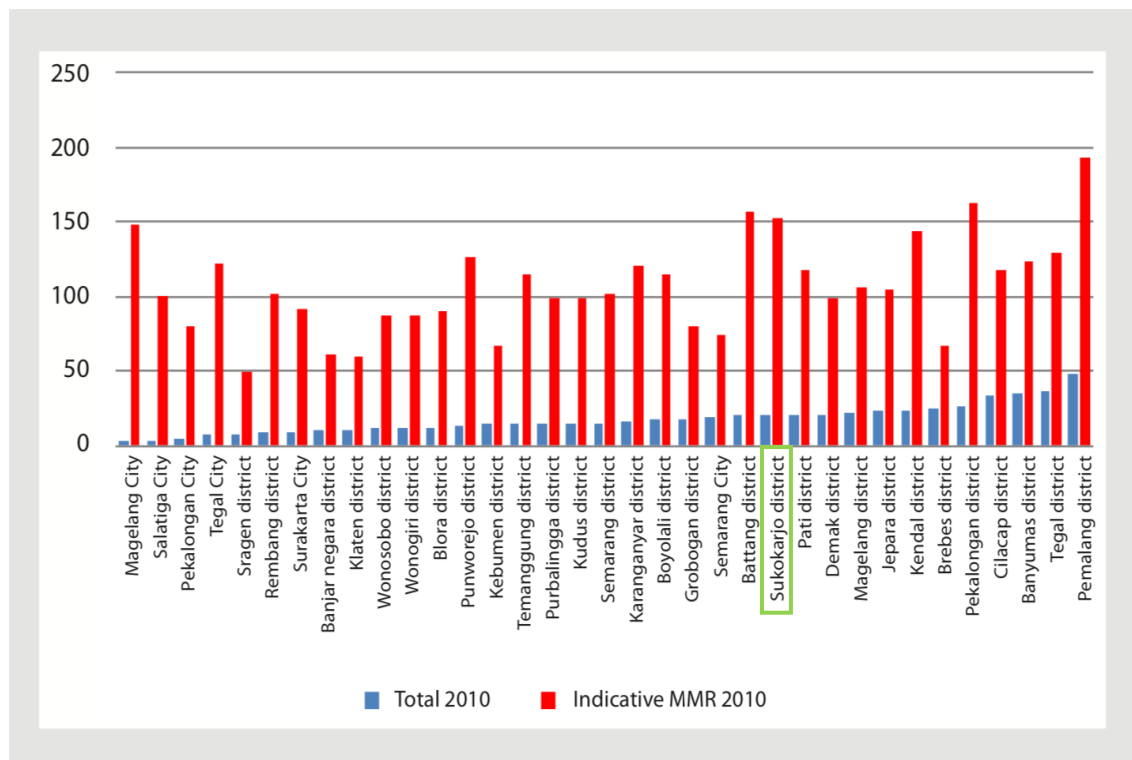
### 1.3.2 Maternal and neonatal mortality and morbidity in Indonesia and Sukoharjo Regency

In 2017, Indonesia was placed at number 16 of highest MMR in the world. Indonesia MMR declined from 272 maternal deaths per 100,000 live births in 2000 to 177 deaths per 100,000 live births in 2017. Even though there was a 35% reduction between 2000 and 2017, Indonesia is still far from the target of 70 (WHO et al., 2019). The decrease of MMR was followed by a decrease of NMR, from 22.8 deaths per 1,000 live births in 2000 to 13.4 deaths per 1,000 live births in 2017 (World Bank, 2021). In 2019, even though Indonesia NMR decreased into 12.4 deaths per 1,000 live births, the newborn death ratio was unacceptably high (60,000 deaths) and made Indonesia as one of top ten countries with the highest number of newborn deaths (WHO, 2020b).

Sukoharjo has one of the highest MMR figures in Central Java (Figure 1-2). In Sukoharjo, there has been an inconsistent reduction in maternal mortality over the past few years. The need to reduce the MMR remains a high public health priority. There were 101 maternal deaths per 100,000 live births in 2014, which increased into 159 per 100,000 live births in 2015, then decreased into 94.83 per 100,000 live births in 2016 with a further reduction to 31.94 per 100,000 live births in 2017. Data reveals that the main causes of maternal death were haemorrhage, hypertension, infection, cardiovascular diseases, and unidentified causes (Health Office of Sukoharjo, 2017).

The NMR in the area of Sukoharjo in 2017 was 3.99 per 1,000 live births, increased from 3.87 per 1,000 live births in 2016. The majority of neonatal death were due to mothers' poor condition during pregnancy, and similar causes as in maternal death (e.g., infection). The highest number of neonatal deaths occurred in Nampan and Maja Districts, (10 deaths). In the same year, in addition, the Nampan District was also one of the four areas in Sukoharjo which reported a high maternal death ratio (Health Office of Sukoharjo, 2017).

**Figure 1-2: The comparison between 'indicative' MMR versus absolute number of maternal deaths by district/city, Central Java, 2010**



Source: Regional Action Plan, Central Java Province, 2011-2015

### 1.3.3 The health system in Indonesia

The Indonesian national health care service is based on a primary health care scheme where the community health centre (*Puskesmas*) is the basic health care facility, not only at the village level but also in the city (National Research Council, 2013).

*Puskesmas* are located in every district within the country, with some auxiliary health centres (*Puskesmas Pembantu/ Pustu*) and monthly integrated health service posts (*Pos Pelayanan Terpadu/ Posyandu*) which number depends on the coverage of the district (MoH Indonesia, 2009). There is one integrated health service post in each hamlet which is managed by village midwives and facilitated by community health

workers (CHWs) called as *kadre* (cadres). Even though cadres come from lay people, they may give important influence to promote community health (Agustina et al., 2018). Additionally, in some villages there are village health posts or *pos kesehatan desa* (PKD) where the village midwives live to provide easy access to the service in the community.

Apart from Puskesmas at a district level, there are public hospitals in the region's capital city and provincial level. These hospitals are managed by the local government, unlike Puskesmas that are managed by the Health Office at a regional level. Meanwhile, at the national level, the government has national public hospitals which are managed by the Ministry of Health (MoH). In addition to Puskesmas and public hospitals, there are also several private clinics and hospitals within the country (MoH Indonesia, 2009). Nevertheless, the spread of these health care facilities is uneven across the country, and it is suggested that the facilities in the urban areas are better than in the rural areas (Agustina et al., 2018).

With regards to the health care professionals, there is a disproportion between health workers and the population ratio. Moreover, the distribution of health professionals is not balanced throughout the country as some health professionals refused to work in the rural and remote places since the areas have poor facilities, lower status, and unfriendly surroundings (Gunawan and Aungsurroh, 2015; Agustina et al., 2018). However, the Indonesian Government always puts effort to increase the equality of health professionals and target to improve the number of health professionals (Agustina et al., 2018).

In order to reach universal health coverage for all and tackle poverty, the Indonesian government has implemented a health insurance programme since 2000. In 2000, the scheme was only for the poorest, and was named *Askeskin* (MoH Indonesia, 2009). In 2005, the name changed into 'Health Safety Net for the Poor Programme' (JPKMM). Then from 2008 to 2013, the programme changed to 'Social Health Insurance Programme' (*Jamkesmas*). Currently, the programme name is 'National Health Insurance System (NHIS)' or *Jaminan Kesehatan Nasional* (JKN) and was established in early 2014 (Fossati, 2016; Agustina et al., 2018). The NHIS was created by merging multiple fragmented health insurance scheme and social assistance schemes into a single public entity named the 'Social Security Agency for Health' (SSAH) or *Badan Penyelenggara Jaminan Sosial Kesehatan* (BPJS) (Mahendradhata et al., 2017; Agustina et al., 2018). The NHIS programme set the referral system of patients vertically, from Puskesmas into public hospitals and joint private hospitals (Fuadi, 2013). Nevertheless, Indonesia faces challenges with this universal health care programme as patient demand is very high, yet facilities are limited (Bredenkamp et al., 2015).

Both the community health centre and health insurance programme are basic services for MNH. At the village level, mothers are under village midwives' responsibility. Every month, there is ANC clinic at Posyandu. In Posyandu, a village midwife, supported by some cadres, provide health assessments and consultations related to pregnancy and reproductive health (National Research Council, 2013). However, not all pregnant women would attend the ANC in Posyandu. There are three major reasons which hinder women visiting Posyandu. Firstly, the Posyandu service is in working hours hence career women are not able to attend. Secondly, most women from wealthy households prefer to seek care from private clinics or obstetrician since they feel that private health providers offer better services compare to government facilities (Titaley et al., 2012). Thirdly, traditional beliefs in which women and their family prefer to have traditional birth attendants (TBAs) (Titaley et al., 2010b). although government has put efforts to provide services for its citizens, the usage is not optimum due to various causes.

#### **1.3.4 Policy strategies to improve maternal and neonatal health**

A range of interventions and programme strategies have been initiated, implemented, and evaluated to improve MNH by various agencies at the local, national and international government level. These include improving access to ANC, skilled birth attendants (SBAs), emergency obstetric care (EmOC), financial support in maternity care and community-based participation approaches (WHO et al. 2015).

The evidence suggests that improving access to ANC, SBAs, EmOC and financial support in maternity care have a significant effect in decreasing MMR (WHO et al., 2009; UN, 2011; Prata et al., 2011; Witter and Ensor, 2012). However, in some LMICs such as in Indonesia, there are a number of barriers that hinder those approaches. The availability of ANC is not equally spread out across Indonesia, with a higher uptake in urban areas compared to remote areas due to socioeconomic conditions, demography disparities and traditional beliefs about pregnancy plus the limited number of health professionals in remote areas (Titaley et al., 2010a; Tripathi and Singh, 2017; Agus et al., 2012; Efendi et al., 2016). Moreover, it has been suggested that women in remote areas may still prefer traditional birth attendants (TBAs) instead of SBAs (Titaley et al., 2010b). TBAs are perceived as offering care that is better suited to local customs and demonstrate awareness of the traditional beliefs held by women and their families (Agus et al., 2012). Furthermore, it is suggested that the effectiveness of EmOC depends on the referral, or the ability, of pregnant women to reach services within a couple of hours (Holmer et al., 2014). In rural and remote areas, for instance, geographical conditions, poor infrastructure and transportation can act as barriers to accessing health care centres (Hirose et al., 2015). Lastly, initiatives that involve financial support from the government does not cover transport costs which absorb



almost half of the total spending for a normal birth (Borghini et al., 2006; Witter and Ensor, 2012; Noerdin, 2014).

The factors outlined above have set the scene for the emergence of CPMs. These models focus on the empowerment of individuals and families in assuming responsibility for their health and wellbeing, as well as that of their community, as such community participation, is emerging as a promising approach to improve MNH (Bhutta et al., 2008; Prost et al., 2013).

### 1.3.5 Community participation for maternal and neonatal health

The idea of community participation in health was developed at the Alma Ata conference in 1978 (WHO, 1978). There were a range of terms used to define community participation in health (CPH) as shown in Table 1-1.

**Table 1-1: Various terms of community participation in health**

<b>Term</b>	<b>Scholar and year</b>
Community involvement	Oakley, 1989
Community participation	Rifkin, 1990
Community mobilisation	World Bank, 1996
Community development	Shiell and Hawe, 1996
Community organisation	Shiell and Hawe, 1996
Community empowerment	Rifkin, 2003
Community engagement	Tindana et al., 2007
Social participation	Loewenson and Tibazarwa, 2013
Consumer engagement	Mittler et al., 2013
Citizen participation	Wheeler, 2013

As can be seen by the quantity of terms stated above, the interpretation of community participation remains debatable. One of the best-known concepts for the basis of community participation was established by Arnstein in the late 1960s, about power and control, where there is a transformation from “control by authorities to control by people or citizens” (Cornwall, 2008, pp. 271). Rifkin (1990) argues that community participation seems to be a key to primary health care (PHC) which focused on the implementation of health care intervention to health issues of those from the poorest and remotest area in LMICs. Regardless of the controversy around the term, definition and contextual meaning, community participation may have the potential to improve health outcomes for sustainable development (Afsana, 2012).

The World Health Organisation (WHO) recommends community participation interventions to be included in programmes to overcome MNH problems. The

recommendation is built upon the growing evidence of community involvement in improving MNH (WHO, 2015). One of the recommendations relates to women's groups as a form of CPM. Recent studies in South Asia indicate that women's groups practicing participatory learning and action (PLA) could increase awareness and development of family care through counselling, action learning and the promotion of positive health behaviours. It is therefore improving MNH outcomes in terms of health care behaviours and breastfeeding (Bhutta et al., 2008; Prost et al., 2013). Nonetheless, it was argued that much of the available evidence is weak in terms the study design and the results are inconsistent, further research is therefore required (Marston et al., 2013; Rifkin, 2014; WHO, 2015).

A community participation approach to improve maternal wellbeing has also been implemented in Indonesia. The 'Alert Village Programme' or 'Desa SIAGA', is a scheme in which the community is empowered to be responsible for their own health conditions rather than rely solely on health care providers (Suryahadi et al., 2010). Based on the evaluation of the Desa SIAGA programme in West Nusa Tenggara/ Nusa Tenggara Barat (NTB) conducted by *Deutsche Gesellschaft fur Internationale Zusammenarbeit* (GIZ) GmbH and the Health Office of the NTB Province (GIZ, 2011), the implementation of Desa SIAGA has increased: antenatal visits; the percentage of deliveries assisted by health professionals; the percentage of deliveries in health facilities; and knowledge about family planning methods. However, there is limited research on the processes of Desa SIAGA and how community participation works within the programme. The factors that influence the programme delivery and implementation are also limited. Several publications on Desa SIAGA were related to the measurement of the programme campaign, the government report on the evaluation of the programme, and the evolution of the programme (GIZ, 2011; Hill et al., 2014).

Furthermore, literature suggests that a number of factors influence the implementation of community participation programmes in improving MNH, including socio-cultural and systemic factors (Rifkin, 2014; Howard-Grabman et al., 2017). The socio-cultural factors such as gender roles in pregnancy and childbearing affect how the community perceive the importance of male involvement in supporting pregnant women (Rosato et al., 2008; Howard-Grabman et al., 2017). Whilst the systemic factors, leadership for instance, predispose the local government to decide whether community participation to improve MNH is on their programme priority (Bhutta et al., 2011; Akhtar et al., 2014; Howard-Grabman et al., 2017). However, there is limited research exploring the process of CPM, the implementation, as well as the facilitators and barriers into community participation programmes. Most studies assess the link between community participation interventions and the MNH outcomes (Butterfoss, 2006; Rifkin, 2014).

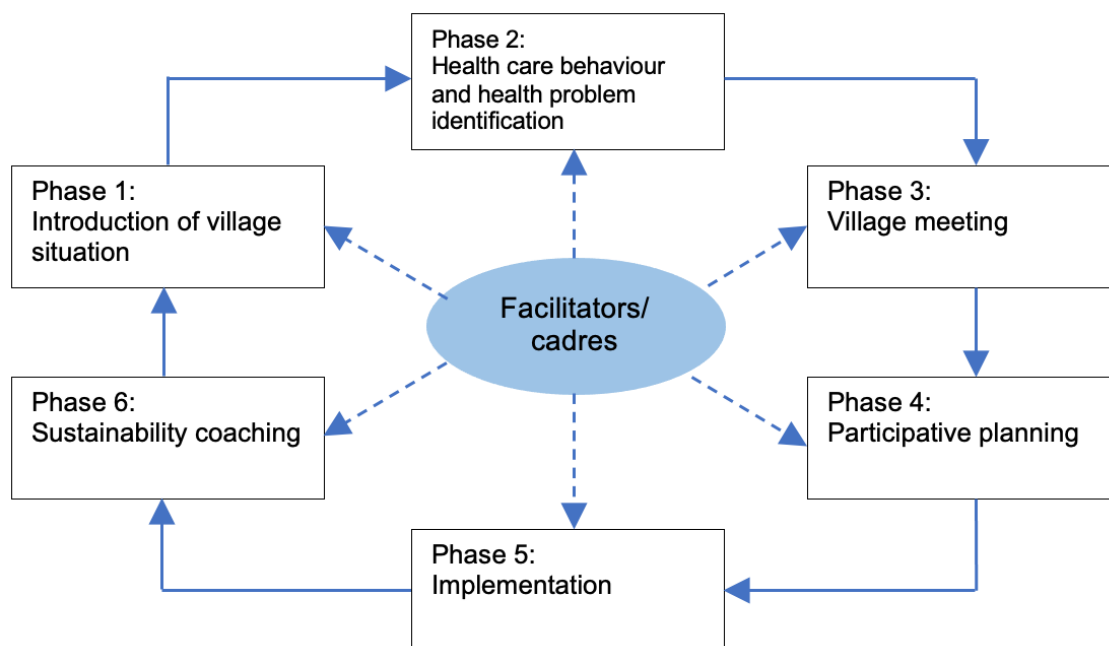
### 1.3.6 Desa SIAGA (Alert Village)

In 1999, the Indonesian Ministry of Women's Empowerment initiated the idea of 'Alert Husband' or '*Suami Siaga*' that aimed to engage husbands to be aware of, and responsible for, their wives' condition in pregnancy (Shefner-Rogers and Sood, 2004). This programme was initially developed as part of the Safe Motherhood Initiative in Indonesia. The name of the programme shifted from *Suami SIAGA* (alert husband) in the first campaign in 1999 to Desa SIAGA in 2006 (Hill et al., 2014). In Indonesian language, the word 'siaga' means alert, but in a semantic shift common to the Indonesian language, 'SIAGA' (capitalized in its technical use) has been described as an acronym comprising elements of three separate words: 'Slap, Antar, and jaGA'. Put literally, 'siap' means 'ready', 'antar' means 'to take, to transport' and 'jaga' means 'to guard' (Hill et al., 2014). Based on the General Guidance on Development of Desa SIAGA or *Pedoman Pelaksanaan Pengembangan Desa SIAGA* (MoH Indonesia, 2006), the definition of Desa SIAGA is:

*'The village in which the communities are aware of and have the intention and capabilities for preventing and overcoming their own health problems, disasters and health emergencies, independently.'* (MoH Indonesia, 2006, pp V-3)

In 2010, the MoH of Indonesia introduced 'Desa SIAGA Aktif' or Active Alert Village as the ongoing development of 'Desa SIAGA'. The concept was then developed into more broad coverage of health issues such as sanitation, healthy lifestyles, disease surveillance, emergency conditions, and disasters (MoH Indonesia, 2010) with a specific focus on the safe-motherhood programme (Hill et al., 2014). Desa SIAGA is described as a form of community participation approach that empowers people in a village to be aware of and responsible to both prevent and address MNH problems, general health problems, disasters, and health emergencies by helping each other with the spirit of togetherness (*gotong royong* in Indonesian) drawing on local resources (Sood et al., 2004; Kusuma et al., 2009).

The Desa SIAGA programme implements a six-phase of PLA cycle namely: the introduction of the village situation; the identification of health care behaviours and health problems; village meetings; participative planning; implementation; and sustainability coaching (Figure 1-3). Through this cycle, a Community Based-Alert System (CBAS) is established by the community within 'Desa SIAGA' (Kusuma et al., 2009). The CBAS aims to manage the non-clinical aspects in emergencies related to pregnancy and delivery to address the "three delays" problem (delay in the decision to seek care, delay in the arrival at a health facility, and delay in the provision of adequate care) that is suggested to cause maternal deaths (Thaddeus and Maine, 1994; Kusuma et al., 2009).

**Figure 1-3: Participatory learning and action cycle in Desa SIAGA**

Source: MoH Indonesia, 2010

The Indonesian government reported that since it was launched in 2006 until 2009, there were 42.295 villages (56,1%) out of 75.410 villages across Indonesia who started to develop Desa SIAGA. However, many of the villages failed to develop the Desa SIAGA. The government suggested that it was challenging to develop a programme which required participation from the community (MoH Indonesia, 2010). Since then, the government has released a new decree for General Guidelines on Development of Active Alert Village or *Pedoman Pelaksanaan Pengembangan Desa SIAGA Aktif* which set the target to achieve 80% of villages across Indonesia developed to be 'Desa SIAGA Aktif' or 'Active Alert Village' by 2015 (MoH Indonesia, 2010).

### 1.3.6.1 Desa SIAGA Aktif / Active Alert Village

The 'Desa SIAGA Aktif' has been developed from the Desa SIAGA programme launched in 2006 (MoH Indonesia, 2010). There are three core elements of 'Desa SIAGA Aktif' (Hill et al., 2014; MoH Indonesia, 2010) namely: (1) basic health care service availability; (2) community empowerment through developing community-based initiatives and promoting community-based surveillance, health emergency, disaster preparedness and sanitation; (3) promoting healthy lifestyles. In order to be a 'Desa SIAGA Aktif', there are eight criteria should be met by a village as follows (MoH Indonesia, 2010):

1. There is a village forum.
2. There are cadres to empower the community.

3. A basic health service that can be accessed everyday by the community.
4. Community based-resources health efforts (*Upaya Kesehatan Bersumberdaya Masyarakat/ UKBM*), including surveillance, disaster and emergency management, and environmental health improvement.
5. Financial resources from the village government, community, and business sectors.
6. Community participation and community-based organisation participation.
7. There is a policy in the village government about 'Desa SIAGA Aktif'.
8. Healthy lifestyle development at the household level.

In the development of 'Desa SIAGA Aktif', there are four levels of Desa SIAGA namely: *Pratama* (baseline level), *Madya* (middle level), *Purnama* (advance level), and *Mandiri* (independent). These levels are based on the criteria met by the village. Table 1-2 below shows a matrix that describing each level of the Desa SIAGA and its criteria:

**Table 1-2: Matrix of Desa SIAGA level**

Criteria	Level of 'Desa SIAGA Aktif'			
	Pratama	Madya	Purnama	Mandiri
1. Village forum	Yes. Does not run	Run, but the schedule is ad hoc	Meeting in every three months	Monthly meeting
2. Community health workers (cadres)	2 cadres	3-5 cadres	6-8 cadres	9 or more cadres
3. Basic health service	Yes	Yes	Yes	Yes
4. Integrated health service post (Posyandu) and other UKBM	Posyandu	Posyandu and 2 other UKBM	Posyandu and 3 other UKBM	Posyandu and 4 other UKBM
5. Financial resources from the village government, community, and business sectors	Financial resources only from village government	Financial resources from village government and one other source	Financial resources from village government and two other sources	Financial resources from village government and two other sources
6. Community participation and community-based organisation participation	There is community participation	There is community participation and one community-based organisation	There is community participation and two community-based organisations	There is community participation and more than two community-based organisations
7. Village government policy	N/A	There is local policy but not yet applied	There is local policy and has been applied	There is local policy and has been applied
8. Healthy lifestyle development at the household level	Less than 20% of total household	Minimum 20% of total household	40% of total household	Minimum 70% of total household

### **1.3.6.2 Maternal and neonatal health sector in Desa SIAGA Aktif/ Active Alert Village**

In a Desa SIAGA Aktif, maternal health and childbirth are village affairs. The community and stakeholders work together to help pregnant women during their pregnancies and childbirths through CBAS (Kusuma et al., 2009) or the five key 'alert system' (GIZ, 2011). There are trained village facilitators who guide the community in the participatory process (MoH Indonesia, 2010). The village facilitators have a task to help the community to identify the maternal and neonatal death in the village and to develop their sense of responsibility through participatory action to reduce the maternal death and neonatal death in the village (GIZ, 2011). The five key alert systems in Desa SIAGA Aktif are as follows.

#### ***Notification system***

Once a pregnant woman in the village has been identified by cadres or neighbours, her details will be recorded in a central register by the cadre. Then the cadre will notify the village midwife about the pregnant woman and that links up to the village health facilities. The village midwife will follow-up with the pregnant woman for regular antenatal visits, home visits, delivery planning and post-partum care. The village midwife, together with the woman, identify delivery planning following what is detailed on the P4K sticker (*Program Perencanaan Persalinan dan Pencegahan Komplikasi* or Programme of Birth Planning and Prevention of Complication), including: expected delivery date, who will assist the pregnant woman during the birth, the name of blood donor, and who will assist with transportation. The village midwife will encourage the pregnant woman to give birth in the health facility. A pink-colour sticker will then be attached to the home door so that everyone in the village can see (Hill et al., 2014; GIZ, 2011). This sticker is a symbol of 'making childbirth a village affair' (GIZ, 2011).

#### ***Financial support system***

In Desa SIAGA Aktif, the community contribute to help with the financial difficulties of the pregnant women, such as transportation and medical care. There are two types of the funding scheme: a self-savings scheme in which the women contribute small amounts of money in an agreed time duration; and a local health insurance scheme which involves contribution from both the women and community (GIZ, 2011).

#### ***Blood donor system***

The community learns about the process of donating blood and are encouraged to have a blood group test in the village health post to ensure it will be easy to find donors when needed. Their phone numbers are recorded so that can be easily contacted by village midwives, cadres, or other related people (GIZ, 2011).

### ***Transportation and communication system***

The community and stakeholders discuss the system for transportation and communication to help pregnant women in an emergency to transport them to health care facilities. Villagers who have cars and mobile phones, and willing to help, are registered in the village and have to be ready anytime needed (GIZ, 2011).

### ***Family planning information post***

A cadre is trained in a reproductive health programme. She then works individually to promote the family planning programme in the village (GIZ, 2011).

### **1.3.6.3 'Desa SIAGA Tidak Aktif' / Non-active Alert Village**

As Indonesia had set the target to reach 80% Desa SIAGA Aktif by 2015, almost all villages across Indonesia have been developed to have the minimum standard of basic health care service (MoH Indonesia, 2010) and those villages are categorised as Desa SIAGA Pratama based on the level of Desa SIAGA Aktif development (Table 1-2 shows the details). In general, these Desa SIAGA are not active as they do not meet the eight criteria of Desa SIAGA Aktif. In terms of the MNH sector, the five key alert systems do not run as they have very limited facilitators (cadres), the village forum does not run, there are limited financial resources, and there is no village government policy about Desa SIAGA. Community participation does exist, but it is disorganised. In Desa SIAGA that is not active, pregnancy is not a village matter (GIZ, 2011).

### **1.3.6.4 Specific elements of Desa SIAGA**

There are two specific elements of Desa SIAGA programme, including a pledge card and P4K sticker. The pledge card is a card provided by healthcare professionals that is signed by pregnant women/family and community members regarding community response to emergencies. While the P4K sticker stands for *Program Perencanaan Persalinan dan Pencegahan Komplikasi* (birth preparedness and complication readiness programme sticker) and it should be displayed on pregnant women's houses (usually on the main door). These documents are available in the maternal and child health book which every pregnant woman should have. The procedure to fill in the sticker as well as the card are available in *Petunjuk Teknik Penggunaan Buku Kesehatan Ibu dan Anak* or Technical Guidelines on the Use of Maternal and Child Health Book, pages 14, 15, and 16. The original procedures for the pledge card, its example and a P4K sticker, along with its translation, are provided in Appendix A, Appendix B and Appendix C, respectively. In general, these two elements of the programme contain the birth preparedness principles that are recommended by WHO (2015), including details of the pregnant woman, when the expected date of delivery is, who will assist the birth, the blood donor in the case of emergency, where is the

birthplace, who will accompany the birth, and what is the transportation to the health facility.

Nonetheless, there is no explanation about these two documents on either of the MoH Decrees. The pledge card is mentioned as part of the 'Desa SIAGA' campaign in the document of JHPIEGO publication 'Measuring the effects of the SIAGA behaviour change campaign in Indonesia with population-based survey results' published in 2004 (Sood et al., 2004). Whilst the P4K sticker is stated as a part of the Desa SIAGA initiative in a report from MoH Indonesia titled '*Menuju Masyarakat Sehat yang Mandiri dan Berkeadilan* or 'Towards a healthy, independent, and equitable community' (MoH Indonesia, 2011).

### **1.3.6.5 The role of key actors in Desa SIAGA**

According to the Decree of MoH Indonesia (2010) about Desa SIAGA Development, various sectors are involved in the Desa SIAGA, ranging from the central level (MoH, Ministry of Home Affairs), provincial level, regency, district, and village level. In terms of the implementation, key actors in the village level have the essential roles, including village government and cadres.

#### ***Village government***

The village government have several main roles in the Desa SIAGA programme (MoH Indonesia, 2010). The roles are mainly as policymakers at the village level and supervising the programme implementation. Moreover, they have duty to manage the funding for the community empowerment programme in the village budget that relates to Desa SIAGA development programme. The funding for Desa SIAGA can be drawn from diverse resources, either from the national government, village government, or other sectors. The funding is allocated for supporting Desa SIAGA development, for example to run health promotion, to empower community to participate in Desa SIAGA activities, and to ensure coordination between all stakeholders to develop Desa SIAGA programme. Additionally, the village governments should provide facilities that can accelerate the development of Desa SIAGA. In carrying the tasks, the village governments should, in partnership with the Village Deliberation Agency/ *Badan Permusyawaratan Desa* (BPD) and the community to empower the community in order to be able to implement Desa SIAGA. Finally, the village governments have to write the implementation report.

The village governments should utilise the available village forum. This village forum has a structure that consists of the village forum leader (the head of the village); co-leader (village secretary); and members (village administrators, family welfare development organisation, religious organisations and scout, CHWs, community leaders). The village forum has a duty to monitor the development of Desa SIAGA.



### ***Community health workers (cadres)***

The cadres are recruited from the local community who have willingness and ability to empower the community to be involved in Desa SIAGA (MoH Indonesia, 2010). These cadres have a main role to facilitate the implementation of the programme. Together with the Village Forum, they have to plan the Desa SIAGA development. They have duty to implement, control, utilise, and maintain the development programme of Desa SIAGA, voluntarily. They should drive and develop the participation of the community in Desa SIAGA. They need to encourage the willingness of the community to use their own resources and mutual cooperation (*gotong royong*) to ensure the programme is a success. They have to conduct health promotions within the community and support the community to solve health-related problems.

### ***Community organisations***

In Desa SIAGA, the available community organisations are also involved in implementing the programme (MoH Indonesia, 2010). They have similar roles as the cadres. However, unlike the cadres, the community organisations have no duty to conduct health promotions or support the community to tackle the health problems.

### ***Alert Youth in Health***

In 2012, The Regent of Sukoharjo District launched a local programme called DASIAT (*Pemuda Siaga Sehat* or Alert Youth in Health) which aimed to empower the youth within the village to help the community in developing their health status including MNH in the village. This programme was not available in the other Desa SIAGA across Indonesia (Andimuhtarom, 2012). Through DASIAT, the young people are expected to use their potential to overcome health problems. It is therefore DASIAT supporting the implementation of Desa SIAGA programme (Press Room Pemkab Sukoharjo, 2012; Health Office of Sukoharjo, 2013).

### ***Village midwives***

In the Decree of MoH of Indonesia (2010) regarding Desa SIAGA development, there is no explanation about village midwives' role in Desa SIAGA. However, based on the JHPIEGO report on the Desa SIAGA campaign (Sood et al., 2004), village midwives have an essential role in 'Desa SIAGA' as skilled health providers that provide services related to childbirth care. In 2002, before the establishment of Desa SIAGA, Bidan SIAGA or Alert Midwife was formed as a part of the safe motherhood programme in Indonesia (Sood, 2004), this then merged into Desa SIAGA as an integrated programme. Bidan SIAGA aimed to increase the uptake of antenatal care and childbirth assisted by health professionals, in order to decrease maternal mortality and morbidity (Heywood et al., 2010; Sood et al., 2004). Nowadays, as the Desa SIAGA programme has evolved, the roles of the village midwives cover not only maternal and child health

but also communicable diseases, outbreak, and disaster management (MoH Indonesia, 2019). However, since there is a shortcoming of the number of village midwives, mainly in rural areas, these tasks seem to affect the maternal and child health services provided by the village midwives (Wibowo et al., 2013). An overview of Indonesian midwives is provided in Appendix D.

#### **1.4 Aim, objectives, and questions of the Study**

The overall aim of this study was to explore the role of community participation in preparing pregnant women for birth. While the specific aim of this study was to investigate and explore the community participation approach through Desa SIAGA (alert village) in preparing pregnant women for birth in the Sukoharjo Regency of Central Java, Indonesia. This study has two main objectives, including:

1. To identify current evidence of the role of community participation in the improvement of MNH outcomes.
2. To explore the community participation approach and underlying processes by focussing on the role of Desa SIAGA in preparing pregnant women for birth and improving MNH.

A scoping review was conducted to address the first objective of this study. The review question was "*What is known about the role of community participation in the improvement of MNH outcomes in LMICs?*" The objectives of the scoping review were:

1. To explore the role of community participation in improving MNH outcomes in LMICs from the existing literature.
2. To identify the available models/ interventions of the community participation approach and understand how they are used to improve MNH in terms of preparing women for birth.

Whilst the second objective of this study was answered by employing a case study. The subject of the case study was "*How does community participation through Desa SIAGA support pregnant women in preparing for birth?*" The objectives of the case study were:

1. To explore and observe the approach to community participation through Desa SIAGA in preparing pregnant women for birth.
2. To understand the factors that influence the implementation of Desa SIAGA (facilitators and barriers).
3. To explore the experiences of the pregnant women involved in Desa SIAGA in preparing them for birth.
4. To explore the experiences of post-natal women about Desa SIAGA in preparing them for birth.

5. To explore the experiences of key health workers and other stakeholders (e.g., village midwives, cadres, nearest neighbour of pregnant women, village government, religious leader) involved in Desa SIAGA.

## 1.5 Conclusion

This chapter has provided the background details underpinning the study. Relevant information related to the study context were described. An overview of health system and policy strategies in an Indonesian context were also presented. The Desa SIAGA as a CPM in Indonesia was explained. The underlying reasons to choose the study location were presented: (i) Sukoharjo was counted as one of the areas in Central Java with high MMR; and (ii) the government of the regency implemented Desa SIAGA as a form of community participation with additional programme of DASIAT. The following chapter will illuminate the literature review to answer the first objective of the study.

### **Key summary points:**

- Maternal mortality and severe morbidity remain a global challenge in which LMICs contribute to the highest numbers. The problems have led to poor neonatal health outcomes.
- Various factors are considered to contribute to maternal mortality and morbidity, including obstetric complication, women's health condition, poor health services, inadequate referral systems, poor education, gender inequalities, and socioeconomic constraints.
- Indonesia is one of the countries with rapid economic growth development in last two decades. Yet, the country could not reach of the MDGs target in 2015 to reduce its MMR.
- A range of interventions and programme strategies have been initiated, implemented, and evaluated in the country, including improving access to ANC, SBA, EMOC, financial support, and community-based participation approaches.
- The Desa SIAGA initiative as a form of CPM in Indonesia and is suggested to bring positive impacts to improve MNH. However, there is scarce evidence on how the programme contributes to safe motherhood.
- The complexity of Indonesian MNH problems, the health system, policy strategies as well as community participation required an exploration of how the Desa SIAGA programme support women in birth preparedness.

## **Chapter 2 Literature review**

### **2.1 Introduction**

This chapter will describe the literature review to address the first aim of the study that was presented in Chapter 1. The background on the rationale for conducting a scoping review will be provided. The aim, question and objectives of the review will also be presented. The methods of the review, followed by the results, will be discussed.

### **2.2 Scoping Review of Community Participation for MNH in Low- and Middle-Income Countries**

Strategies to increase the participation and accountability of citizens in the provision of health services is suggested to increase as a popular approach to address shortcomings in service provision in LMICs (Rifkin, 2014). The evidence on community participation to improve MNH in all resource settings is emerging. In Nepal, women's group initiatives as a form of community participation programme, have shown a positive impact in reducing maternal mortality (Manandhar et al., 2004). In most of the resource poor settings, community participation programmes were argued to improve MNH behaviours (Prost et al., 2013). However, the effectiveness of the approach remains debatable (Rosato et al., 2008). In a systematic review conducted by Marston et al. (2013), it was found that community participation interventions did not bring a significant effect on the uptake of skilled care. Therefore, in order to assess the existing evidence of the role of community participation in improving maternal and neonatal health (MNH) outcomes and to identify any gaps in the literature, a scoping review was conducted.

A scoping review was employed as the method of literature review in this study as a scoping review can cover a broad scope of material (Arksey and O'Malley, 2005). This method is useful in examining emerging areas of research that is unclear (Tricco et al., 2016; Munn et al., 2018), such as community participation (Cornwall, 2008). Therefore, this review can help to identify and map the available evidence (Munn et al., 2018) of the model of community participation and the debate around the intervention.

Moreover, the initial search showed that there was scant literature around this topic when it was conducted in Indonesia. Accordingly, there was a need to look at evidence in the LMICs to see what could be learned to inform the delivery and implementation of the community participation in the Indonesia context.

## **2.3 Aim and objectives of the scoping review**

This review was to identify current evidence of the role of community participation in the improvement of MNH outcomes. The objectives of this review were:

1. To explore the literature relating to the role of community participation in improving MNH outcomes in LMICs.
2. To identify the available models/ interventions of community participation and understand how they are used to improve MNH in terms of preparing women for birth.

## **2.4 Methods**

This scoping review applies the framework developed by Arksey and O'Malley (2005). The framework consists of five stages which help to describe the process of this review and will be provided in the following sections.

### **2.4.1 Identifying the research question**

The question is based on the aim of this review that is "*What is known from the existing literature regarding the role of community participation in the improvement of MNH outcomes in LMICs?*"

### **2.4.2 Identifying relevant studies**

The literature search was conducted between March 2017 and October 2020. The search included published studies in electronic databases: MEDLINE, Embase, CINAHL, Global Health, PsycInfo, ASSIA, Social Science Citation Index, Maternity & Infant Care Database (MIDIRS) and Cochrane Library. In addition, the search was also applied through Scholar Google, Google Search Engine, and grey literature from the University of Leeds library website at <https://library.leeds.ac.uk/grey-literature>. The search was limited to studies from 1990 onwards (2020) as in that year, governments around the globe started to adopt and analyse the community participation approach for development programmes (Mitton et al., 2009; Hataya, 2007). Search terms were a combination of 'community participation', 'community mobilisation', 'participatory action', women's group' 'maternal mortality', 'maternal health', and 'maternal health outcomes', including the application of Boolean logic (see Appendix E).

### **2.4.3 Study selection**

All citations and abstracts obtained from the searching on databases were exported to EndNote and Covidence, and duplicates were removed. The remaining titles and abstracts were screened by applying the following criteria in Table 2-1 and Table 2-2.

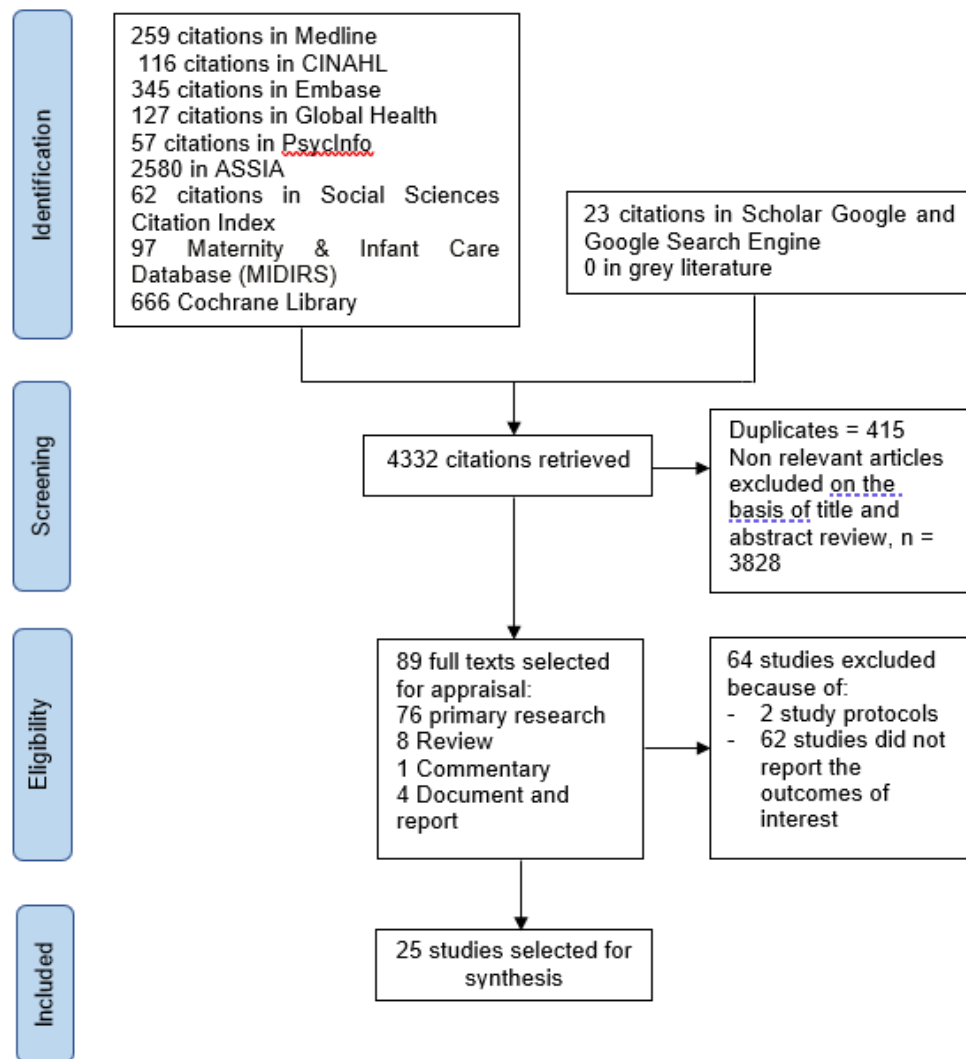
**Table 2-1: Inclusion criteria for article screening**

<b>Inclusion criteria</b>	
1	The article reported data related to the role of community participation in improving MNH outcomes.
2	The article provided information on model/ intervention of community participation MNH maternal and neonatal health outcomes.
3	The study was conducted in low-middle income countries.
4	Study design: any type of study design was included.

**Table 2-2: Exclusion criteria for article screening**

<b>Exclusion criteria</b>	
1	Articles were excluded if studies did not report MNH outcomes.
2	Opinion pieces, letters and book reviews were not eligible for inclusion in the review.
3	Articles published before 1990 were excluded.
4	This review was restricted to English and Bahasa Indonesia only.
5	This review excluded studies on pharmacological and nutritional interventions

There were 4332 references retrieved, of which 25 studies met the inclusion criteria (Figure 2-1).

**Figure 2-1: Flow Diagram for Selection of Studies**

#### 2.4.4 Charting the data

Once the included studies had been selected, the next step was to chart the key information about the study characteristics such as study population, intervention description, outcomes, and study design. The critical information extracted from the papers formed the basis of the analysis and subsequent findings (Arksey and O'Malley, 2005).

##### 2.4.4.1 Summary of study characteristics

Table 2-3 below provides a short version of the study characteristics, see Appendix F for more details. The included studies were conducted between 2000 and 2020.

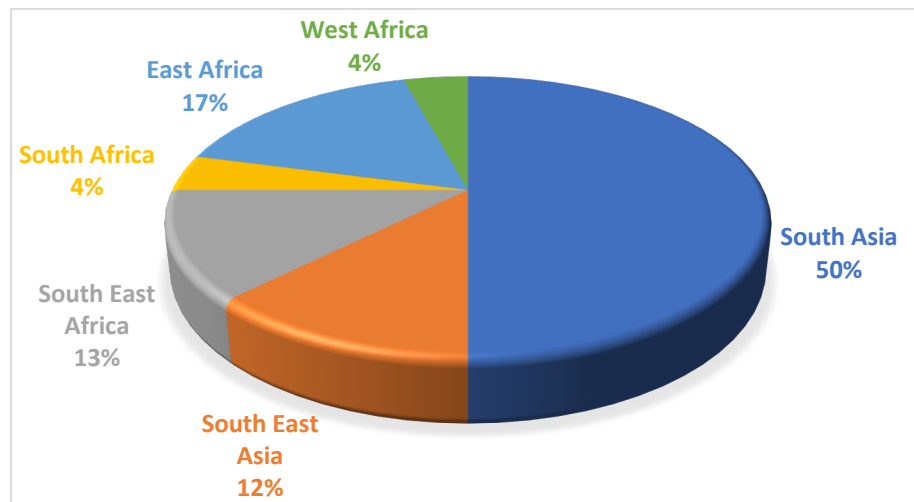
**Table 2-3: Included studies based on study design classification**

No.	Author and year	Research design	Country
1.	Manandhar et al., 2004	Cluster-randomised controlled trial	Nepal
2.	Tripathy et al., 2010		India
3.	Azad et al., 2010		Bangladesh

4.	More et al., 2012		India	
5.	Colbourn et al., 2013		Malawi	
6.	Lewycka et al., 2013		Malawi	
7.	Fottrell et al., 2013		Bangladesh	
8.	Tripathy et al., 2016		India	
9.	Fabbri et al., 2019		India	
10.	Sevene et al., 2020		Mozambique	
11.	Qureshi et al., 2020		Pakistan	
12.	Sood et al., 2004		Cross-sectional study	Indonesia
13.	Wangalwa et al., 2012			Kenya
14.	Sharma et al., 2016			Nepal
15.	Swain et al., 2019	India		
16.	Ahluwalia et al., 2003	Qualitative study	Tanzania	
17.	Skinner and Rathavy, 2009		Cambodia	
18.	Morrison et al., 2010		Nepal	
19.	Esienumoh et al., 2017		Nigeria	
20.	Hamal et al., 2018		India	
21.	Fachry et al., 2009	Mixed methods	Indonesia	
22.	Rath et al., 2010		India	
23.	Rosato et al., 2012		Malawi	
24.	Solnes Miltenburg et al., 2019		Tanzania	
25.	Ogwang et al., 2012	Case series	Uganda	

The included studies were multiform in terms of designs, including study settings, sample, methods, results, and outcomes. All studies were conducted in countries with high incidences of maternal mortality in LMICs. Most of them were conducted in South Asia [1-4,7-9,11,14,15,18,20,22], followed by East Africa [13,16,24,25], South East Africa [5,6,23], and South East Asia [12,17,21]. The least studies were conducted in South Africa [10], and West Africa [19]. Figure 2-2 shows the included studies characterised by region. The participants of the study were mostly women of reproductive age (15-49 years old) [1-11,12-15,18-20,21-24]. In some studies, the participants also involved: community members/ community influencers [12,16,17,19,20]; health professionals - the majority of which were midwives [12,16,17,19,20]; husbands [12,18,19]; key actors of the programme [17,20-22]; health volunteers [17,20,21,24]; mothers-in-law [18,19]; stakeholders [21,22,24]; head of households [25], and TBAs [20].



**Figure 2-2: The included studies based on region**

Moreover, there was a difference between the studies in terms of the first target of the intervention. Some studies [1-11] targeted women in the earlier stage of the intervention implementation, such as the women's groups initiative, in order to address gender-based barriers in maternal health. Then in the later stage of the intervention, participation grew to engage men, older women such as the mothers of the women and mothers-in-law, the wider community, and local government workers. Gender stereotypes were identified as one of the contributing factors to maternal health issues. Women as a vulnerable group tend to have less power to decide what works for them in taking care of their pregnancy and preparing for a safe birth. Therefore, involving women in the community participation interventions was expected to empower women to overcome MNH problems (Rosato et al., 2008; Rath et al., 2010). Some papers involved all level of communities since the start of the study [17-19,21,22,24].

In general, all the included studies discussed the importance of community involvement in MNH programmes. The 11 C-RCTs aimed to test and to assess several CPMs to improve MNH outcomes [1-11]. They used surveillance, interviews (verbal autopsy) with family members present at the time of the death of the neonate or women, and observation of participatory meetings to collect the data. The verbal autopsy was conducted by asking the family members to write a free narrative related to the details of the events leading to the death of the neonate or the women. The observations were conducted by programme facilitators. Yet, there was limited information on the type of the observation. The C-RCT conducted by Tripathy et al. (2016) also did data triangulation with documentary analysis. The other five studies were four cross-sectional studies [12-15] and one a case series [25]. The cross-sectional studies intend to assess the effectiveness of several CPMs in improving MNH. The data collection

methods used were survey interviews using questionnaires. The case-series study conducted by Ogwang et al. (2012) used standardised semi-structured questionnaire to investigate community involvement in obstetric emergency management.

Moreover, the five qualitative studies evaluated and explored how certain CPMs worked to improve MNH [16-20]. The qualitative data was collected through interviews [16,17,19,20], observations of several important activities in community participation programmes [16,18,19], focus group discussions (FGD) [17-20], document reviews [16], and fieldnotes [17]. The last four studies [21-24] utilised a mixed-methods approach to evaluate the activities implemented within particular CPMs. These mixed-methods studies collected qualitative data through FGDs [21-24], interviews [21,23,24], document reviews [21,22,24], and meeting observations [22,24]. Whilst the quantitative data was collected using descriptive statistical analysis to the community participation activities [22,23]. In addition, two studies [21,23] also conducted surveys to collect the quantitative data.

The included studies showed mixed results of the impact of CPMs. Most of the studies indicated that CPMs led to substantial improvement on maternal health behaviours and the uptake of MNH services [1,3,6-9,12,18,14,21], as well as birth preparedness [12,15,17,21]. It was indicated that those positive impacts as results of the improvement of the community awareness of MNH problems. However, there was only one study [1] that found the women's groups initiative could decrease maternal mortality. It was highlighted that the key success of the women's groups in Nepal was the high coverage of the groups per population and the acceptability of the intervention. Some studies showed that this approach had no impact on reducing maternal mortality and morbidity [2,3,4,5,10,11]. It was suggested that the limitation of the programme design such as intervention and coverage per population, might influence the results [3,7]. In addition, the evaluation of the intervention was mostly short after the programmes were implemented. In contrast, it was inevitable that the development of a strong and sustainable community mobilisation required time and effort from either the community or the programme implementers. Therefore, it might need some time to allow the intervention to bring an effect (Rath et al., 2010).

#### **2.4.4.2 Critical appraisal**

Scoping reviews aim to provide an overview or map of the available evidence on a particular topic and critical appraisal of the individual studies is not generally a requirement (Munn et al., 2018). However, for the purpose of the PhD training, a critical appraisal was conducted. To critically appraise the cluster randomised controlled trials (C-RCTs), this review used the Critical Appraisal Skills Programme (CASP, 2018a) tool

for RCT and Consolidated Standards of Reporting Trials (CONSORT) 2010 checklist of information to include when reporting a cluster-randomised trial (Campbell et al., 2012). The CONSORT checklist was used to complete the CASP tool, which had no item to appraise cluster RCT design precisely. See Appendix G and Appendix H for the summary of the CASP and CONSORT, respectively.

As of the critical appraisal for the qualitative papers, this review utilised the CASP tool for qualitative study (CASP, 2018b), see Appendix I for the summary. For the descriptive research (cross-sectional studies and case series), this review adopted the AXIS (Appraisal tool for Cross-Sectional Studies) critical appraisal tool (Downes et al., 2016), a summary of which is available in Appendix J. While for the mixed-methods studies, the MMAT (Mixed Methods Appraisal Tool) version 2018 (Hong et al., 2018) was used (Appendix K).

The quality assessment for this review focused on the reporting of study design, sampling strategies and methods used for data collection and analysis. These items were the most frequently reported and easily apprehended elements of study design. They thus offered a reasonable route for the identification of potential risk of bias (Burls, 2014). The critical appraisal report in this review will be delivered based on the type of study design as each study design was appraised using a different tool. Hence, it will be easy to follow.

### ***Cluster-randomised controlled trials***

All the included randomised controlled trials (RCTs) were cluster RCTs. A C-RCT is a RCT in which involve randomisation of groups (cluster) of individuals to treatment or control arms (Hemming et al., 2017). A C-RCT is particularly useful when the nature of the treatment/intervention has a significant contamination, such as in public health promotion. High risk contamination may occur when individuals randomised to different comparison groups has a frequent contact with each other (Moberg and Kramer, 2015). According to the CASP and CONSORT assessment, the 11 C-RCTs included have a robust design when conducting the trials. All papers described the study process in a suitable manner. They addressed a clearly focused issue that is maternal and neonatal health. All trials except three (Fottrell et al., 2013; Sevene et al., 2020; Qurashi et al., 2020) described a transparent randomisation process. However, even though Fottrell et al. (2013) provided limited information around the randomisation, they did mention that they replicated the same study in the Bangladeshi trial (Azad et al. 2010).

Eight trials (Manandhar et al., 2004; Tripathy et al., 2010; Azad et al., 2010; More et al., 2012; Colbourn et al., 2013; Lewycka et al., 2013; Tripathy et al., 2016; Fabbri et al., 2019) reported a clear randomisation process which may minimize bias (Campbell et

al., 2012). Even though they did not mask the allocation of participants, healthcare providers, and study personnel, they provided a reason as to why they did it. They did not conceal the assignment as the nature of the community participation intervention, which is acceptable in terms of C-RCT (Campbell et al., 2012). Moreover, all studies explained about the strategy to minimise contamination. They also described an exact result of the trials. They were aware that the interventions might not cause any harm. All trials acknowledged the limitations of their trials and provided recommendations for further studies.

It is noted that there are some limitations of the included trials in this review in terms of conducting the C-RCTs, and those limitations have been acknowledged by the authors. Most of the issues that the trials had were baseline imbalance, recruitment process, contamination and the analysis. All of the trials but one (Qureshi et al., 2020) reported that they had a baseline imbalance in the intervention and control arms in terms of age, education, literacy, and socioeconomic status. Even though they adjusted and stratified the differences, the problem might be considered as a confounding factor that results are susceptible to bias (Manandhar et al., 2004; Hahn et al., 2005). For instance, four trials (Azad et al., 2010; Fottrell et al., 2013; Tripathy et al., 2016; Fabbri et al., 2019), all excluded a deprived cluster from the intention-to-treat (ITT) analysis. They did not recognise there was a problem in this cluster during the baseline survey and recruitment process. Accordingly, these problems might reduce the power to detect the effect of the intervention in the ITT analysis (Agbla and DiazOrdaz, 2018).

### ***Descriptive studies (Cross-sectional studies and case series)***

The AXIS tool developed by Downes et al. (2016) was adopted for assessing the quality of the four included cross-sectional studies (Sood et al., 2004; Wangalwa et al., 2012; Sharma et al., 2016; Swain et al., 2019) and one case series (Ogwang et al., 2012). Based on the tool, the five studies had good quality. All studies clearly explained the aims of the study. The study designs were appropriate to answer the stated aims. All papers described clearly about the study sample, population, and how the sample was taken from the population. They explained that the sample of the studies were selected through a multistage process, generally from the district or village level, then households, and finally, selected eligible respondents within households. From the explanation, it was likely that the samples were representative from the target population. Describing the population, and how the sample is drawn from the population, is important in cross-sectional study design since this study design aims to obtain a representative sample by taking a cross-section of the population. The representativeness of the sample will minimise the selection bias (Sedgwick, 2015).

In addition to the strength points, some weaknesses were identified from the studies. All studies but one (Ogwang et al., 2012) did not report whether they conducted measures to address and categorise non-responders. In two studies (Sharma et al., 2016; Sood et al., 2004), it was found that the response rate raised concerns about non-response bias. In the study conducted by Sharma et al. (2016), the number of participants that completed the survey were different between the first, second and third survey. While Sood et al. (2004) found there were missing responses in their results. Yet, both studies did not explain how they overcame this matter in their statistical analysis. Even though non-response in cross-sectional studies is difficult to address, the studies need to declare how they address the non-responders to make sure that the sample is still representative of the population (Downes et al., 2016). Moreover, only one study (Swain et al., 2019) clearly stated that they used a standardised tool in their survey. One of the advantages of using standardised tools is the measurements can be repeated by other researchers and reproduce identical results, so that it can increase measurement validity and reliability (Downes et al., 2016).

### ***Qualitative studies***

Similarly, the CASP quality assessment for qualitative studies showed that all qualitative studies (Ahluwalia et al., 2003; Skinner and Rathavy, 2009; Morrison et al., 2010; Esienumoh et al., 2017; Hamal et al., 2018) that were included in this review have a good research design. The study designs were appropriate to address the aim of the studies. The data collection strategies used strengthened the study to answer the research issues including in-depth interviews (Ahluwalia et al., 2003; Skinner and Rathavy, 2009; Morrison et al., 2010; Esienumoh et al., 2017; Hamal et al., 2018), focus group discussions (Skinner and Rathavy, 2009; Morrison et al., 2010; Esienumoh et al., 2017; Hamal et al., 2018), observations (Ahluwalia et al., 2003; Skinner and Rathavy, 2009; Morrison et al., 2010; Hamal et al., 2018), documentary analysis (Ahluwalia et al., 2003), and fieldnotes (Skinner and Rathavy, 2009).

However, some limitations were noticed in these qualitative studies included in the review. Firstly, participant recruitment. Only one study (Morrison et al., 2010) clearly explained how they consider the relationship between researcher and participants. Morrison et al. (2010) described that they did not include sample from a more remote area to avoid over expectation from the participants to the researcher, and that may cause bias. While Hamal et al., (2018) acknowledged a problem in their participant recruitment in which the recruitment was purposefully selected by consultation with a civil society organisation that develop the intervention. Thus, the respondents' positive responses on the effectiveness of the intervention might be bias. Yet, they also

explained how they overcame the problem by including lay community members as participants. The second limitation was two studies did not clearly report their ethical approval (Ahluwalia et al., 2003; Skinner and Rathavy, 2009). Literature argues that reporting ethical approval in a qualitative publication remains an issue since many qualitative studies have limited explanation on their ethical approval. Providing a transparent ethical approach to minimise bias is important in all study designs, not only in randomised-controlled trials (RCTs) (Wu et al., 2019).

Thirdly, one study (Morrison et al., 2010) provided limited detail relating to the data analysis process. Even though they presented a table of an example detailing how the themes emerged, they did not clearly mention their approach to data analysis. The next limitation was the timeframe. Two studies (Ahluwalia et al., 2003; Skinner and Rathavy, 2009) conducted their studies to evaluate a community approach just shortly after the intervention was implemented. An evaluation of the intervention might need some time after the implementation of the intervention, this will allow a follow-up of the longer-term effects and sustainability of the results (Scheirer and Dearing, 2011).

#### ***Mixed methods studies***

The four mixed methods studies (Fachry et al., 2009; Rath et al., 2010; Rosato et al., 2012; Solnes Miltenburg et al., 2019) in this review were critically appraised using the Mixed Methods Appraisal Tool (MMAT), version 2018 developed by Hong et al. (2018). According to the MMAT tool, the four studies have a good quality of study designs. Fachry et al. (2009) evaluated the effect of the development of Desa SIAGA as CPMs in West Nusa Tenggara/Nusa Tenggara Barat (NTB), Indonesia. The Rath et al. (2010) study assessed women's groups from the Indian trial that was conducted by Tripathy et al. (2010). Rosato et al. (2012) evaluated women's groups that were implemented in the Malawi trial by Lewycka et al. (2013). Whilst Solnes Miltenburg et al. (2019) evaluated the implementation of community participation groups for maternal health care in Tanzania. All mixed methods studies performed a combination of qualitative and quantitative methods, as described earlier under the study characteristics. Nevertheless, only one study (Solnes Miltenburg et al., 2019) provided an explanation of the quantitative data analysis. In addition, the four studies integrated the findings from both qualitative and quantitative data, yet two studies (Fachry et al., 2009; Rath et al. 2010) provided a limited discussion.

#### ***Overall quality***

Based on the quality assessment, all of the included studies were of good quality. Among them, the paper published by Manandhar et al. (2004) is the most robust quality paper. Manandhar and colleagues (2004) reported their study in detail, and they

acknowledged their limitations around C-RCTs and highlighted areas of susceptibility to bias.

### **2.4.5 Collating, summarising, and reporting the results**

In this final stage, data from the study characteristics were collated and summarised and the findings synthesised (Arksey and O'Malley, 2005). In order to make sense of the diverse areas of the included studies, the data was grouped under the following three headings: (1) Community participation strategies to improve MNH outcomes; (2) The role of community participation in improving MNH outcomes; (3) Determining factors of the programme delivery and implementation. In this phase, research gaps were also identified.

#### **2.4.5.1 Community participation strategies to improve MNH outcomes**

The included studies in this review reported diverse strategies of community participation to improve MNH outcomes across Asian and African regions, including Indonesia. According to its characteristics, the strategies can be grouped into three main models: women's groups initiatives [1-8,14,18,20,22,23,24]; a combination between community participation in programme planning and implementation and specific strategies [9-11,12,15-17,20,21]; and community-based continuous training [14].

Half of the included studies focused on women's groups initiatives to improve MNH outcomes [1-8,14,18,20-24]. The women's groups were community-based groups of women that used PLA to empower the member of the groups, other women, and mobilise the community in order to overcome MNH problems. The PLA refers to a family of approaches, methods, attitudes, behaviours and relationships, which enable and empower people to share, analyse and enhance their knowledge of their life and conditions, and to plan, act, monitor, evaluate and reflect (Thomas, 2004). The PLA approach implemented featured had a cycle that consisted of four main phases including: problem identification and resources required, planning to solve the problems, implementing the strategies, and evaluation of the implementation. Programme facilitators with no health background were recruited from the local community. The facilitators were trained with participatory modes of communication about a range of health issues, especially MNH problems such as haemorrhage, and associated health care and care-seeking behaviours. The facilitators' roles included setting up the meetings in their locality; meeting with locally recruited supervisors and other facilitators regularly; convening and supporting the groups in identifying MNH problems, developing and implementing strategies to improve MNH, and evaluation of the results of the strategy implementation. The women's groups met monthly in certain

number of meeting cycles with certain aims such as, problem identification and planning strategies to solve the problems. Studies suggested that women's groups initiatives could help the communities to take control of their health problems mainly MNH issues, such as more women had antenatal care and institutional deliveries. In two studies (Manandhar et al., 2004; Tripathy et al., 2010), the information related to MNH issues were delivered through various methods such as picture-card games and role play. These methods of health education were considered to be more than conventional health education. In picture-card games and role play, the women and community were actively encouraged to actively learn about MNH problems. Thus, the women and community were not just passive learners.

Moreover, nine studies [9-11,12,15-17,21] reported on the combination between participatory action and specific strategies to overcome MNH problems. In some studies (Ahluwalia et al., 2003; Sood et al., 2004; Fachry et al., 2009; Skinner and Rathavy, 2009; Sevene et al., 2020; Qureshi 2020), the CPMs combined participatory meetings and training for key actors in the programme, such as midwives, CHWs, and local government. The training covered various materials including the core ideas of community participation, participatory decision-making, and communication (Ahluwalia et al., 2003); clinical skills for midwives (Sood et al., 2004; Skinner and Rathavy, 2009); emergency obstetric skills for CHWs (Skinner and Rathavy, 2009); and skills for the detection and management of pre-eclampsia (Sevene et al., 2020; Qureshi et al., 2020).

In addition to the training for midwives, in the study conducted by Sood et al. (2004), the CPM also included a pledge card. On the pledge card, pregnant women, husband/family members, a community member, and a village midwife signed a contract that stated they would work together to ensure the woman would have a safe childbirth. In one study (Fabbri et al., 2019), the participatory meetings were integrated with maternity report cards. The maternity report cards were completed by women about the health-related problems that they faced and their expectations towards solutions. In community meetings, the report cards were shared with community leaders and health providers. The report cards aimed to communicate information regarding MNH indicators in the villages in a simple way. The included MNH indicators were antenatal visits, counselling, institutional birth, breastfeeding, and neonatal clean cord care. The report cards enabled women to share their voices with local leaders, health care providers, and citizens in community meetings. It was expected that the report cards could increase the accountability of community leaders to devise and implement strategies to improve the maternal health services in their local areas.



While in the study conducted by Wangalwa et al. (2012), the implemented CPM was a 'community unit' (CU). One CU provided MNH services for a local population of 5000 people. In each CU, there was one CHW for 20 households. For every 25 CHWs, there was one certified health professional to provide supervision and technical support. In addition, there was a Community Health Committee (CHC) of elected local representatives who were tasked with managing community dialogue sessions to increase awareness of MNH issues with the aid of data displayed on chalk boards. Meanwhile, one study (Ogwang et al., 2012) did not clearly mention a specific model of the community participation.

There was one study which utilised a community-based continuous training model (Swain et al., 2019) which provided training for both CHWs and women. It was explained that a suite of training was given to the CHWs, and the CHWs subsequently provided training for their registered pregnant women under the continuous monitoring of project supervisors. The training was delivered in three sessions of birth preparedness as a minimum requirement. The training covered the use of appropriate birth preparedness models and packages at an individual level, as well as family and community level. The birth preparedness training aimed to minimise the delays in childbirth in order to generate better pregnancy and childbirth outcomes.

Generally, the CPM adopted a participatory cycle which had four main phases, including identifying problems, planning the intervention/strategies to solve the problems, implementing the intervention, and evaluating the implemented strategies. The strategies developed by the community were varying and dependent on the problems and characteristics of each community. The strategies reported in the CPMs covered maternal health education [1,5,6,8,12,13,17,18,19,21,23,25]; community-based transportation [1,5,8,10,11,12,16,20,21,23,25]; community-based saving [1,2,5,8,10-12,14,15,16,18,21,22,25]; improving the quality of traditional birth attendants (TBAs) [1,16,19,20]; income-generating activities [1,8,16,20,23]; and other health activities, such as a sanitation programme [23]. The strategies aimed to support women to overcome several main barriers that were suggested to be essential in seeking care including a poor transportation system, infrastructure, and financial constraints (Fachry et al., 2009; Esienumoh et al., 2017; Qureshi et al., 2020).

All studies explained that there were trained facilitators who facilitated the delivery and implementation of community participation programmes, including community meetings. These facilitators were either health volunteers that were recruited from local women with no health backgrounds (Manandhar et al., 2004; Morrison et al., 2010; Tripathy et al., 2010; More et al., 2012; Coulbourn et al., 2013; Tripathy et al., 2016), or staff from health providers (Skinner and Rathavy, 2009; Coulbourn et al., 2013), and

local non-government organisations (NGOs) (Fachry et al., 2009). In several studies, the health volunteers also recruited men (Sevene et al., 2020). The health volunteers or CHWs were also identified as one of the main focuses of community participation intervention (Tripathy et al., 2016; Qureshi et al., 2020). Several projects of community participations had their own name for the CHW, such as Accredited Social Health Activists (ASHA) in eastern India (Tripathy et al., 2016) and Lady Health Worker (LHW) in Pakistan (Qureshi et al., 2020). It was suggested that CHWs could act as key enablers in delivering and implementing community participation strategies since they understood the social and cultural background of the community. The combination of the package was considered to be adequate to tackle MNH issues. Yet, literature argued that CHWs faced many challenges to carry out their tasks, including lack of support from the government and trust from the community (LeBan et al., 2014).

#### **2.4.5.2 The role of community participation in improving MNH**

The mechanism of community participation is complex and multi-layered. The strategies that were implemented in the community participation programmes appeared to provide unclear results as to whether they had an impact on maternal mortality, but they did impact on maternal and health behaviours and practices. However, there were three prominent roles of the community participation approach that were suggested to increase the status of MNH: (1) Increasing knowledge and awareness of MNH outcomes; (2) Social awareness and support; and (3) Community capacity building. These roles will be elaborated in the following sub-themes.

##### ***Increasing knowledge and awareness of maternal and neonatal health outcomes***

Most studies found that the community participation had a positive impact on improving the knowledge and awareness of the women and community in terms of maternal health behaviours and practices (Manandhar et al., 2004; Azad et al., 2010; Tripathy et al., 2010; Fottrell et al., 2013; Colbourn et al., 2013; Lewycka et al., 2013; Sharma et al., 2016; Tripathy et al., 2016; Fabbri et al., 2019; Sevene et al., 2020; Qureshi et al., 2020). The involvement of family and community in the programme increased their knowledge and awareness of danger signs and birth preparedness that could tackle the 'three delays' in safe motherhood (Sood et al., 2004; Fachry et al., 2009; Skinner and Rathavy, 2009; Rath et al., 2010; Swain et al., 2019; Sevene et al., 2020; Qureshi et al., 2020).

It was identified that the increase of knowledge and awareness was as a result of a health education strategy (Rath et al., 2010) and programme campaign (Sood et al., 2004). The health education was delivered through community meetings (Manandhar et al., 2004; Rath et al., 2010; Tripathy et al., 2010). In the Nepali trial (Manandhar et

al., 2004), where the MMR was 80% lower in intervention arms after the implementation of women's groups compare to the control arms, the information about MNH problems was delivered through an iterative design and the playing of a picture card game. In the Indian trial conducted by Tripathy et al. (2010), there was an increase of awareness of the clean delivery practice of community members who attended the women's groups meetings. The study described that clean delivery practice included birth hygiene and care practices, and safe delivery kits. It appeared that their health education strategy was different from the conventional one. In this approach, the design emphasised the importance of participatory learning rather than instruction. Thus, women in the groups could actively engage in learning the content, instead of being a passive learner.

In addition to participatory meetings, the information related to maternal health issues was also provided through conventional health education, such as a communications campaign on television, radio and mass media events, such as press gatherings. In Indonesia, the media events were supported with print materials, such as posters and leaflets (Sood et al., 2004). The target of this national campaign was all levels of the community. This campaign delivered a message about Desa SIAGA programme as a strategy to raise awareness of the community and all related stakeholders to participate in taking care of pregnant women. The programme evaluation showed that there was an increase in knowledge of danger signs in pregnancy and delivery from women, husbands and the community. The community was also more aware of supporting the pregnant women in birth preparedness (Sood et al., 2004). Nevertheless, unlike the participatory learning in the women's groups, the conventional health education in Desa SIAGA appeared to have limited community involvement. In Desa SIAGA, the information related to MNH, especially birth preparedness, was delivered through a conventional health education strategy as mentioned earlier. In contrast, in the women's groups initiative, the MNH information was delivered through a participatory meeting which used picture card games (Manandhar et al., 2004). A retrospective study conducted by Hill et al. (2014) showed that Desa SIAGA was suggested to be sustainable, but there was limited involvement of the community in the programme. In their study, it was found that there was no triangulation collaboration between women, village midwives, and the community.

Providing maternal health education to women and the community in CPMs is vital in supporting safe motherhood (Rath et al., 2010). Acknowledging, and working, with women's and communities' current beliefs and practices was suggested to lead on actions taken to improve MNH, such as increase the uptake of maternal health services (Morrison et al., 2010; Hamal et al., 2018). Studies have demonstrated that the active

involvement of the community in the learning process is crucial. Otherwise, participation would be very superficial, and the intervention would not be sufficient (Akhtar et al., 2014). In Pakistan, where there was no improvement in knowledge of the community's role in the health programme, the community participation intervention failed to engage the community actively. It was also reported that in Pakistan, the programme to improve MNH was more focused on improving SBAs, the availability of technology and health management. In that programme, community participation is limited to the awareness and creation of maternal health without actually engaging the community to take action (Akhtar et al., 2014).

### ***Social support***

Most studies showed that community participation strategies led to collective social responsibility. Six studies (Manandhar et al., 2004; Fachry et al., 2009; Morrison et al., 2010; Tripathy et al., 2010; Rath et al., 2010; More et al., 2012; Colbourn et al., 2012; Solnes Miltenburg et al., 2019) found that social support was built following the improvement of knowledge and awareness of MNH issues. In Nepal and India, studies found that the women's groups activities could lead to the development of excellent social networks amongst the community. In the case of emergency, women from low-income families could obtain funds from the women's groups, for example, for accessing transportation and health services. This fund was from a donation from friends, neighbours, and money lenders. It was also noted that the women's groups could encourage women to support each other (Manandhar et al., 2004; Morrison et al., 2010; Rath et al., 2010; More et al., 2012). In addition, the initiatives increased social support for the clean delivery practice. The social support was also found to reduce maternal depression (Tripathy et al., 2010) and strengthen problem-solving skills (Tripathy et al., 2010; Colbourn et al., 2013; Solnes Miltenburg et al., 2019). Through the women's groups, group members shared their problems as well strategies that they found were helpful to overcome their problems (Tripathy et al., 2010; Colbourn et al., 2013).

Yet, in some communities, studies found that strong social networks were already available before the programme established. For example, the Desa SIAGA programme in Indonesia was grounded from the tradition of *gotong royong* or community help (Sood et al., 2004; Fachry et al., 2009). The programme relied on the resources from the community to provide blood donors, funds, and transportation. The government, as the policymaker, devolved the power control to the community to establish their systems to help pregnant women in preparing for birth (Sood et al., 2004; Fachry et al., 2009). However, there was no clear explanation of how the intervention was carried out. The two studies conducted by Sood et al. (2004) and

Fachry et al. (2009) did not intend to explore the process of community participation within the Desa SIAGA programme. Therefore, it was unclear how 'social support' in the context of the Desa SIAGA programme actually worked on the ground.

### ***Community capacity building***

The involvement of the community in planning and implementing the strategies appeared to be able to build community capacity to support pregnant women. Six papers (Ahluwalia et al., 2003; Morrison et al., 2010; Rath et al., 2010; Rosato et al., 2012; Colbourn et al., 2013; Sevene et al., 2020) provided evidence on the ability of the community to enhance their capacity to overcome the problems that were identified to influence MNH outcomes, such as poverty. Two studies (Morrison et al., 2010; Rosato et al., 2012) identified that women's groups strategies could empower the community to create some income-generating activities. In Nepal (Morrison et al., 2010), women were able to produce their own clean home delivery kit. This activity provided two benefits to women, including the availability of the clean home delivery kit, and the money they could earn from selling it. As a consequence, this money could be used to support women in greater financial need. In Malawi (Rosato et al., 2012), activities included gardening, fish farming, poultry, selling second-hand clothes, managing telephone bureaux, as well as buying and selling goods. These activities appeared to bring benefit to women to address their economic problems in case of an emergency.

Moreover, the community participation approach was able to empower the community to create their own transportation, such as the bicycle ambulance in Malawi (Rosato et al., 2012) and stretchers in Nepal (Morrison et al., 2010). This community-based transportation was established based on the community resources either from a donation or the money that they obtained from income-generating activities (Morrison et al., 2010; Rosato et al., 2012). In a setting where the transportation system and infrastructure were lacking, most women faced delays in reaching health facilities. This delay often resulted in women experiencing maternal morbidities, and some mortalities, due to severe bleeding and lack of timely care (Rath et al., 2010; Qureshi et al., 2020). The community-based transportation was identified to support women to reach health facilities faster (Ahluwalia et al., 2003; Fachry et al., 2009; Rosato et al., 2012; Ogwang et al., 2012; Sevene et al., 2020). However, without addressing poor road infrastructure, the challenge to reach the health facility remained a burden (Sharma et al., 2016).

The studies showed that the community could provide women with the support of access to adequate health care services (Ahluwalia et al., 2003; Fachry et al., 2009; Rosato et al., 2012; Ogwang et al., 2012; Sevene et al., 2020). The community-based transportation system and community-based funds were found to make healthcare services more accessible and affordable (Fachry et al., 2009; Wangalwa et al., 2012;

Ogwang et al., 2012). Yet, geographical barriers were reported to hinder women to access health facilities and receive obstetric care on time (Manandhar et al., 2004; Ogwang et al., 2012; Sharma et al., 2016). It was argued that geographical constraints cannot be easily addressed by community-based strategies (Sharma et al., 2016).

#### **2.4.5.3 Determining factors of the programme delivery and implementation**

Given the above complexities and the roles of the community participation approach, it was identified that several elements determined the delivery and performance of the strategies. These determining factors can be classified into three main areas, including organisational factors, intermediary factors, as well as social, cultural, and economic factors.

##### ***Organisational factors***

There were several organisational elements that appeared to determine the success of the community participation approaches, including the policy system and government support. A strong and clear policy system at the national level was found to be essential, since the policy system regulated how the programme would be promoted, delivered, and implemented (Sharma et al., 2016; Hamal et al., 2018; Solnes Miltenburg et al., 2019). A study into an evaluation of the national programme of maternal and child health in Pakistan (Akhtar et al., 2014) revealed that there was a lack of national guidelines towards community participation. The guidelines stated that the government should implement a community participation approach to tackle maternal and child health problems within the country. Yet, the guidelines did not clearly explain how the programme should be set up and delivered and how the community should be involved in the intervention (Akhtar et al., 2014).

The policy system was considered to be related to political inference in delivering and implementing CPMs. The government, as the policymaker, needed to fully commit and provide good support for the programme. When the government did not put MNH issues as a priority, the programme would work sub-optimally (Bhutta et al., 2013). The government had to be involved in the programme from the outset. The community empowerment needed several phases to reach full participation. At the starting point, the government have to be actively engaged in the programme since the community was passively involved (Rosato et al., 2008). Government support, such as the provision of funding streams, was argued to be essential to run a community participation intervention (Hamal et al., 2018).

### ***Intermediary factors***

The determinant elements under intermediary factors are the health system, partnerships, and acceptability of the programme. A robust health system including high quality of care, appropriate facilities and a referral system play a crucial part in the community participation approach (Morrison et al., 2010; Wangalwa et al., 2012; Hamal et al., 2018; Solnes Miltenburg et al., 2019; Sevene et al., 2020). A poor health system was proved to add more burden to women. For instance, in a resource-poor setting, limited health facilities and the availability of trained health providers would not assist women with emergency obstetric cases (Bhutta et al., 2013). Several studies that combine a community participation approach and health-service strengthening showed a positive outcome to MNH (Manandhar et al., 2004; Morrison et al., 2010; Lewycka et al., 2013; Tripathy et al., 2016). Community-based strategies were suggested to improve the uptake of health care services. Accordingly, the health care facility should be ready to provide a good service. Otherwise, the effect of the strategy would be bias.

Furthermore, a partnership among programme implementers seemed to be essential. It was identified that task-sharing could strengthen the quality of care (Sevene et al., 2020). In addition, the partnership between the community and health system was also important. In India, the community supported the health system by spreading health information to others and engaging each other to utilise the available health services. This action then encouraged the community to trust the health system (Hamal et al., 2018). A cluster RCT in Mozambique (Sevene et al., 2020) showed that the community's trust towards CHWs ensured the delivery of the programme was effective (Sevene et al., 2020). The collaboration between the community and the skilled birth attendants (SBAs) (Esienumoh et al., 2017) and the community's trust (Hamal et al., 2018) could affect how community perceive the intervention and their involvement. The community's perception towards the programme influenced local ownership and the acceptance of the programme. The collaboration between CHWs and village midwives could develop a good referral and transportation system (Akhtar et al., 2014). The limited success of the community participation programme in Pakistan (Akhtar et al., 2014) revealed that there was poor collaboration between CHWs and village midwives. There was a professional jealousy reported between them since there was a lack of partnership between CHWs and midwives; and the CHWs wanted more roles similar to those of the midwives.

The acceptance of the programme also appeared to influence programme delivery and implementation. Three studies (Manandhar et al., 2004; Skinner and Rathavy, 2009; Rath et al., 2010) mentioned that there was a high percentage of acceptance of the intervention that contributed to the success of the programme. In a Nepali trial

(Manandhar et al., 2004), 95% of the women's groups remained active after the intervention ended, despite no financial incentives being offered. In contrast, in a Mumbai slum study (More et al., 2012), where the intervention showed less effect of women's groups, it was noticed that women left the groups when they felt that they had obtained enough information. Moreover, three studies (Ahluwalia et al., 2003; Manandhar et al., 2004; Rath et al., 2010) highlighted that the active involvement of the community in the identification of the problems, planning, implementation and evaluation would lead to local ownership of the programme. The community would feel responsibility for solving their health problems. The conceptual framework from Akhtar et al. (2014) towards levels of community participation in health programmes showed that 'ownership' of the programme was at the top level of the framework. It was noted that on this level, the community gained full responsibility as the owner and implementer of the programme. Once gained, the community would have the power to make key decisions.

### ***Social and cultural values***

In a community with a strong social and cultural beliefs and practices, it was important to consider the intercultural sensitivity of the programme (Azad et al., 2010; Sharma et al., 2016; Hamal et al., 2018; Esienumoh et al., 2018). Social and cultural values were argued to influence women's and community's health behaviours. The values embedded in their daily lives could affect their acceptance of a new programme (Morrison et al., 2010; Hamal et al., 2018). In Pakistan, it was suggested that one of the reasons for community participation being unsuccessful in improving MNH was that the programme was focussed on biological determinants only, without considering the social and cultural aspects (Akhtar et al., 2014).

Social and cultural values were suggested to be barriers for women to participate in the programme. For example, in Bangladesh, women needed permission from their husbands to attend the women's groups meetings (Azad et al., 2010). In the study conducted by Fabbri et al. (2019) that targeted local leaders to improve their social accountability in maternal health care showed no significant effect. One of the underlying factors for this was the fact that most of the leaders were men. Gender-based relations were identified as influencing the local government in relation to the ownership of community participation programmes. Community leaders that were mostly men argued that infrastructure development should be a priority. The male leaders felt less social accountability to taking care of MNH problems. Whilst female leaders would invest more in health since it was relevant to their own sex (Fabbri et al., 2019). In this circumstance, gender-based barriers clearly influenced programme delivery and implementation.



Another social and cultural factor was social capital (Hamal et al., 2018). Social capital referred to the network among community members (Portes, 2000). This social capital allowed women, and other community members, to discuss and solve shared problems using their own resources. In rural areas, villagers were suggested to have a good social network that could result in social capital. A study in a slum area in Mumbai city (More et al., 2012) showed that limited social cohesion hindered the community participation intervention to achieve its coverage, which affects the effectiveness of the programme.

## **2.5 Research gap in the review**

The synthesis of this review showed that various CPMs had been implemented in a variety of settings. Currently, most of the research in this area was from South Asia and Africa and very limited research conducted in South East Asia, specifically in Indonesia. The scoping review has demonstrated several roles of CPMs in improving MNH and the complexity, as well as facilitators and barriers, in delivering and implementing the models. However, the scoping review has shown that previous works that studied CPMs were more focussed on the outcomes of the interventions and very few studies focussed on the processes that may influence good or poor outcomes. Many of the included studies were conducted immediately following the development of community participation programmes. In addition, most of the study participants were women and key stakeholders/programme implementers, and none of the included studies included the local community such as women's neighbours as participants of the studies. Accordingly, there was limited information on how the community experienced the participation programmes in safe motherhood.

There were two included studies which were conducted in Indonesia (Sood et al., 2004; Fachry et al., 2009). Nonetheless, the two studies only measured the effectiveness of the development of the Desa SIAGA programme (soon after implementation) and did not provide an in-depth understanding of how the community participation in Desa SIAGA worked for safe motherhood. Therefore, there was a need to explore the views and experiences from the women, local community, key stakeholders, local governments, and health care providers to capture a more detailed picture of the role of community participation through the Desa SIAGA programme in improving MNH outcomes in Indonesia.

## **2.6 Conclusion**

In this chapter, relevant papers related to CPMs in the improvement of MNH outcomes in LMICs have been reviewed. The synthesised literature on various CPMs, the role of

community participation in improving MNH outcomes, and the facilitators and barriers in the delivery and implementation of community participation have been presented.

The scoping review provides some valuable insights into the importance of CPMs in improving MNH outcomes. Nevertheless, many of the studies of community participation programmes for MNH that have been discussed focussed on the effectiveness of the interventions, conducted immediately after the establishment of community participation programme, and mostly reported the views from women and key stakeholders only without exploring the views from the local community such as women's neighbours. Therefore, a study that explores the perceptions and experiences from women, wide array of key stakeholders, and local community, towards a community participation programme that has been rolled out several years ago, would add stronger evidence to the understanding of community participation for MNH in Indonesia.

**Key summary points:**

- The initial search on CPMs for improving MNH showed that there was scant literature around this topic conducted in Indonesia. Accordingly, there was a need to look at evidence in the LMICs to see what could be learned to inform the delivery and implementation of the community participation in the Indonesia context.
- The scoping review was undertaken by adopting a framework by Arksey and O'Malley (2005) to explore the literature relating to the role of community participation in improving MNH outcomes in LMICs, as well as to identify the available models/ interventions of community participation and understand how they are used to improve MNH in terms of preparing women for birth.
- Twenty-five relevant papers from LMICs were included in the review, in which most papers were cluster RCTs and quantitative studies that were more focussed on the outcomes of community participation programme for MNH; there was limited literature that focussed on the processes that may influence the success of CPMs.
- The two studies that were conducted in Indonesia were limited to the measurement of the effectiveness of the development of the Desa SIAGA programme and lacking an in-depth understanding of how the community participation in Desa SIAGA contribute to improve MNH outcomes in Indonesia.

## Chapter 3 Methodology and Research Methods

### 3.1 Introduction

The previous two chapters have illuminated the need to explore the community participation approach and the underlying processes in preparing pregnant women for birth and improving MNH. In this chapter, a detailed account of the underlying philosophy to the study approach, the methodology, and the research methods are presented. Furthermore, the ethical consideration and the quality of the study approach will be explained.

### 3.2 Underlying philosophy to the study approach

In developing a research plan, it is important to define the philosophical assumptions or 'research paradigm' supporting the choice of study approach. The research paradigm is defined as a set of beliefs that underpin how a problem might be understood and research questions should be addressed (Creswell, 2014). There are four main philosophical paradigms that can be chosen to direct the research plan, namely positivism, constructivism, advocacy/participatory, and pragmatism (Creswell, 2009; Mackenzie and Knipe, 2006). The positivist paradigm believes that knowledge can be studied from observation and experiment and generally aims to measure association or causal links between variables (Guba and Lincoln, 1994; Mackenzie and Knipe, 2006; Creswell, 2009). As this paradigm intends to measure causal and/or associations between variables through experiment or survey, hence the positivists conduct quantitative methodology in their research (Creswell, 2009). The current study did not aim to find associations between variables, therefore a positivist approach was not felt to be suitable.

Another major research paradigm is advocacy/participatory. Advocacy holds the belief that researchers should collaborate with their participants in studying an issue in a social setting. The participants need to be included in an action so that they can improve their lives (Creswell, 2009). The researcher adopting the advocacy/participatory paradigm tends to employ qualitative methodology, although it can also be developed into a quantitative study. This paradigm did not fit with the aim of this current study since this study did not propose to develop or test an intervention that needed to involve participants in action. The next paradigm is pragmatism, this paradigm views 'what works' and solutions ('how it works') to problems that arise from actions, situations, and consequences. Pragmatists believe that research problems need to be studied by employing multiple methodologies including both quantitative and qualitative (mixed methods) in addressing their research questions (Johnson and Christensen,

2012; Creswell, 2009). A pragmatist paradigm would not help to answer the question of this study as this study did not intend to examine the outcomes of community participation.

Lastly, constructivism, this paradigm aims to seek understanding of a specific context in a real-world setting (Mackenzie and Knipe, 2006; Creswell, 2009). Constructivism views that knowledge can be gained by investigating and understanding a complex phenomenon from the point of view of individuals who live it (Mertens, 2014). The scoping review in Chapter 2 has shown that there was not much known about the process of community participation in the Desa SIAGA initiative to improve MNH outcomes, thus there was a need to employ an interpretivist approach to gain deeper understanding of community participation as a complex phenomenon in a real-life setting. Therefore, constructivism was chosen as the paradigm to best address the aims of this study.

### **3.3 Qualitative research as the methodology**

Since a constructivism paradigm underpinned the approach of this study, qualitative methodology was applied to help addressing the research questions of this study. Qualitative methodology refers to a research approach that investigates and explores a detailed understanding of the issues around social and human phenomena (Marshall and Rossman, 2011; Creswell, 2013;). This methodology aims to gain a deeper understanding regarding the perspective, process, and situation; identifying phenomena and influences; and developing explanations. Therefore, qualitative methodology was suitable for this study as this study intended to explore deeper understanding about community participation in improving MNH within the Desa SIAGA programme.

#### **3.3.1 Approaches to qualitative inquiry**

There are several approaches to qualitative inquiry, including; narrative, phenomenology, grounded theory, ethnography, participatory action research, and case study (Creswell, 2013; Green and Thorogood, 2013). These approaches have different goals and strategies in addressing research objectives/ questions (Creswell, 2013).

A narrative inquiry is a qualitative method that studies one or two individual stories of individual's life's experiences, such as a narrative of illness (Creswell, 2013; Squire et al., 2013). Whilst a narrative study focuses on the individual stories of experiences, a phenomenological approach portrays the meaning of the lived experiences for several people and then derive it into an essential structure (Creswell et al., 2013). As this

study looked at a complex phenomenon of a group of people instead of individual stories and its meaning for some people, then narrative and phenomenology inquiries did not appear suitable. Meanwhile, grounded theory research aims to find or produce a theory from a phenomenon of a specific situation (Creswell et al., 2013; Corbin and Strauss, 2008). Grounded theory is employed to discover social processes, such as social relationship, action, interactions and groups' behaviour (Creswell, 2013). Grounded theory might be suitable to uncover the process underlying a community participation programme, however this study aimed to explore the phenomenon of a community participation instead of generating a theory. Hence, grounded theory was not chosen as the methodology.

Another qualitative approach is ethnography which looks at a cultural or system of a group of societies, such as its behaviour, language, and interactions (Creswell et al., 2013; Goulding, 2005). Ethnography focusses on finding the meaning of the pattern of culture within a group. Since this study did not aim to look at a particular cultural system of a society within the Desa SIAGA programme, ethnography did not fit to help address the aims of this study. Furthermore, participatory action research seeks a transformation of people by empowering them to take action and have control of their lives condition (Baum et al., 2006). Participatory action research could be suitable for a community participation study area; however, this study intended to illuminate a community participation programme that already existed, rather than developing/evaluating a new intervention to change a community from one condition into another. Lastly, one of the qualitative inquiries is case study. This approach aims to explore a case, such as a programme, event, activity, or persons, in order to understand on how and why that case may occur (Yin, 2014). Considering all the above approaches, case study was the most appropriate approach to address the objectives of this study. Section 3.3.2 will provide further explanation on why case study approach was chosen to help answer the research questions of this study.

### **3.3.2 Case study as the chosen approach for the study**

According to Yin (2014), case study research is:

“an empirical inquiry that investigates a contemporary phenomenon (the ‘case’) in depth and within its real-world context, especially when the boundaries between phenomenon and context may not be clearly evident.” (Yin, 2014, pp. 16)

This approach aims to explore a case, such as a programme, event, activity, persons, decisions, policies, or other systems in order to understand “how” and “why” that case may occur (Yin, 2014; Thomas, 2011). It intends to illustrate and understand a unique case, a specific issue, and a problem or concern (Stake, 1995). Therefore, case study allows in-depth understanding and focus on how and why a complex phenomenon

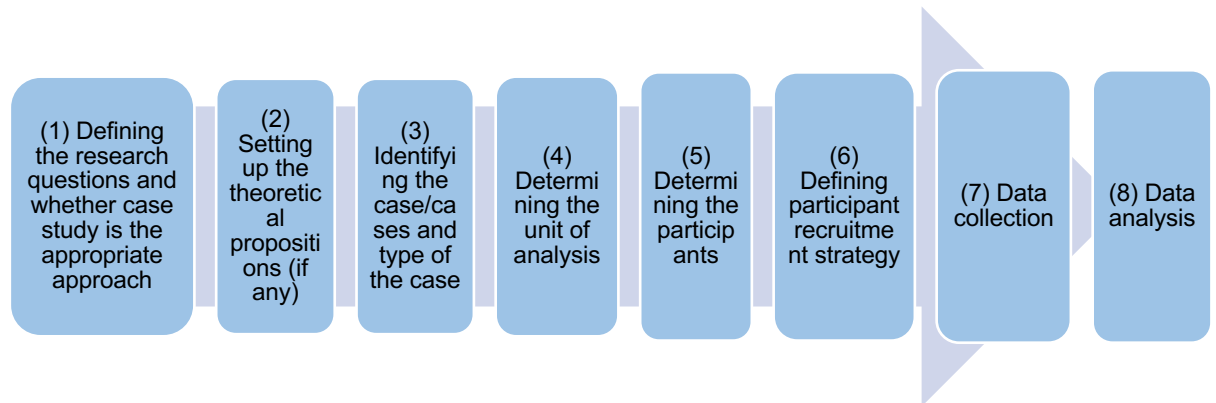
happens in a real-world, contemporary context or setting through multiple data collection such as in-depth interviews, observations, audio-visual material, and documentary analysis (Yin, 2014; Creswell, 2014). Multiple data collection will help the study to develop an in-depth description of the case and increase the validity of the research (Marshall and Rossman, 2014; Creswell, 2014).

According to conceptual and theoretical debates, participation is a dynamic process that requires a range of implementation mechanisms that might differ from one location to another and that are dependent on the situations and the needs of communities (Rifkin, 1986; Rifkin, 1996). Participation is inherently context dependent.

Consequently, in a trial, the evaluation approach of participation needs to seek out context from the micro, meso, and macro level (Rifkin, 1986). In this circumstance, community participation is a complex social structure and needs to be looked at in specific context and cannot be generalised (Rifkin, 1996) and a case study was suitable for the research design. By collecting data through multiple sources of information, this study gained a deeper understanding from many perspectives about community participation in improving MNH and answered the “how” question of this study (Yin, 2014). The in-depth interviews would provide explanations and personal views from participants, observation would give an insight of a real-life phenomenon of community participation, and documentary analysis would confirm and add evidence to the interviews and observations (Yin, 2014).

### **3.4 Research methods**

There are two key approaches that guide the development of a case study, those are proposed by Stake (1995) and Yin (2003) (Baxter and Jack, 2008). Both Stake (1995) and Yin (2003) stated that a case study should seek to explore a phenomenon, and the constructivist paradigm is the underlying philosophy in choosing this approach. The difference between Stake (1995) and Yin (2003) is in the methods that are employed. Case study approach proposed by Yin (2014) focuses on the scope, process, and methodological characteristics of case study research, while Stake (1995) emphasises more on the case rather than the method (Harrison et al., 2017). This current study used the case study approach that was proposed by Yin (2014). In addition, the research methods of this study were also guided by Creswell (2014). Both offer a complimentary approach which fits well with the study aim and objectives: Yin (2014) provides theoretical direction while Creswell (2014) gives more practical ways of how to develop a case study. Therefore, the research methods in this study involved eight steps as in Figure 3-1.

**Figure 3-1: Eight steps of the research methods**

### 3.4.1 Case study questions

The primary research question of this study was: how does community participation through Desa SIAGA support pregnant women in preparing for birth? This research question was developed during the initial reading and writing of the study background, the research problem was identified early before the literature review was conducted. The literature review has helped to map out findings from previous research and to investigate the sites for the case studies. Therefore, the findings from the literature review have strengthened and focussed the research question. Since little was known regarding the process of how CPM worked in Desa SIAGA, there was a need to consider selecting the case(s) that could reflect different situation of the delivery and implementation of the initiative. More details on the case selection are provided in section 3.4.3.

This study had five objectives in order to address the research question as described in Chapter 1, including:

1. To explore and observe the approach to community participation through Desa SIAGA in preparing pregnant women for birth.
2. To understand the factors that influence the implementation of Desa SIAGA (facilitators and barriers).
3. To explore the experiences of the pregnant women involved in Desa SIAGA in preparing them for birth.
4. To explore the experiences of post-natal women about Desa SIAGA in preparing them for birth.
5. To explore the experiences of key health workers and other stakeholders (e.g., village midwives, CHWs, women's nearest neighbours, local governments, religious leaders) involved in Desa SIAGA.

### 3.4.2 Theoretical propositions

This study developed an initial proposition to help the research process focus on the aim of this research (Yin, 2014). Theoretical proposition is defined as a preliminary theory to give direction to what has to be examined and analysed in the study (Baxter and Jack, 2008; Yin, 2014). The initial propositions were based on professional experience, literature, theories, and empirical data. The initial theoretical propositions were built in the design stage of the study and were clarified during the study as the development of propositions is an iterative process (Baxter and Jack, 2008). The theoretical propositions of this study are stated in Table 3-1.

**Table 3-1: Theoretical Propositions of the Study**

<b>Theoretical proposition</b>	<b>Sources</b>
Empowerment in decision making, knowledge and economic factors influence the participation of women and community in the Desa SIAGA initiative to improve MNH	(MoH Indonesia, 2006; Rifkin et al., 2003; Rosato et al., 2008)
The performance of the key actors in delivering and implementing the Desa SIAGA initiative is affected by their perception towards their roles, workload, and the training that they received	(Goeman et al., 2011; Kilewo and Frumence, 2015; Howard-Grabman et al., 2017)
Government support and policy have impacts in achieving the goals of the Desa SIAGA initiative	(Goeman et al., 2011; Howard-Grabman et al., 2017; Miltenburg et al., 2019)
Social, cultural, and religious values underpin the delivery and implementation of CPM within the Desa SIAGA initiative	(Azad et al., 2010; Howard-Grabman et al., 2017; Fabbri et al., 2019)

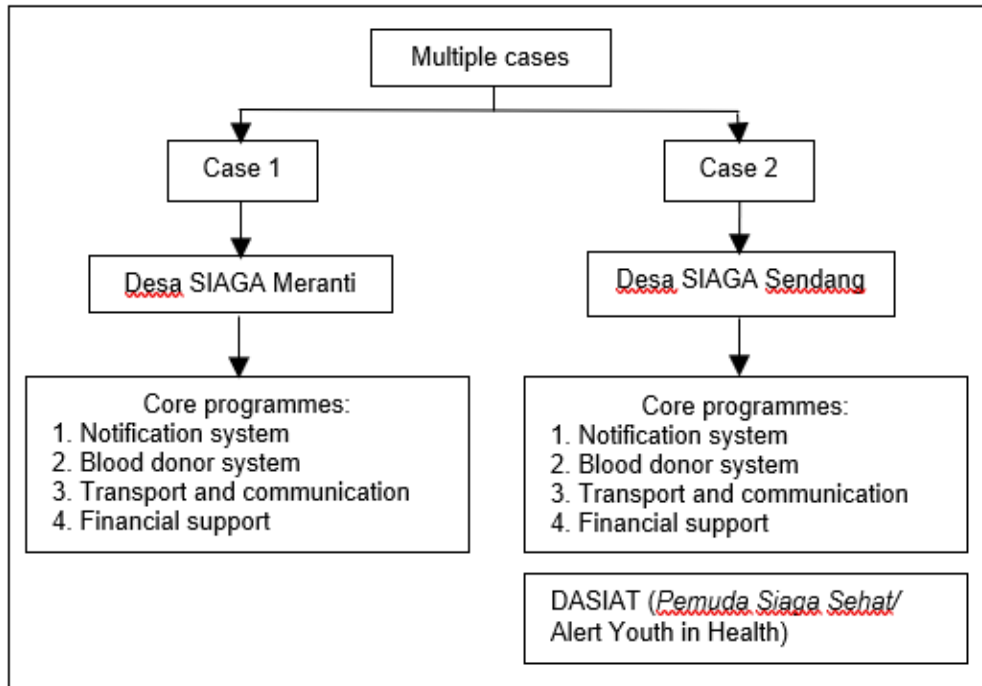
### 3.4.3 The case(s), unit(s) of analysis and study setting

The selection of the case(s) needs to be related to the theoretical proposition of interest (Yin, 2017). The cases identified for this study were two villages in Sukoharjo Regency that had adopted the Desa SIAGA approach to community participation in preparing pregnant women for birth: Meranti village and Sendang village (Figure 3-2). Desa SIAGA has four main programmes in preparing pregnant women for birth namely, notification system, blood donor system, transport and communication, and financial support (Sood et al., 2004). In 2012, The Regent of Sukoharjo Regency launched a local programme called DASIAT (*Pemuda Siaga Sehat* or Alert Youth in Health) which aimed to empower the youth within each alert village to help the community in developing their health status including MNH in the village. In Desa SIAGA Sendang, DASIAT programme was reported to be active to help health providers in improving MNH. Whereas, in Desa Siaga Meranti, there was no DASIAT programme as the local



government had not formed it yet (Personal communication with Health Office of Sukoharjo and Nampun Community Health Centre). Hence, it was of interest to compare and contrast these two cases of Desa SIAGA to explore if the addition of DASIAT could improve the delivery of the model.

**Figure 3-2: The study cases**



A unit of analysis in a case study refers to the case that is being studied, such as organisation, social group, or community (Yin, 2017). Accordingly, the units of analysis of this study were the Meranti Village and the Sendang Village. The study was conducted in two villages in the Sukoharjo Regency that had been purposefully sampled to portray the comparison of two different approaches to the application of community participation through Desa SIAGA. The cases were bound by a system (the community), by time (seven months of data collection) and by place (two villages) (Creswell, 2014). The system that bound the cases was that the communities were implementing an approach of participation namely alert village system which was an Indonesian government programme to help pregnant women in preparing for birth (Kusuma et al., 2009).

#### **3.4.4 Participant and the recruitment strategy**

The participants of this study were pregnant women, post-natal women, neighbours of pregnant women, village midwives, *kader* (CHWs/ cadres), local governments (chief of neighbourhoods, chief of hamlets, and village heads), religious leaders and DASIAT members (in Sendang village). The strategies to recruit participants in this study was

through distributing general information leaflets about the study to all targeted participants (Appendix L). The leaflets were distributed by the researcher in several strategic places, often visited by village citizens, including community health centres (*Puskesmas*), auxiliary health centres (*Pustu*), monthly integrated health service posts (*Posyandu*), village midwives' houses, village health posts, village government offices, places of worship, and village security posts. The leaflets informed potential participants who were interested in participating to contact the researcher either by phone, short message service, or WhatsApp application. In addition, the researcher approached potential participants who were involved in antenatal classes, neighbourhood and hamlet meetings in each village; and DASIAT meetings in Sendang village.

Participant information leaflets (PIL) were distributed to those who expressed an interest in participating (Greaney et al., 2012). An exemplar of PIL is available in Appendix M. The leaflet and PIL were written in Indonesian. The potential participants were given a two-day timeframe to allow them to ask questions about the study and reflect in order to decide to take part in the study. The researcher then obtained informed consent from every participant with initial contact and then clarified the research process verbally. Informed written consents were obtained from the participants once they agreed verbally to take part in this study. Appendix N provides an example of the informed consent form. The participants had the opportunity to withdraw their consent at any time. The interview was conducted once for each participant. However, the participants would be contacted again if there was data that needed to be clarified. Therefore, retention and commitment from the participants was important. The researcher explained about retention in the consent form and communicated about the commitment.

### **3.4.5 Data Collection**

This study employed multiple collection of data sources, including non-participant observation, open-ended in-depth interviews, and documentary analysis. In addition, the study also used fieldnotes to strengthen the data. The reason for multiple sources of evidence in a case study is to conduct data triangulation (Yin, 2014; Creswell, 2014; Houghton et al., 2017). The corroboration of multiple data sources can improve the rigour and validity of the qualitative research (Yin, 2014; Houghton et al., 2017). The data triangulation will then strengthen the substantive data (Yin, 2014). In this study, the substantive data was obtained from in-depth interviews. The data from observations, documentary analysis, and fieldnotes were used to inform, confirm, and strengthen the interview data. The following sections describe further details on each data collection strategy.

### **3.4.5.1 In-depth interviews**

The interview is considered as one of the most essential sources of information in a case study (Yin, 2014). Qualitative interviews have the potential to provide in-depth information regarding the experiences and viewpoints of the participants towards a particular topic (Mann, 2016). Thus, the interviews in this study would help the researcher to gain data related to the perceptions and experiences from a wide array of participants involved in the community participation programme. A schedule of open-ended, face to face, in-depth interviews was developed to guide the interviews (see Appendix O for sample of the interview schedule). The researcher conducted 24 interviews in total, of which one was a pilot interview with a pregnant woman. The pilot interview provided information to strengthen the interview schedule and was excluded from the analysis. To measure the quality of the interviews, this first interview was transcribed verbatim and translated. After the supervisory team read through the translated transcription and fed back, the next interviews were then conducted.

In each case, the researcher interviewed two pregnant women, two post-natal women, one neighbour of a pregnant woman, one cadre, the village midwife, one chief of neighbourhood, one chief of hamlet, the village head, and one religious leader. While in the Sendang case where DASIAT programme was implemented, the researcher also interviewed one DASIAT member that was apparently the chairman of DASIAT. The length of each interview was approximately one hour. The interviews were audio-recorded and transcribed verbatim with participants' consent to ensure a proper statement could be repeated for data analysis objectives. To ensure the anonymity and confidentiality of participants during the interviews, the researcher negotiated with the local government for permission to access a private room in the local area, which was comfortable and had minimum risk of distraction.

### **3.4.5.2 Non-participant observations**

As this study intended to capture the real-life situation of the case, non-participant observation was employed (Yin, 2014; Creswell, 2014) by using the observation inventory that was adopted from Spradley (2016), "Descriptive question matrix for observation" (Appendix P). The matrix had nine elements that generally guided the observations in terms of location, the objects that were being observed, what was happening and when, who were the actors, the purpose of the activities, and the feeling expressed by the actors (Spradley, 2016). The data from non-participant observations were used to strengthen and inform interview data.

The researcher conducted non-participant observations into five essential community meetings. These meetings provided important data, including whether MNH issues

formed part of the community's agendas. In each case, the researcher conducted an observation of one neighbourhood meeting and one hamlet meeting. In the Sendang case, the observations were also carried out in one antenatal class. The antenatal class in Meranti only occurred once during the seven-month data collection period. The researcher asked the village midwife in Meranti regarding the schedule, and she advised it was ad hoc. Further explanation regarding this data is provided in Chapters 4 and 5. During the development of the study protocol, it was expected to observe a DASIAT meeting too, however there was no DASIAT meeting, or other activities, scheduled at the time.

Each meeting was observed once. The length of each observation depended on the meeting. Informed consent was not gained from observation participants in the neighbourhood and hamlet meetings as those were public forums and the observations were anticipated not to cause any harm (Boddy et al., 2017). However, the researcher explained about the research to the person in charge of the meetings a week prior to the meeting. The researcher then contacted the same people two days later to gain permission. Before the meeting began, the researcher explained to the forum about the study and then an observation was conducted during the meeting. Meanwhile, the antenatal class observation required consent as the class was a group forum (Boddy et al., 2017). The schedule of antenatal classes was obtained from the village midwives. A week prior to the antenatal class, the researcher contacted the village midwives and pregnant women who would attend the class. The village midwives and pregnant women were given two days to consider the observation. The researcher contacted them and asked whether they were interested in participating. Once they agreed to participate, they were given a PIL and consent form.

Some participants of the neighbourhood and hamlet meetings were also the participants of the interviews, including chief of neighbourhoods and chief of hamlets. The antenatal class in Sendang case was also attended by the village midwife who was interviewed. The meetings and the antenatal class also enabled the capture and exploration of further data related to the information from the interviews. Therefore, the meetings and the antenatal class were purposefully selected. In addition, during the fieldwork, the researcher attended several integrated health service posts (*Posyandu*) and one meeting of cadres in both cases. The researcher took fieldnotes from the integrated health service posts and the cadres' meetings. From the integrated health service posts, important information related to MNH services, and the service uptake could be obtained.

The researcher was aware that the participants might change their behaviour during the observation (Hawthorne effect), so the researcher used a protocol adopted from

Oswald and colleagues (2014) to overcome such a situation. This protocol had six stages to help the observer to engage and build relationship with the participants so that participants could act as natural as possible. The six stages were gauging the participants; creating a non-threatening perception; introductions; establishing rapport; relaxed signals; and link to conversation area (Oswald et al., 2014). In gauging the participants, the researcher arrived prior to the meetings and the antenatal class started. In order to create a non-threatening perception, the researcher showed a friendly manner. The researcher observed community meetings in which the majority of the community was Javanese. Thus, the researcher performed '*unggah-ungguh*' – the Javanese terms for very polite manner employed to build positive relationships with the participants. To establish rapport, the researcher was introduced by the key actors of the meetings to the participants. The researcher spoke both Javanese and Indonesian throughout the conversations. In addition, the researcher used appropriate jokes to perform the relax signals. As a link to the conversations, after the meetings ended, the researcher had informal conversations related to MNH issues and community participation strategies in the area with random participants and key actors of the meetings. The meetings ran naturally, regardless of the researcher's appearance. The researcher had several experiences attending similar community meetings earlier, and it was noticed that there were no effects caused by the observations.

### 3.4.5.3 Documentary analysis

Documentary analysis was used to collect data as documents might confirm and enhance evidence from other sources (Yin, 2014). Data was collected from supporting documents associated with the Desa SIAGA as shown in Table 3-2. With the permissions from the persons in charge, the researcher took photographs of the documents and/ or took photocopies.

**Table 3-2: Supporting documents for documentary analysis**

No.	Document	How to access
1.	<i>Kartu Amanat Persalinan/</i> KAP (pledge card) and P4K sticker from pregnant and post-natal women	In order to obtain consent to look at pledge cards and P4K stickers from the women participants, the researcher involved a section about documentary data collection in the informed consent.
2.	Maternal documents from village midwives including medical records of pregnant women who were interviewed and antenatal class records	In order to access these documents, the researcher obtained consent from the village midwives at the same time when the researcher gained consent for the interviews.
3.	Local government documents (head of villages, head of	Documents were accessed with consent from those persons who also were being interviewed.

	neighbourhoods and head of hamlets)	
4.	Desa SIAGA policy manuals from Nampan Community Health Centre	Documents were accessed with permission from the Head of Nampan Community Health Centre.
5.	Government policy manuals from Health Office of Sukoharjo Regency	Documents were accessed with permission from the Head of Health Office, Sukoharjo Regency.
6.	DASIAT documents (in Sendang village)	Documents were accessed with consent from the chairman of DASIAT who was also a participant of the interviews.

#### 3.4.5.4 Fieldnotes

Fieldnotes were used by the researcher to document the needed contextual information throughout the fieldwork. The fieldnotes were written by hand during the interviews, observations, or any other activities in the field such as familiarisation to study sites. The hand-written notes were then typed onto a personal laptop. These fieldnotes recorded essential information related to the study, the researcher's thoughts, feelings, reflections, and experiences during the data collection process. This information is useful in the data analysis in order to enhance the rigour of the study (Philippi & Lauderdale, 2017).

#### 3.4.6 Transcript verbatim and translations

All interviews in this study were audio-recorded. Data from the interviews were transcribed then translated into English as the interviews were in Indonesian. However, translation of transcripts might cause the cultural meaning embedded in linguistic expression to be lost in translation (Temple and Young, 2004; Smith et al., 2008). To overcome this, the process of transcription and translation were performed by adapting procedures of translation in qualitative nursing research proposed by Chen and Boore (2010) that included four stages. First, data from all interviews were transcribed verbatim by the researcher herself in the original language. The second stage was forward translation (from the source to the target language). All translations were done by the researcher who is able to speak both Indonesian and English and understood the research context. This approach was considered to minimise the possibility of transcription error because of the use of jargon or language barrier (Oliver et al., 2005; Squires, 2008).

The third step was back translation (from the target to the source language). A translator was employed to back translate a selection of transcripts (3 samples) and confirmed that the meaning and nuances within the data set were not overlooked. Once the researcher translated the transcript from Indonesian to English, the translator then did the back translation from English to Indonesian. The researcher discussed

with the translator if there was any misunderstanding by comparing the original transcript and the translated version. If there was a word or a term in Javanese that was difficult to translate into Indonesian language or English, then the explanation of the term was written in bracket to illustrate the meaning. This approach was adapted from Halai (2007) who suggested to use brackets to provide some explanations of the words when an exact translation is not possible and to provide the closest translated meanings.

The final step involves expert panel to reach final agreement on the translation. Several translated transcripts were read by the Supervisory team as English native speakers who understood the study context. Several translated transcripts were selected from each group of participants. These processes of translations and back translations were considered to enhance the rigour of the study (Temple and Young, 2004; Behr, 2017).

### **3.4.7 Data Analysis**

The data analysis in this study relied on theoretical propositions and an inductive strategy (working from the ground-up) as proposed by Yin (2014). As described earlier, the theoretical proposition would give direction about what was to be examined and analysed in the study (Baxter and Jack, 2008; Yin, 2014). Whilst the inductive approach would allow the researcher to work from the ground-up to explore the underlying processes (Thomas, 2006; Yin 2014) of how community participation works through Desa SIAGA in supporting women in preparing for birth. Accordingly, the two general analytic strategies were appropriate to help the researcher to link the data to the concept of interest.

The process of data analysis is very complex and challenging in a qualitative study, and there are no systematic rules in this phase (Thorne, 2000; Houghton et al., 2015). However, for novice researchers, thematic analysis is argued to be the most appropriate strategy as thematic analysis allows the researcher to employ more accessible form of analysis; the detailed theoretical and technological knowledge of approaches are more flexible. Thematic analysis is also appropriate for a study underpinned by the constructivist paradigm since thematic analysis allows the analysis of the real-life phenomenon and is more transparent (Braun and Clarke, 2006). Based on those reasons, the data of this study was analysed using the general thematic analysis approach developed by Braun and Clarke (2006). Thematic analysis is “a method for identifying, analysing, and reporting pattern (themes) within data” which contain six phases (Braun and Clarke, 2006) as shown in Figure 3-3.

**Figure 3-3: Thematic analysis phases by Braun and Clarke (2006)*****Familiarising with data***

Interview data from the two study sites were analysed separately. The transcribing process provided a starting point to get familiar with the data (Braun and Clarke, 2006). Once the interview data were transcribed, the next step was to read and re-read the transcripts. Reading and re-reading allows the researcher to immerse in the data, so that they will be familiar with the depth and the breadth of the content. In addition to familiarisation with the data, the reading process aimed to search for meaning and patterns. While reading, notes were taken and ideas marked to start the initial coding (Braun and Clarke, 2006; Thomas, 2015). Table 3-3 shows an example of the initial coding process that was done manually.

**Table 3-3: Example of initial coding process**

<b>Participant's initial</b>	<b>Quotes</b>	<b>Initial coding</b>
PW2M	<i>"I ever heard (about Desa SIAGA), but I don't know what that (Desa SIAGA) means."</i>	- Lack of understanding
RTM	<i>"Yes, I have (heard about Desa SIAGA). However, until today, the so-called Desa Siaga (Alert Village) has not been established in this village. The only programme that has been really organised is integrated health centre (Posyandu). In each community unit (RT), there is one integrated health centre (Posyandu). There are elderly Posyandu and the toddlers one. As for the pregnant women, they check (their pregnancy) (by seeing) doctor and (visiting) public health centre (Puskesmas). Usually, they also could (see) the nearest midwives."</i>	- Lack of understanding - Lack of awareness

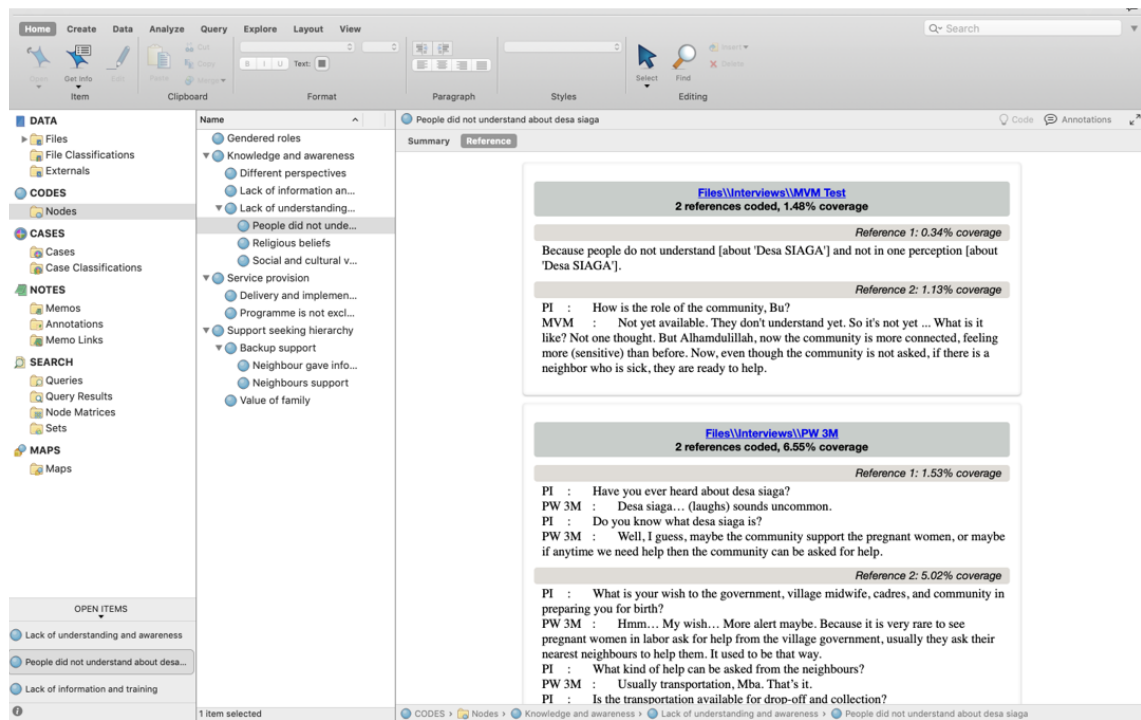
***Generating initial codes***

This phase involved coding interesting features of the data in a systematic way across the data set, collating data relevant to each code, and organising the data into meaningful groups (Tuckett, 2005; Braun and Clarke, 2006). Codes refer to "the most basic segment or element, of the raw data or information that can be assessed in a meaningful way regarding the phenomenon" (Boyatzis, 1998). Coding can be done both manually and through a software programme (Braun and Clarke, 2006), the data



in this study were analysed through manual coding and the data were managed through NVivo 12 (QSR International Pty Ltd, 2018). Through manual coding, the data were coded by writing notes, using highlighters and 'post-it' notes to identify segments of data. The codes were grouped and re-grouped using NVivo to identify initial patterns. By identifying interesting segments in the data, it might form the basis of repeated patterns (themes) across the entire data set (Braun and Clarke, 2006). An example of the use of NVivo is provided in Figure 3-4. below.

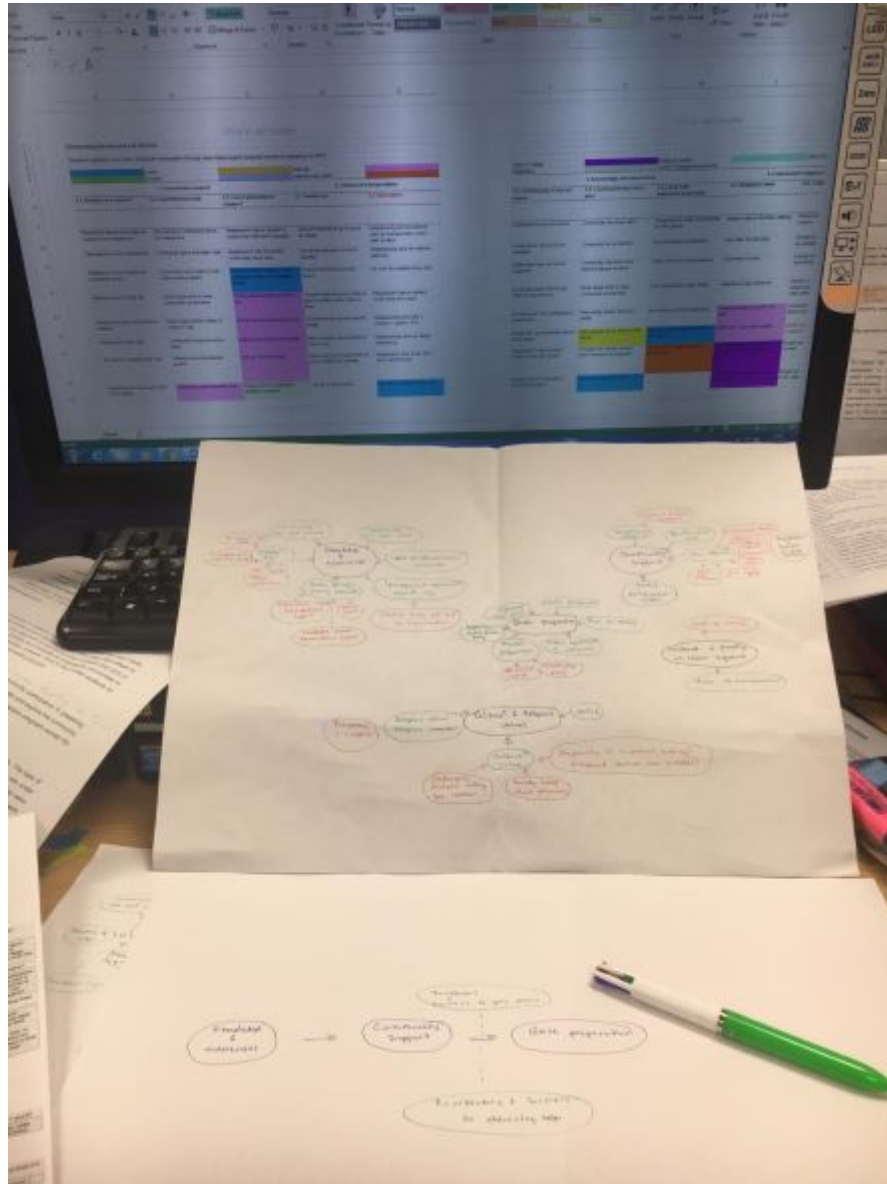
**Figure 3-4: Example of the use of NVivo 12 to manage data**



### Searching for themes

In this phase, the different codes were sorted into potential themes and relevant codes were collated within the identified themes. The codes were organised into theme groups by using tables, mind-maps or writing codes into separate papers (Figure 3-6). A theme needs to capture 'something important about the data in relation to the research question and represents some level of *patterned* response or meaning within the data set' (Braun and Clarke, 2006, pp.82). At this stage, the relationship between codes, between themes, and between different levels of themes were started to emerge. This stage produced a set of candidate themes, sub-themes (Braun and Clarke, 2006).

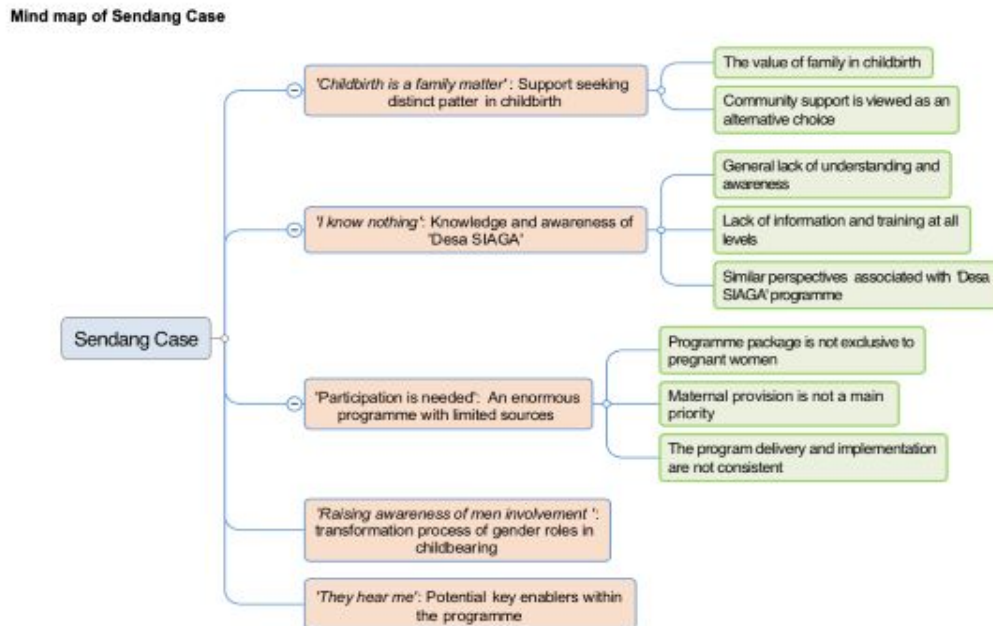
**Figure 3-5: Example of searching for themes process**



### ***Reviewing themes***

This phase consisted of two level of activities namely reviewing and refining the candidate themes. At the reviewing level, the candidate themes were read and considered whether they could form a coherent pattern. If the candidate themes could form a coherent pattern, then the candidate themes were refined. Otherwise, the process was repeated from the coding stage to the stage of searching for themes. The reviewing process was then continued until it was believed that the candidate themes had adequately captured the data outline. At the end of this level, a 'thematic map' of analysis was generated (Braun and Clarke, 2006). Figure 3-7 below shows an example of the developing the thematic map.

Figure 3-6: Example of mind map for searching for theme process



In the level of refining themes (Figure 3-8), the entire data set were re-read to consider the validity of the themes and the accuracy of the thematic map in reflecting the meanings evident throughout the data set. In addition, the re-reading process allowed the identification of themes that might be missed so that they could be coded and added into the candidate themes. These two levels were working like a cycle until it was found that the thematic map fitted to the data set (Braun and Clarke, 2006). Before going to the next phase, it was essential that this phase had generated an idea about the different themes, how they fit together and whether the themes could tell the overall story about the data (Braun and Clarke, 2006; Thomas, 2015).

Figure 3-7: Example of Reviewing candidate themes and the data

Theme	Subtheme	Data
1. Knowledge and awareness of Desa SIAGA	1.1. General lack of understanding of Desa SIAGA	PW2G: Umm... (laughs) I don't know.
		PW1G: No, I never heard about Desa Siaga.
		PW2G: No, I never heard about Desa Siaga.
		PW1G: No, I never heard about Desa Siaga.
		PW2G: Never heard about village ambulance.
		PW2G: No, I don't know about village ambulance.
		PW1G: No, I never heard about birth preparation sticker. Is that KIA (maternity book)?
		PW2G: No, I don't know [about birth preparation sticker].
		PW1G: No, I don't know [about pledge card].
		PW1G: No, I don't know [about pledge card].
		PW1G: P4K sticker? Is that the [sticker] toilet one? I don't know.

### Defining and naming themes

This phase is referred to as defining and refining the themes, which mean identifying the fundamental things that the themes relate to and then determining what aspect of the themes capture. The analysis also identified what was interesting about the data and the reason. In this phase, a detailed analysis for each theme was written as well as the 'story' that each theme tells (Braun and Clarke, 2013). As a part of the refinement, it was identified whether there was or not any sub-themes in the data set. At the end of this stage, clear themes were defined and were named with 'concise and punchy' names that immediately would give the reader a sense of what the themes refer to (Braun and Clarke, 2006). Table 3-4 provides an example of theme development.

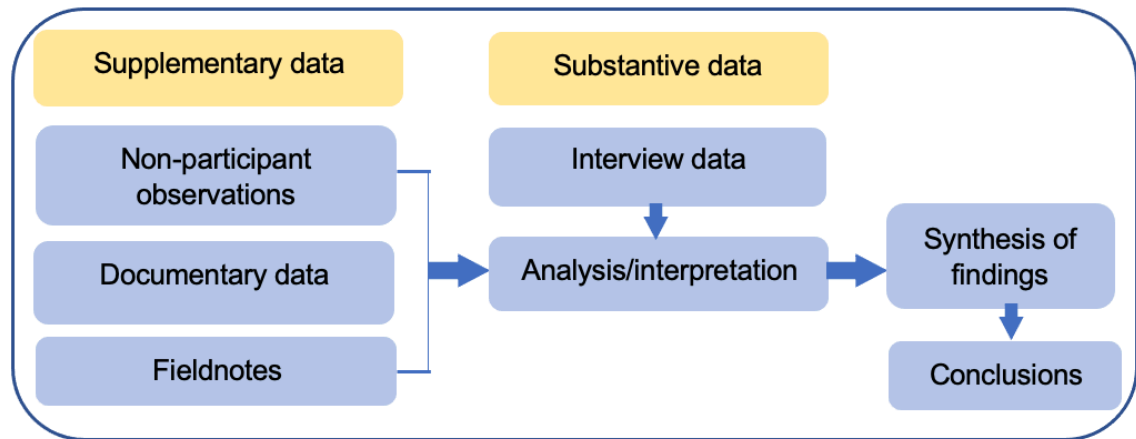
Table 3-4: Example of theme development

No.	Participant's quotes	Coding	Subtheme	Initial themes	Themes
1.	"I ever heard (about Desa SIAGA), but I don't know what that (Desa SIAGA) means."	- Lack of understanding	Knowledge	General lack of understanding and awareness	Knowledge and awareness
2.	"Yes, I have (heard about Desa SIAGA). However, until today, the so-called Desa Siaga (Alert Village) has not been established in this	- Lack of understanding - Lack of awareness	- Knowledge - Awareness	General lack of understanding and awareness	Knowledge and awareness

<p><i>village. The only programme that has been really organised is integrated health centre (Posyandu). In each community unit (RT), there is one integrated health centre (Posyandu). There are elderly Posyandu and the toddlers one. As for the pregnant women, they check (their pregnancy) (by seeing) doctor and (visiting) public health centre (Puskesmas). Usually, they also could (see) the nearest midwives.”</i></p>				
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### ***Producing the report***

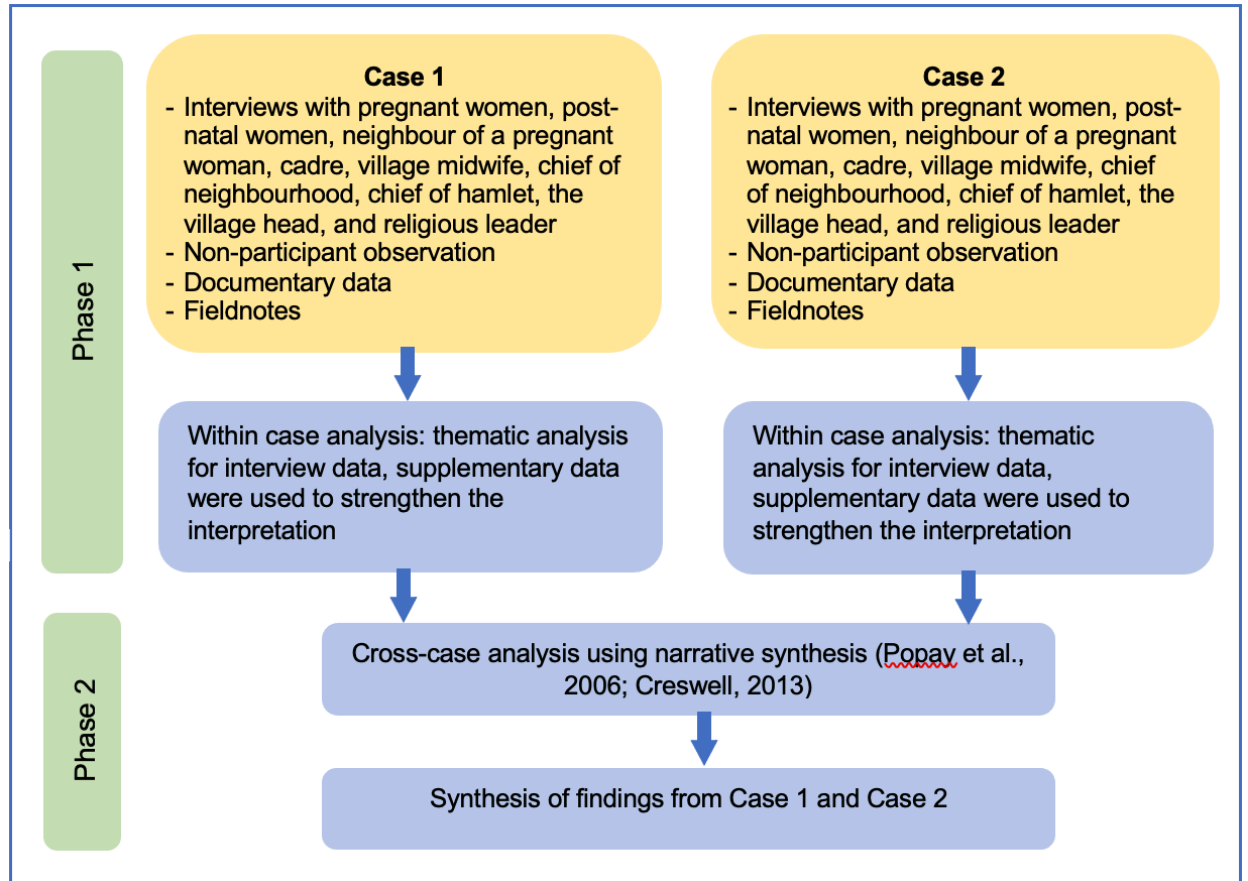
The last phase was writing-up the results of the analysis. This writing process provided the story of the themes as well as the extracted data that was embedded within an analytic narrative (Braun and Clarke, 2013). The analytic narrative is more than describing the data, it is an in-depth exploration, along with an argument that relates to the research question (Braun and Clarke, 2006; Yin, 2013). In writing the analysis, selected quotes from the data are provided to support evidence of the themes so that may convince the reader that the data fit the themes (Braun and Clarke, 2013). Details of the findings of this study are written in Chapter 4 and Chapter 5. Figure 3-4 below described the process and direction of the analysis.

**Figure 3-8: Data analysis process in each case**

Once the data analysis in both study cases was performed, findings from both cases were then synthesised using a narrative approach. In this circumstance, narrative synthesis refers to a method 'to synthesize findings from multiple primary studies that relies primarily on the use of words and text to summarise and explain the findings of the synthesis' (Popay et al., 2006). However, there is no exact guidance on how to perform the synthesis using this approach. Cruzes et al (2015) stated that narrative synthesis can be used to synthesise data across cases. They referred to a work from Babar et al. (2006), where Babar et al compare their primary findings with a similar study from Oza et al (2005). However, Babar et al. (2006) did not state whether they used a narrative synthesis approach to synthesise their final findings. Instead, Babar et al. (2006) only mentioned that they compared their findings to Oza et al. (2005). Babar et al. (2006) compared and contrasted their findings and described them in a narrative way. There was no clear explanation about the narrative synthesis approach that they employed. Most literature related to narrative synthesis including Cruzes et al. (2015) who referred to seminal work from Popay et al. (2006) about how to conduct a narrative synthesis. There was one work (Whedbee, 2009) that employed narrative inquiry from Creswell (2013) to synthesis its multiple cases in the study. The synthesis in Whedbee's study used three steps of data analysis proposed by Creswell (2013).

Based on the above considerations, the synthesis of this study involved three phases that were adapted to Creswell's steps of data analysis (Creswell, 2013) and the narrative synthesis approach proposed by Popay et al (2006). Further details of the synthesis are provided in Chapter 7. Figure 3-5 elucidates the phases of data synthesis from the two cases.

**Figure 3-9: Data synthesis process from the two cases**



### 3.5 Ethical considerations

Ethics in research is defined as ‘moral deliberations, choice and accountability on the part of the researchers throughout the research process’ (Edwards and Mauthner, 2012, pp. 14). This research obtained ethical approval from the School of Healthcare Research Ethics Committee (SHREC), University of Leeds (Appendix S) and the Government of Sukoharjo Regency (Appendix T). In addition, several key ethical principles (Orb et al., 2000; Hewit, 2007; Hammersley and Traianou, 2012) were followed.

To adhere to the ethical principle of autonomy, all participants were provided with complete information concerning to the study. The information was written in a clear manner to aid full understanding. The information stated that the participants had the option to decide whether they wanted to take part in this study, and if they did not wish to participate, this did not matter. In order for consent to be informed, participants were provided with comprehensive information about the study. The researcher distributed a general information leaflet about the study to all targeted participants to attract them to take part in the study (Appendix L). Several promotional banners and posters containing information on the study were placed in strategic locations, such as the

community health centre, integrated health service posts, village health posts/village midwives' houses, village government area offices, village security posts, and places of worship. The participant information leaflet (PIL) was then distributed to those who expressed an interest in participating (Appendix M). The village midwives and several cadres aided the researcher to identify and approach the pregnant and post-natal women, since it was quite challenging to rely on women to contact the researcher in the first place. Meanwhile the village midwives, cadres, and stakeholders were approached by the researcher. However, there was no coercion during the recruitment process.

The researcher obtained informed consent (Appendix N) from every participant with initial contact and the researcher clarified the research process verbally. The time frame that was given to the participants to decide to participate was in two-days time. Informed written consents were obtained from the participants once they agreed verbally to take part in this study. The participants had the opportunity to withdraw their consent at any time. The researcher also clarified to participants that they had the autonomy to withdraw from the research at any time.

Moreover, to meet privacy and confidentiality principles, the data was secured and stored based on the University of Leeds guidance for good research practice and the Data Protection Act. The researcher confirmed to the participants that confidentiality was considered, the data was anonymised and that pseudonyms were also used throughout the study, so that the participants could not be identified. The participants were assigned an identity code that would be utilised through the research process. The usage of participants' data was explained in the consent form. The collected data was stored on the M: drive on the University desktop, Microsoft One Drive provided by the University of Leeds, and the researcher's personal laptop. The account had a password and only the lead researcher had access. The participants could ask for a copy of their data. The contact detail and other forms of information of the participants were separated, so they cannot be linked and identified. During data collection in Indonesia, hard file data such as consent form, participants' demography information, and fieldnotes were secured and stored in a locked cabinet in the researcher's office at Universitas Muhammadiyah Surakarta, and only the researcher had access. The paper document data was scanned and saved into Microsoft One Drive.

In terms of the beneficence and non-maleficence principles, this study might lead to many advantages not only for the researcher but also for all related sectors, including the participants, communities in Sendang and Meranti village, Nampan Community Health Centre, and government of Sukoharjo district. The communities, healthcare professionals and local governments who took part in this study will be given an



executive summary of study findings that may provide them with new information regarding community participation to improve MNH. In addition, during the interview with women participants, there was possibility that topics or issues might be sensitive, embarrassing or upsetting. Therefore, a distress protocol (Appendix U) was prepared which the researcher adapted from Haigh and Witham (2013). The researcher would also explain about this matter and action might be taken on PIL (Appendix M).

### **3.6 Quality and robustness of the Study**

In order to enhance the quality of a qualitative study, the rigour of study needs to be performed (Cope, 2014). According to Lincoln et al. (1985), the trustworthiness of a qualitative study could be developed by paying attention to four criteria, including credibility, transferability, dependability, and confirmability. One of the strategies to build the credibility of the study was by contacting the participants both telephone and face to face meetings. In terms of transferability, it was expected that the study would increase learning, knowledge, and establishment in community participation. The researcher utilised an audit trail to obtain dependability of this study by keeping a note of all information, data, and judgments in a secure location. In the context of confirmability, the researcher used audio-taped, transcription verbatim and proofreading to avoid bias and misinterpretation of the data, as English was a foreign language of the researcher, and the interviews were in the Indonesian Language. The researcher was supervised by a supervisory team where one supervisor had extensive expertise in qualitative methods. Both supervisors had a background in clinical midwifery and research; both supervisors had worked in Indonesia and had a good understanding of the geopolitical, social, and cultural context of the setting for this study. The researcher also established a discussion with the participants to verify whether their information had been interpreted correctly. The procedure of this member checking was by asking the participants to review the raw transcriptions and observation fieldnotes (Creswell and Miller, 2000).

### **3.7 Conclusion**

This chapter has provided details on the methodology underpinned by the chosen study approach. The methods employed to answer the study's aim were presented. A rationale to use a case study as the study approach has been described. An explanation on how the study was conducted was presented. The data collection and analysis processes were illuminated to explain the data triangulation. Ethical considerations and the robustness of the study were also demonstrated. The following

two chapters (4 and 5) will present the study's findings that emerged from the data obtained from the two study cases (Meranti and Sendang).

**Key summary points:**

- Constructivism as a research paradigm and qualitative comparative case study as a methodology were chosen to shed light on community participation as a complex phenomenon in a real-life setting for improving MNH.
- Multiple data collection methods were employed to answer the research question. These included open-ended, face to face, in-depth interviews, non-participant observations, documentary analysis, as well as fieldnotes.
- Thematic analysis was used to elaborate the interview data. The analysis/interpretation of interview data was strengthened by data from non-participant observations, documentary analysis and fieldnotes.
- Cross-case analysis using narrative synthesis was undertaken to compare and contrast, as well as to synthesise the findings from the two study cases.

## Chapter 4 Findings from Desa SIAGA Meranti

### 4.1 Introduction

This chapter describes the findings from Case 1, namely Desa SIAGA Meranti. The study setting, and characteristics of the participants are presented. The chapter presents a detailed analysis and interpretation of the participants' interviews, the key findings and themes derived from their views and perceptions towards the topic. Where appropriate, relevant quotations from the participants and fieldnotes are presented to illustrate the findings. Evidence from non-participant observations is also conveyed. Fieldnotes and non-participant observation data are written in text boxes. At the end of this chapter, a summary of the key findings and conclusion are also provided. Documentary analysis that was employed to aid data triangulation will be provided in Chapter 6.

### 4.2 Study setting

Meranti Village was one of 14 villages located in Nampan District, Sukoharjo Regency, Central Java, Indonesia. The coverage area was 2.7 Km<sup>2</sup> (larger than the second site, Sendang Village) and it made Meranti the largest village in the Nampan District. Compared to the second case – Sendang Village, Meranti was more rural and closer to the centre of Nampan District and Sukoharjo Regency (Meranti Village Government Report, 2017). In 2017, the total population of Meranti Village was about 6373 (Sukoharjo Government, 2018). Javanese was the major ethnicity in Meranti, and Javanese culture influenced the values of Meranti people, for example, the traditional language, social life, beliefs, traditions, health and healing. Even though Meranti Village was the centre of guitar manufacturing in Indonesia, the people of Meranti were still more traditional compared to people in Sendang (Meranti Village Government Report, 2017). As the village was a key area for guitar manufacture, many people from outside the village came over to buy and make business to the village. In this circumstance, the villagers might be exposed by social and cultural values from outside the village and that might influence their own social and cultural values (Daskon, 2010; Palmer and Chuamuangphan, 2016).

In terms of health systems and provision, Meranti Village government has implemented national programmes to improve the health of its citizens, such as integrated health service posts and family planning clinics. So far, there were 10 integrated health service posts which focused on the care of babies, children, maternal and women's health, and the elderly. These posts were run by CHWs (known as *kader*- in Indonesian)) and attended by the village midwife. In addition, Meranti also has a village

health post (*Post Kesehatan Desa/ PKD*). The village midwife lived in the PKD and she had 24-hour responsibility to provide health services, such as blood glucose level check, immunisation and antenatal care. Most importantly was that the village midwife should be ready to help pregnant women in preparing them for birth (Meranti Village Government Report, 2017). However, unlike the second case, which had two village midwives, there was only one village midwife in Meranti even though the area was larger than Sendang. The population of Meranti was considered to be enough to place only one village midwife in the village (Meranti Village Government Report, 2017).

### **4.3 Recruitment process and characteristics of participants**

Details of participant recruitment are available in Chapter 3. The researcher advertised the study by distributing leaflets (Appendix L) and by placing display posters in the community health centre, one auxiliary health centre, 10 integrated health service posts, village midwife's house/village health post, village government office, places of worship, and village security posts. The women participants were also approached by the village midwife and cadres. The village midwife also approached cadres to participate. As per the village midwife, the researcher provided detailed information in a meeting in the community health centre. The meeting was attended by village midwives from the second study case and from other villages. Village government and religious leader participants were approached by cadres. Once a participant was interested in hearing more information, the village midwife and/or cadres contacted the researcher. Seven women received detailed information from the researcher; one woman was interviewed for the pilot; and one woman declined to participate.

As planned, the researcher consulted with the local government for permission to access a private room in the local area office, which was comfortable and had a minimum risk of distraction to conduct the interviews. Nonetheless, several women refused to have the interviews in the appointed place. Therefore, the researcher, with the Supervisory team's approval, applied for an ethics amendment to SHREC. The amendment was to include participants' homes as one of the interview places. Once the amendment was granted (Appendix V), the interviews were continued.

In total, 11 interviews were conducted with two pregnant women, two post-natal women, one neighbour of a pregnant woman, one cadre, the village midwife, the village head, one chief of hamlet, one chief of neighbourhood, and one religious leader. Pseudonyms were used for the sake of confidentiality of the participants as shown in Tables 4-1 and 4-2. Amongst the participants, there were seven female and four male participants. The education levels were varied from elementary school, junior high school, senior high school, vocational high school, and diploma. In the Indonesian

context, to entry elementary school, pupils need to be 7-years of age. After graduating senior high school/ vocational high school, there is no A level system such as there is in the United Kingdom (UK). Therefore, students can enrol direct to universities. In the midwifery education system, diploma 3 is the lowest level. More information regarding the midwifery education system in Indonesia can be found in Appendix D. Profiles of the participants are provided in Tables 4-1 and 4-2.

**Table 4-1: Profiles of women participants**

<b>Women/ age (years)</b>	<b>Gestation age (months)/ pregnancy number</b>	<b>Education background</b>
Mirna (30)	9 months/ 3 <sup>rd</sup>	Vocational high school
Tati (34)	9 months/ 3 <sup>rd</sup>	Vocational high school
Ani (24)	Newly post-natal woman/ 1 <sup>st</sup>	Senior high school
Rina (23)	Newly post-natal woman/ 2 <sup>nd</sup>	Junior high school

**Table 4-2: Profiles of key stakeholders and neighbour participants**

<b>Key participants/ age (years)/ gender</b>	<b>Role/ Working experiences (years)</b>	<b>Education background</b>
Arum (30)/ female	Village midwife (9)	Diploma 3
Sudrajat (62)/ male	Village head (6)	Vocational high school
Suryani (40)/ female	Cadre (10)	Senior high school
Tarmidi (51)/ male	Chief of neighbourhood unit (13)	Senior high school
Darmadi (60)/ male	Chief of hamlet (6)	Elementary school
Sukardi (62)/ male	Religious leader (10+)	Junior high school
Sayekti (33)/ male	Guitar luthier/ neighbour	Junior high school

#### **4.4 Emerging themes from the Meranti Case**

Detailed discussion of the analysis process is provided in Chapter 3 section 3.4.7. The participants' interviews were transcribed verbatim and translated. Segments of the participants' texts addressing a succinct topic or collection of topics were coded manually and managed using NVivo 12. The codes were refined and compressed into subthemes (organising themes) using Microsoft Excel and mind mapping, which led to identification of five themes (Figure 4-1 – Figure 4-5). Four main themes emerged from the data from this study site with several sub-themes as described in Table 4-3. The table describes key points from each theme in order to provide a brief overview. These themes and sub-themes did not necessarily stand on their own and the relationships between them were explored. Data from the in-depth interviews, non-participant observations, and documentary sources has been used to illustrate how the overarching themes emerged. Data from fieldnotes were also used to support the findings. The details of the documentary review are provided in Chapter 6.

Table 4-3: Themes and subthemes from Meranti Case

Main theme	Subtheme	Key points
1. <i>'Family first'</i> : Support seeking hierarchy in childbirth	1.1. The value of family in childbirth	<ul style="list-style-type: none"> <li>- Family was on the top of the list as a source of support, mainly those who were women</li> <li>- Preparing birth was a family's matter</li> <li>- Family as the greatest support</li> </ul>
	1.2. Community support is viewed as a back-up	<ul style="list-style-type: none"> <li>- Community support was not needed unless women had no resources of their own</li> </ul>
2. <i>'I've never heard about it'</i> : Knowledge and awareness of Desa SIAGA	2.1. General lack of understanding and awareness	<ul style="list-style-type: none"> <li>- Most participants were not aware of and did not understand about Desa SIAGA</li> <li>- Only key participants (village midwife and village head) were aware of the programme</li> </ul>
	2.2. Different perspectives of Desa SIAGA	<ul style="list-style-type: none"> <li>- The village midwife and the village head had different perspectives of Desa SIAGA</li> <li>- Village midwife: citizen power</li> <li>- Village head: community as recipients</li> </ul>
3. <i>'The work is too much'</i> : Programme package was not exclusive to safe motherhood	3.1. Maternal and neonatal health provision was not the main priority	<ul style="list-style-type: none"> <li>- The initiative had a broad range of intervention programmes</li> <li>- It did not only focus on MNH</li> </ul>
	3.2. Village midwife as the main actor	<ul style="list-style-type: none"> <li>- There was only one midwife in the village</li> <li>- Village midwife was not only taking care of pregnant women and children but also community health as a whole</li> <li>- Society placed special value upon and trusted the village midwife</li> </ul>
	3.3. The programme delivery and implementation lacked consistency	<ul style="list-style-type: none"> <li>- Many parts of the programme were not consistently delivered and implemented</li> </ul>
4. <i>'Helping each other is a must'</i> : Contextual factors to		<ul style="list-style-type: none"> <li>- The support given by the community was a spontaneous act</li> </ul>

provide support in pregnancy and childbirth		<ul style="list-style-type: none"> <li>- There were three elements that drive the community to support women, including social capital, altruistic behaviour, and religious beliefs</li> </ul>
5. <i>'Pregnancy is a women's business'</i> : Gender roles in childbearing		<ul style="list-style-type: none"> <li>- Men acted as the main decision makers in family, and they financed the family</li> <li>- There was a perception that women had a natural duty to take care of pregnancy</li> <li>- Men and women appeared to have different roles in pregnancy and childbirth</li> </ul>

#### 4.4.1 *'Family first'*: Support seeking hierarchy in childbirth

Most of the interview participants expressed trust to their family as the first source of support in childbirth. The coding contained in Figure 4-1 below reveals the views and perceptions of the participants towards support for women in pregnancy and childbirth. The codes have been refined into subthemes and a theme. This study found that there was a hierarchy in obtaining support during the preparation of birth. Women would seek support from their families first. Most participants, whether women, neighbours, or key stakeholders, stated that birth preparedness should be done within the family, since they thought that childbirth was a 'family matter'. It was apparent throughout the interviews that family was the women's first assistance and the backbone of their support networks. When women and their family could not meet the woman's need, then she would seek help from their neighbours.

**Figure 4-1: Coding framework revealing the emergence of theme support seeking hierarchy in childbirth**

Codes	Subthemes (organising themes)	Theme
Family as the greatest support Family provided emotional support Family provided informational support Family provided financial support Family was always ready to help Different source of support within family Neighbours did not want to be responsible to women without clear financial means	i. The value of family in childbirth	Support seeking hierarchy in childbirth
Neighbours' supports were important if family was far Women with no family lived close to them experience difficulty to get help Neighbours' supports as alternative Neighbours provided practical help No advance plan for preparing woman for birth Neighbours' supports will be provided if required	ii. Community support was viewed as a back-up	

#### 4.4.1.1 The value of family in childbirth

This sub-theme showed that family is important and has its own position for women in the perinatal period, as well as in childbirth. All women participants stated that they had family as their main support system during childbirth and that they were the first layer of the support hierarchy. Family members were described by women as their greatest support.

*“(pause) Family's support is more important rather than communities.”  
(Rina, 23-year-old, newly post-natal woman)*

From family women would seek emotional support, informational support and financial support. Emotional issues were identified by all women participants as the major challenge that women need to deal with. Ani described her labour experience as a fearful moment. She expressed that the situation in the delivery room had frightened her. She said that her family strengthened her throughout the process:

*“When I was about to give birth, my mother-in-law said, ‘Don’t be afraid, every woman does that, don’t be afraid to give birth.’ Then, my sister also said, ‘Don’t think about anything when you give birth, your thought should be neutral, don’t be stressed.’ When my labour was given with a medical induction, I was scared because the patient next to me [was about to give birth as well] was screaming, asking for help, while another one said, ‘Astagfirullah, Astagfirullah (Forgive me, Lord)’. I said, ‘I am scared.’ I just entered the room, but I was scared already. So, I need support to overcome my fear.” (Ani, 24-year-old, newly post-natal woman)*



As well as emotional support, women claimed that information related to pregnancy and delivery could be sought from family members, especially relatives who were women, such as sisters and aunts since they had experience of birth.

*“Besides the midwife, I often discussed my pregnancy with my sister.” (Rina, 23-year-old, newly post-natal woman)*

*“Yeah, I often asked [about my pregnancy to] my sister. My sister also has an 8-month, no, a 9-month baby. So, if I did not know [about something], for example – I asked her, ‘Why do I feel pain in my stomach, Mba (Indonesian term for older sister)?’ Then, she answered, ‘No problem, it is common until the 4 months of pregnancy.’ Then, I asked, ‘Why I don’t have appetite [to eat]?’ She said, ‘No worries’. So, for such issues, I ask my sister. (Laughs).” (Ani, 24-year-old, newly post-natal woman)*

Furthermore, family was mentioned as a primary source of financial support. Sudrajat, the village head said that financial problems should be solved by family members. Even though he did mention that the village government might help, he also emphasized that it was a second alternative when the family could not afford it in the first place.

*“As for the disadvantaged women and they have no health insurance, the village government will help to obtain Health District Assurance (Jaminan Kesehatan Daerah/Jamkesda) that is issued by Social Office. But it will only cover 50% of the total hospital cost. For the 50% rest, well, they [women] have family. It may also be possible to me [as the village head] to help them. We will see first how much we [village government] should cover the rest, then we discuss it with the family. If it is not too much, we will help. However, their family usually will help first.” (Sudrajat, 62-year-old, male, village head)*

It was obvious that financial support could not be easily given by the community. The family should be responsible for the hospital bills. During childbirth, family should be present to ensure that there was always someone to pay the childbirth expenses. Arum, the village midwife, expressed those financial issues could be a barrier for the community to help a woman in labour if family were not able to be present, even though the women really needed help. It was identified that ‘terms and conditions’ might apply for neighbours in order to transport a woman to reach health facility. In this context, the woman must have clear financial means. It suggested that neighbours did not want to act as the guarantor to pay the hospital expenses.

*“At that time, a cadre called me to say that the pregnant woman was pushing and asked me to come to her house immediately. So, at that time I immediately came by riding a motorbike because I thought the pregnant woman was only pushing normally. When I arrived at her house, it turned out that the pregnant woman had a cramp, and her husband was not there. The neighbours did not want to be responsible for taking her to the hospital because I thought they were afraid if told to finance her. Finally, I called my mother who is also a midwife and also have a clinic and an ambulance. I asked my mother to send the ambulance. Then I took the pregnant woman to the hospital even though without her husband and family (laughs). The pregnant woman did not have a family who lived close to her house because she was not a native of the village.*

*Thank God, the mother and the baby born were safe. But at that time, she needed to be treated in the ICU (intensive care unit) for one week. I was worried if she would die (laughs).” (Arum, 31-year-old, female, Village Midwife)*

Similar to the women, the village government also had perceptions that family was the substantial assistance for women in childbirth. Tarmidi, a chief of the neighbourhood, explained that women’s husbands and families were always ready to help since they lived close to each other. Within Indonesian culture, mostly in a village, it is common that a family live close in a neighbourhood environment.

*“On pregnant women related [issues], they surely have husbands – [the husbands] take care of them. The husbands take care of them, and they are ready once the pregnant women will deliver their babies. [This is] because as a family, if there is a family member who faces difficulties, [they] will know. It is [most likely to happen] if their houses are close to each other.” (Tarmidi, 51-year-old, male, chief of neighbourhood unit)*

Nevertheless, in terms of finding support within family, women tended to select from whom they would like to obtain the help. For instance, a woman would obtain financial assistance from her husband. Meanwhile, when preparing mother’s and baby’s equipment, they asked for help from their sisters and mothers.

*“When I first met the pregnant woman during her pregnancy check-up, I asked if she has a national health insurance card. She replied that she didn’t have, even though she was classified as the poor. Then I asked her about how she would pay for her delivery, she replied that the cost of delivery will be covered by her husband.” (Arum, 31-year-old, female, Village Midwife)*

*“The help in preparing for childbirth (paused). [It was] only from family, to prepare for some things as I explained previously such as mother and baby stuff. [It was from] My sister and mother.” (Ani, 24-year-old, newly post-natal woman)*

#### **4.4.1.2 Community support was viewed as a back-up**

Since it was apparent that family was the women’s main source of assistance, it was likely that the community was the second choice for women seeking support. Consequently, community support was a back-up that would be utilised by the expectant mothers in preparing for birth if required. Neighbours would be helpful to the women if their families were not present:

*“(pause) If family is far from us, the nearest neighbours’ support [is important].” (Rina, 23-year-old, newly post-natal woman)*

Furthermore, most women participants also explained that neighbours could be asked to provide practical help such as transportation. The quotation below is an example from Mirna. She described her plan on how she would reach health facilities when she entered labour. She indicated that support from neighbours could be used as an alternative plan.

*“Well, about how to go to the hospital, I will be in a healthy condition so that I can still ride motorbike. That will be fine. If I feel contractions at home, I will ask for my neighbour’s help. Some of them have cars. They [my neighbours] are fine. They have offered me some help; I mean later if something happens to me, they will take me [to the hospital].” (Mirna, 30-year-old, 9-month gestation)*

In addition to transportation, support from neighbours was needed when women needed someone to look after their elder children left at home during the labour:

*“I also asked my neighbours to take care of my children when I start to labour.” (Tati, 34-year-old, 9-month gestation)*

Overall, family appeared to be the core support for women in pregnancy and childbirth. It was identified that family would provide emotional, informational, practical and financial support; and the involvement of community was limited. Social and cultural factors seemed to underpin the perception of family as the first support for women in pregnancy and childbirth, for instance most Indonesian people tend to live in an extended family. This is strengthened by the demographic data of women participants which show that all of them lived in an extended family. So, the women had many people in the house who were always ready to help. It should be noted that many Indonesian families lived close each other in a neighbourhood environment. The women’s neighbours were commonly their families too, such as their aunts, their sisters, or their parents. In this circumstance, women might not be aware that they may need support from outside their family, such as from the community.

#### **4.4.2 ‘I’ve never heard about it’: Knowledge and awareness of Desa SIAGA**

Knowledge and awareness of Desa SIAGA was derived from the participants’ understanding of the existing context of the issue, which they used to interpret the topic. Figure 4-2 shows some codes revealing there was a lack of understanding and awareness of the Desa SIAGA programme from all participants in the Meranti case. This included pregnant and post-natal women, neighbours, the village midwife, cadres, and local government (the village head, chief of hamlet unit and chief of neighbourhood unit). This theme has two sub-themes as described in Table 4-3.

**Figure 4-2: Coding framework revealing the emergence of theme knowledge and awareness of Desa SIAGA**

Codes	Subthemes (organising themes)	Theme
Limited knowledge about <u>Desa SIAGA</u> Limited understanding about <u>Desa SIAGA</u> Limited awareness of <u>Desa SIAGA</u> Community is not yet aware Community's role is not yet available Limited information sessions Limited training on <u>Desa SIAGA</u> Lack of knowledge transfer Lack of community engagement People did not understand about <u>Desa SIAGA</u> People don't want to know what is in the P4K sticker	i. General lack of understanding and awareness	Knowledge and awareness of <u>Desa SIAGA</u>
Only limited people know about DS programme Pregnancy related problems were viewed as village midwife's and cadres' tasks Village midwife viewed <u>Desa SIAGA</u> as bottom-up approach Village head viewed <u>Desa SIAGA</u> as top-down approach	ii. Different perspectives of <u>Desa SIAGA</u>	

#### 4.4.2.1 General lack of understanding and awareness

One of sub-themes that emerged from the data was that there appeared to be limited understanding and awareness of Desa SIAGA amongst most of the participants, except for the village midwife and the village head. Whilst some participants reported that they had never heard about the term Desa SIAGA. Amongst women participants, only one woman, Mirna, stated that she had heard about Desa SIAGA, however, she could not offer a full explanation. Even though there is uncertainty in her response, she then tentatively suggested Desa SIAGA is about help for pregnant women from the village midwife.

*“Desa SIAGA, I mean like, Desa SIAGA... Do you mean there is a midwife who help pregnant women? I have heard [about Desa SIAGA], but I don't know what that [Desa SIAGA] means.” (Mirna a 30-year-old 9-month gestation)*

However, this general lack of understanding and awareness was not only from the women, but also from local government workers, for example the chief of the neighbourhood unit, was not aware of the programme. Tarmidi, the chief of the neighbourhood unit, stated that Desa SIAGA had not been established in the village, when in fact it was functioning. Even though he held a key position in the community, as a chief of the neighbourhood unit, he was not aware of the programme:

*“Yes, I have [heard about Desa SIAGA]. However, until today, the so-called Desa Siaga has not been established in this village. The only programme that has been really organised is Posyandu (integrated health service posts). In*

*each hamlet unit, there is one Posyandu. There are elderly Posyandu and the toddlers one.” (Tarmidi, 51-years-old, male, chief of neighbourhood unit)*

Similarly, a cadre participant reported that she did not know about Desa SIAGA. But from her explanation, she appeared to have some knowledge of the programme and that indicated she was just not aware of the name of the programme. It seemed that she did not realise that she was part of the programme. She suggested that Desa SIAGA was the care for pregnant women and children:

*“I don’t really understand [about Desa SIAGA] (laughs). Well, Desa SIAGA... Here [Meranti Village], doesn’t seem [to establish the programme] yet. We are just planning to establish a family planning [KB] village. The Desa SIAGA is usually managed by the men [who serve] as village administrators. On the other hand, the cadres only manage integrated health service posts. Well, related to women, in Desa SIAGA, pregnant women are usually taken care of, then the children’s weight have to be measured [at integrated health service posts regularly] and [they receive] a complete immunisation. Just like that.” (Suryani, 40-year-old, female, a cadre)*

This study found that one of the underlying factors for the lack of understanding and awareness was that there were limited information sessions and training at all levels on the Desa SIAGA initiative. Most participants asserted that they never received exposure to the Desa SIAGA programme. As for key stakeholders, only the village midwife participant had received training related to the programme. Consequently, there was insufficient information and training, and this is likely to be one of the underlying factors affecting people’s lack of awareness of Desa SIAGA. Sudrajat, the village head highlighted the lack of information sessions on Desa SIAGA to the people and/or officials in the local government in the village which may account for their lack of understanding and awareness of the existence of Desa SIAGA:

*“Currently, the Desa SIAGA programme is not optimal. If there is information session, so many people will know [this programme] – especially the society in general. Therefore, there will be some improvements if there is information session. There has not been any other information session yet [about Desa SIAGA]. During my service [about 6 years], there is no information session on Desa SIAGA.” (Sudrajat, 62-year-old, male, village head)*

The village midwife identified that the promotion of the programme was the duty of the Health Promotion Officers from the community health centre. She suggested that one of the contributing factors to the limited information was that the Health Promotion Officers did not actively promote the programme to the community and stakeholders.

*“People do not understand [about Desa SIAGA] and not in one understanding [about Desa SIAGA]. Hmm... Well sorry to say, the Health Promotion from [Nampan] Community Health Centre is less, in my opinion you know, it is less exciting. So [actually] we should make the people really understand. It doesn’t need to be simultaneously in all 14 villages [under Nampan Community Health Centre], just one village first that is focused to be Desa SIAGA. So, the Health Promotion of the Community Health Centre goes [to the village] to give a*

*counselling [like] 'this is what is called as Desa SIAGA, like this, and so on'.* (Arum, 31-year-old, female, Village Midwife)

Data from the village midwife above was strengthened with a fieldnote in which it was noticed that Health Promotion Officers were not able to deliver and implement the Desa SIAGA programme optimally. It was highlighted that workload and officer shortage were the two major factors that influenced the performance of Health Promotion Officers to promote the programme.

Fieldnotes:

Day/ date: Tuesday, 24/07/2018

Place: Nampan Community Health Centre

When the researcher obtained a document related to Desa SIAGA in Nampan Community Health Centre, she met a person in charge from the Health Promotion Department. This person spoke to the researcher and said that the Health Promotion Officers had a considerable task in the village with very limited personnel. Hence, they could not promote all of the programmes to women, community and stakeholders.

In this matter, it seemed that health professionals delivered and implemented the initiative without introducing the concept first to raise the awareness of the community and key stakeholders for whom the programme was designed. Accordingly, it appeared that the programme was delivered only as a part of the health professionals' duty. The health professionals appeared to fail in engaging the community to be actively involved in the programme. However, it was indicated that there were several obstacles to promote the programme which required attention, for example workload and the number of health promotion officers.

Furthermore, most participants remarked that there was a lack of training that focussed on the Desa SIAGA initiative. From the village midwife's explanation, it was revealed that the training was *ad hoc* and not sustainable. Only selected people had been invited to the training, such as Desa SIAGA leader (previous village head) and village treasurer who have since retired, and their successors had not received any training. Arum mentioned that there was no transfer of knowledge, either oral or written, from those who received training to the other actors in the programme.

*"I once joined the training with the previous village head, previous Desa SIAGA leader, and previous village treasurer. They all are now retired [and there were no successors]. They didn't transfer to the young people [knowledge they received about Desa SIAGA]. So Desa SIAGA in this village was limping because the three of them had retired even though they were trained [at Health Training Centre]."* (Arum, 31-year-old, female, Village Midwife)

This view was strengthened by statements from the key stakeholders. From their explanations, it can be seen that they had never received a training related to the programme.

*“Yes, it [Desa SIAGA training] is really important, in any forms. I will be very happy if there is such training. So, we could be motivated so that there will be some improvements to advance the village – as a result, it [Desa SIAGA] can run as it should be.” (Sudrajat, 62-year-old, male, village head)*

*“... I hope there is a training about Desa Siaga to support the pregnant women in preparing for labour. I will surely support this programme. If there is anything we need to prepare, I will do it.” (Tarmidi, 51-years-old, male, chief of neighbourhood unit)*

Training related to Desa SIAGA appeared to be an essential part in the programme. It was identified that lack of training had influenced the understanding and awareness of the key stakeholders involved in the initiative. In this circumstance, the lack of understanding and awareness might influence perspectives and roles towards the programme.

#### **4.4.2.2 Different perspectives of Desa SIAGA**

Amongst those who were aware, the village midwife and the village head, it was noticeable that there were differing perspectives of what the programme actually means. Nevertheless, neither the village midwife nor the village head mentioned of how this initiative related to safe motherhood programme. The village midwife described that the Desa SIAGA programme aimed to empower the community to control their health status, as well as to overcome their own health problems.

*“The purpose of Desa SIAGA, the first is to make the community healthy in particular, the second is to mobilize the community to be aware, not to be contacted by the government. So how the community can be able to actively develop their own village to be healthy.” (Arum, 31-year-old, female, village midwife)*

This particular village midwife participant also linked the programme to disaster management:

*“... But actually, there is no Desa SIAGA that is truly active. Desa SIAGA is actually a village where the people really understand and ready if a disaster occurs, whether it is a flood or an outbreak. So, the village is ready as there is a village ambulance, there are people who are already aware of donating blood, there is a village clean mutual cooperation movement, something like that.” (Arum, 31-year-old, female, village midwife)*

From the village midwife's description, it can be seen that there are many programmes offered by Desa SIAGA. It seemed that the national government attempted to empower the community to improve their health status through this broader programme.

Meanwhile, the village head explained that in Desa SIAGA, government and related sectors were the facilitators/ service providers, and the community was seen as the recipient.

*“This Desa SIAGA aims to work together in overcoming various issues by improving the activities in related fields. For example, if there are some problems on health issues, then the cooperation will be established with the health sector. As the village government, we face the current issues and facilitate the programmes to address them [the issues]. In order to improve the programmes, we should involve the cooperation at neighbourhood unit level and smaller units.” (Sudrajat, 62-year-old, male, village head)*

The different perspectives of the village midwife and village government appeared to be related to the different roles they held within the village. As only the village midwife had received a training related to the programme, it was noted that she had more comprehensive knowledge of Desa SIAGA. It was indicated that the understanding of key actors (the village midwife and the village head) towards Desa SIAGA may influence their intentions and actions to implement the programme.

#### **4.4.3 ‘The work is too much’: Programme package was not exclusive to safe motherhood**

Figure 4-3 reveals segments of codes that have been refined into a theme, which highlights the data relating to how key stakeholders and the village midwife delivered and implemented the programme of Desa SIAGA. This theme shows that the focus of the programme was not only to taking care of pregnant women, but also to improving the health of the community in general. Several facilitating factors and barriers emerged to influence the lack of consistency of the delivery and implementation of the programme.



**Figure 4-3: Coding framework revealing the emergence of theme programme package was not exclusive to save motherhood**

Codes	Subthemes (organising themes)	Theme
Community engagement was not only focused on MNH Improving health status in general Many programmes under Desa SIAGA to address various health problems	i. Maternal and neonatal health provision was not the main priority	Programme package was not exclusive to safe motherhood
Village midwife carried diverse duties Village midwife provided all health services Village midwife had huge workload Cadres as village midwife's assistants Community valued village midwife Community had low trust on cadres Village midwife as the main driver on Desa SIAGA Cadres had limited skills	ii. Village midwife as the main actor	
Women had limited information about birth preparedness sticker and pledge card Health professionals did not provide clear information Birth preparedness sticker and pledge card were not consistently implemented Inconsistent recording of birth preparedness sticker and pledge card  People's beliefs influenced the delivery and implementation	iii. The programme delivery and implementation lacked consistency	

#### 4.4.3.1 Maternal and neonatal health provision was not the main priority

Findings revealed that there was a broad range of intervention programmes within the Desa SIAGA programme, and that the community engagement was not only focused on MNH related issues. Based on the explanation of the village midwife and the village head regarding the Desa SIAGA definition under section 4.4.2.2, preparing women for a safe birth was not the cornerstone of the programme. Instead, the programme focused on the general health status in the village and MNH was only a part of it. In this case, it looked like that the programme for pregnant women was not the main priority.

*“Every once a month there was antenatal class, but it was off during the fasting month. Before fasting month [it] was also off because there was a PSN (pemberantasan sarang nyamuk/ eradication of mosquito nests) programme, so we focus on the PSN first. Then on the next Friday there will be another class.”*  
*(Arum, 31-year-old, female, Village Midwife)*

That data was strengthened by evidence from the fieldnotes of observation in which the researcher found there was no antenatal class on the day that the village midwife said it would be held on.

## Fieldnotes:

Day/ date: Friday, 06<sup>th</sup> July 2018 at 10:00 West Indonesian Time

Place: Village Government Office of Meranti

The researcher came to study site, wishing that there would be an antenatal class as village midwife said on the interview. However, there was no class held. When the researcher confirmed to the village midwife the answer was the class was postponed again due to another agenda.

The class was delivered in an *ad hoc* manner. The invitation to attend the class was distributed to women by cadres either through text message or direct message (face to face information).

From Arum's explanation and the fieldnotes, it was noticeable that she carried many duties in the village. She did not only take care of women and children but also the health of community in general, for example in the prevention of dengue. The Desa SIAGA initiative had many programmes to overcome various health problems, however, regarding implementation of the programme there was no clear role allocation on who should carry out the tasks. It appeared that the village midwife was responsible to ensure that the programme worked. This workload of village midwife had become a burden for her to deliver her main duty which was focussed on the care of MNH. This was apparently preventing women to access MNH services from the village midwife.

*"In the first time [of antenatal booking visit], I went to the village midwife. But then at Puskesmas (community health centre) Nampan until now on. Because it is difficult to see the village midwife. (laughs)" (Mirna, 30-year-old, 9-month gestation)*

*".... there is a shift work to provide services in the Puskesmas. When it is my shift to work in Puskesmas, then I couldn't provide service in the PKD (village health post) so that women couldn't meet me when they come to PKD." (Arum, 31-year-old, female, Village Midwife)*

It became apparent that the village midwife was not only required to carry out duties within the village, but she also had a shift to work in the community health centre. Therefore, this task had added to her workload and presented a barrier for her in meeting her obligations to provide MNH services.

#### **4.4.3.2 Village midwife as the main actor**

It was highlighted that there was only one midwife assigned in the village. The village midwife carried out duties to provide health care services for all villagers. Arum, the village midwife reported that she felt the workload was too much for just one midwife. She also stated that the ratio of the midwife in the village was not balanced with the village coverage. The large area of the village was likely to make the village midwife had an issue with distance and infrastructure access which was affecting her

performance. During the interview, the village midwife expressed that she ran out of time to be able to finish her duties. Based on the data throughout the interviews, the particular village midwife had several specific duties, including providing MNH and general health services in the village health post; home visits to women as much as four times especially for women who were unable to come to the health facilities; shift work in the community health centre; and disease surveillance. The village midwife felt that she could not deliver all the tasks optimally due to increased workload from other sources, for instance she could not meet four times home visits for women. The quotation below is an example of her experience in providing a service in the village:

*“I couldn't make home visit to woman as much as four times as it should because the work is too much [for the village midwife] while the village midwife is only one [in the village]. Actually, my village consists of two villages that are made into one village. (pause) Well, if the pregnant women are housewives, then it is easy for me to meet them, they come to the integrated health service posts. So, the home visit reduces, I don't need to come to their houses, where can be in remote areas. There is area of the village that the location is far away. When I come to their houses, far away, but then the pregnant women are still working, so I go back, I couldn't meet them. To be honest, there should be two village midwives in this village, but until now on, [it is] only me.” (Arum, 31-year-old, female, Village Midwife)*

The village midwife felt she had enormous responsibility. However, she had no equal work partner that could substitute her tasks in her absence. As a result, the workload was not only affecting her performance, but also influencing her personal life. For example, during the data collection, the village midwife was pregnant to her second child and she reported that she would not have a proper maternity leave. It appeared that she faced challenges to meet her own rights. She provided care for women, but it seemed that the Desa SIAGA initiative failed to pay attention to her as a woman too.

*“No one will temporarily replace the duty of the village midwife [when I give birth], [it is] still me. All assignments remain my responsibility. So, I will be on leave [doing services at] integrated health service posts. [Everything] keeps running as usual, but I will not come to the community health centre. But I will keep working in the village. Well, I feel like fantastic. I used to not be able to leave during my first-time pregnancy too, only one week. Because at that time, there was cadres contest was held in the village. So, at that time I didn't get maternity leave.” (Arum, 31-year-old, female, Village Midwife)*

However, it was apparently there were cadres in addition to the village midwife.

*“... Well, I already have got some tasks in health sector. [But] The officers in this sector such as the village midwife or cadres have represented me [my job in health sector]. They always give reports to me. If there is something we could improve in the activity, they will report to me as well. We also hold evaluation together.” (Sudrajat, 62-year-old, male, village head)*

The village midwife explained that they had a strong collaboration with cadres. Cadres were seen as the village midwife's assistants. Cadres provided help to both women and the village midwife. They appeared to be a 'bridge' between women and the village

midwife. They had a role to give notification to the village midwife when a pregnant woman started in labour, for example. It was also identified that they could arrange the transportation to drive the woman to reach the health facility in time. However, Arum also highlighted that the cadres' action to notify the village midwife was influenced by their culture too – Javanese. Within this culture, villagers tend to help each other.

*“The co-operation with cadres is extraordinary. Without them, I am like nothing but dust. (laughs) So the cadre is very, very helpful. If there something happened to pregnant women, [they who will say to me] ‘Bu, this pregnant woman has a stomach-ache’, like that. Usually, Javanese is like that, “Her stomach hurts, what should we do?” Then I suggested [the pregnant woman] to be taken to the community health centre, then the cadres have been ready to find a neighbour’s car as a village ambulance.” (Arum, 31-year-old, female, Village Midwife)*

This collaboration between village midwife and cadres can be viewed as a facilitating factor in providing health services. Nonetheless, a cadre participant felt slightly different towards her role as a CHW. She thought that she was only a facilitator of the village midwife in conducting her duty. She described that the village midwife had a special value within the society and that the community hold the village midwife in high regard. In her view she felt that people had a low trust of cadres. It was identified that one factor which influenced this was because the village midwife had superior knowledge and experience in terms of MNH. People had a perception that the village midwife was the expert who they could turn to.

*“I don’t have experience of preparing a woman for a birth. It is usually the village midwife who do that. The society trusts the village midwife more rather than [towards] the cadres. So, sometimes we [cadres] only accompany the village midwife. The one who conducts information session [about health] is usually the village midwife. We work together with the village midwife in the village. She [village midwife] have more knowledge [on health issues] and experience [than cadres]. We, as cadres, only assist the village midwife.” (Suryani, 40-year-old, female, cadre)*

A statement from Mirna, a pregnant woman participant, strengthened Suryani’s illustration.

*“I like to ask [something] to the village midwife. [From her] I can get more knowledge. I rarely talk to the cadres (laughs). I only meet the midwife when I go to the integrated health service post. (laughs)” (Mirna, 30-year-old, 9-month gestation)*

The trust to the village midwife can also be seen through Ani’s quotation below on how she utilised the integrated health service post. From Ani’s explanation, it seemed that the village midwife was the driver of the service and she valued her most. However, since the village midwife had no substitute in her absence, it prevented some women from accessing the services. Even though cadres run the post, they were not equipped

with high level knowledge, skills and the appropriate equipment, such as blood pressure monitors. Therefore, it influenced people's perspective towards the cadres' ability to carry out certain health services.

*"If there will be a Posyandu (integrated health service post) service, for tomorrow for example, we will be notified this morning by the cadres that the service will be available, and what time. As for me, I would ask them if the village midwife would come or not. Sometimes, if the midwife doesn't come, I wouldn't make it. (Laughs). If the village midwife come, then I visit the Posyandu. If the cadres said, "The midwife won't come tomorrow," I don't come [as well]. (Laughs). It's because if the midwife doesn't come, the activity is only measuring the weight. That's all. There's no blood pressure measurement because the equipment was brought by the midwife." (Ani, 24-year-old, newly post-natal woman)*

Trust from the community in the cadres is important to build confidence of the cadres in delivering services in the village. Cadres had the potential to support the village midwife to fulfil the gap in her workload, nonetheless it seemed that the empowerment of cadres was still limited. It is tangible that the village midwife was the key actor in Desa SIAGA. Nevertheless, she carried a high level of responsibility on her own with limited facilities. She had no 'partner' with equal knowledge or the skills to carry out the programme who could substitute her in her absence. It is highlighted that these conditions may affect the delivery and implementation of the programme.

#### **4.4.3.3 The programme delivery and implementation lacked consistency**

This study had found that many of specific elements of Desa SIAGA that were described in Chapter 1 such as the pledge card and birth preparedness (P4K) sticker were not consistently adhered. All women participants reported that they did not know about the 'pledge card'. When they were asked whether they have pledge cards, all participating women responded, 'I don't have'. All women claimed to have routine antenatal care, yet they did not appear to know about the pledge card. Similarly, with regards to P4K sticker, Ani, a 24-year-old newly post-natal woman stated she did not know about P4K sticker even though she had delivered her baby. She reported that none of her health providers had given her a sticker. Meanwhile, some women participants spoke about the inconsistency of the attachment of the sticker to their houses, and reflected on their experience about current pregnancies and previous ones:

*"I think sometimes ago, yes there was that sticker. The pink one, right? Where is it... Ah, here (pointing out the sticker on the book's inside cover). ... Usually, it is affixed at home [door], right? But it hasn't been affixed yet. When I had my first pregnancy, it was stuck at home." (Mirna, 30-year-old, 9-month gestation)*

*"In my house. It [P4K sticker] is affixed at my home [door]. Well, when I had my first and second pregnancy, there was no sticker to be affixed." (Tati, 34-year-old, 9-month gestation)*

Apart from the inconsistency of the sticker attachment, the recording of the stickers was inconsistent too. Most women participants expressed their stickers remained blank. Moreover, Mirna explained that she did not know about completing it since the midwife did not inform her:

*"Should this [sticker] be filled in? I haven't been told by the midwife." (Mirna, 30-year-old, 9-month gestation)*

Fieldnotes:

Interviewee: Ani, 24-year-old, newly post-natal woman

Day/ date: Wednesday, 11<sup>th</sup> July 2018 at 12.00 West Indonesian Time

Place: Ani's home at Meranti Village

The pledge card should be fulfilled by village midwife and signed by the pregnant woman, village midwife and who will take the woman to health facility when the labour starts.

It was interesting to find that Ani's P4K sticker remained blank and was not attached to her home door even now she has had delivered her baby, and the same with her pledge card. She said that she met village midwife only once, she attended integrated health service post three times but only met the midwife once. However, she said that she liked how the midwife explained about her pregnancy and the birth preparedness. Then she attended antenatal care at the Puskesmas. In this circumstance, Ani had routinely attended antenatal care but her P4K sticker and pledge card were still blank. It looked like P4K sticker and pledge card were not a priority in the Desa SIAGA initiative because from some interviews with women, some reported having a sticker on their home door and some did not. And there was a woman participant who attached her sticker on the window, so that when the window was opened no one would know that sticker.

Nonetheless, despite of the efforts to deliver and implement the programme, Arum, the village midwife described that community believe that pregnancy is something 'usual'. It seemed people avoid talking about worse case scenarios. It was highlighted that instead of taking preventive action, people tend to dismiss any negative outcomes. The beliefs appeared to challenge the Desa SIAGA programme in achieving its goals.

*"I suggested her [the expectant mother] to go to the hospital but she refused, neither to the community health centre. So, it happened [the expectant mother was treated in intensive care unit]. Well, there is still society that think pregnancy is a something usual and the baby will be delivered in a healthy condition, does the mother, she will be fine. It is very hard to give understanding about severe pre-eclampsia to the society, whereas pre-eclampsia is one of the severe cases in pregnancy." (Arum, 31-year-old, female, Village Midwife)*

It became apparent throughout all interviews with all women participants that they did not want to think about the possibility that a negative outcome could happen during the pregnancy and childbirth. It indicated that women 'underestimated' pregnancy and

childbirth. So, women never thought that they need to prepare a blood donor prior to the labour, and that this could be an obstacle for preparing women to have a safer birth. All women participants claimed that they did not think about a blood donor as per the following statement from Ani:

*“That [preparing blood donor] was not in my mind. (Laughs). Because I wanted to be always healthy. (Laughs).” (Ani, 24-year-old, newly post-natal woman)*

Despite many efforts and facilitators as well as obstacles to meet, it seemed that it was the village midwife who bore most of the responsibility for MNH within the Desa SIAGA model. Even though she received assistance from cadres, she was still the key actor in this initiative.

#### **4.4.4 ‘Helping each other is a must’: Contextual factors to provide support in pregnancy and childbirth**

The theme ‘contextual factors to provide support in pregnancy and childbirth’ emerged from several codes (Figure 4-4) indicating that the community had a perception that providing supports to everyone was essential in life. Several contextual factors influenced the community to support women in pregnancy and childbirth, regardless of whether they were aware of the Desa SIAGA programme.

**Figure 4-4: Coding framework revealing the emergence of theme contextual factors to provide support in pregnancy and childbirth**

Codes	Theme
Helping other is spontaneous act Social network influences people to support others Social capital as motivating factor to support women in pregnancy and childbirth Gotong royong/ sense of togetherness as motivating factor to help others Altruism as motivating factor to support women in pregnancy and childbirth Providing help as religious tenet Providing help is a good deed	Contextual factors to provide support in pregnancy and childbirth

This theme reflects that almost all participants expressed the belief that the community as a collective thought that they were already ‘alert’ to support pregnant women in pregnancy and childbirth. The support would be provided regardless of whether there was or was not a ‘programme’ for safe motherhood.

*“However, the voluntary supports have been done. Under any circumstances, without instruction [order], people are ready [to help pregnant women]. Anytime there is someone who needs a drive to the health facilities, it is ready. There is no need to choose the car, we can use any car that is available – we can*

*directly ask for help. There is no cost as well. You only need to thank them.”*  
(Tarmidi, 51-year-old, male, chief of neighbourhood unit)

This study revealed that there were three main elements that influenced the community to support women in pregnancy and childbirth including social capital, altruism, and religious beliefs. The social capital was found to influence villagers to support pregnant women through a tradition called as ‘*gotong royong*’. The term ‘*gotong royong*’ in the Indonesian language means a sense of togetherness or working together/mutual assistance. This tradition has encouraged the villagers to help each other.

*“So, such thing [helping each other] will come as a result of gotong royong.”*  
(Sudrajat, 62-year-old, male, village head)

*“I am happy of that. Glad to get support from them [neighbours]. Because they [neighbours] are not indifferent to me. It’s not like in the city where they [people] live individually. People in the village tend to help each other.”* (Mirna, 30-year-old, 9-month gestation)

In addition, altruism appeared to influence people to provide support to pregnant women. Sayekti, a neighbour participant, expressed that he felt a satisfaction after accompanying his neighbour’s wife in childbirth.

*“At that time, he [my neighbour] had no friends for waiting her wife, then I just helped accompany him because I felt pity of him, he had no friend to talk. Just that... Well, I was happy, I can help my neighbours.”* (Sayekti, 33-year-old, male, neighbour of a pregnant woman)

Furthermore, it was identified that religious beliefs have influenced the community to spontaneously support women. Providing help for other people was believed to be one of religious tenets. Consequently, ignoring someone that needed help was considered to infringe God’s rules and was considered to be a disgrace.

*“If one is religious, she/he is not afraid of people, but Lord the Almighty. So, without any instruction [to help others], they understand that if they violate the religious or social norms, they will be a shame.”* (Tarmidi, 51-year-old, male, chief of neighbourhood unit)

The findings revealed that the social, cultural, and religious values encouraged the community to help each other irrespective of whether they are ‘ordered’ to or not since providing help was regarded as a good deed. In this village, the tradition of *gotong royong* is embedded in everyday life. The villagers work together to support others in many social activities, such as preparing a wedding party, building a house, cleaning up the environment, and visiting a neighbour who is sick. Within the Indonesian society, working together is a natural societal expectation. In addition, the religious beliefs also motivated the community to providing support. The fear of God’s power appeared to control people’s action. However, almost all participants identified support for women as a ‘spontaneous act’. Accordingly, it appeared that the assistance given was



unorganised. Whereas, in birth preparation, there are a number of elements that need to be prepared in a comprehensive way.

#### 4.4.5 ‘Pregnancy is a women’s business’: Gendered roles in childbearing

Taking into account all themes described above, it is noted that gender roles play an important part in birth preparedness. Several codes as described in Figure 4-5 informed that there were predefined gender roles within the community in supporting pregnant women for childbirth.

**Figure 4-5: Coding framework revealing the emergence of theme Gendered roles in childbearing**

Codes	Theme
Taking care pregnancy was women's responsibility Childbirth was women's responsibility Men involvement in pregnancy and childbirth was taboo Men's task was in infrastructure development Gender stereotypes in pregnancy and childbirth Women should obtain permission from their husbands in decision making Gender segmentation as cultural values Gender segmentation as religious beliefs Task of women (family/community) in childbirth: nurturing mothers Men's task in childbirth: transportation matter	Gendered roles in childbearing

Most participants reported that it was the women’s role to take care of pregnancy. It was found that men talking about pregnant women was a ‘taboo’ in society. Pregnancy related matters were seen as natural circumstances for women.

*“Yeah, I mean, pregnancy related matter is a women’s task, since it relates to the women themselves. If the men discuss pregnancy issues and if it is heard by somebody, it seems to be inappropriate. It is normal if the women [discuss] it. If the men, who do it, it is fine. But, in my opinion, it is not appropriate [for men to discussing about pregnant women]. It should be [discussed and managed] by cadres, Family Welfare Movement (PKK) and integrated health service posts.” (Darmadi, 60-year-old, male, Chief of Hamlet)*

The ‘taboo’ of men involved in pregnancy and childbirth appeared to be the result of social norms and breaking these could lead to stigmatisation. It was indicated that a married man should not assist a married woman without the attendance of her husband. The chief of neighbourhood unit experienced a sense of awkwardness to

help a woman in labour. He identified it was because he had no legal bond to the woman he would assist, and he had his own wife.

*“I felt awkward when helping a pregnant woman who was about giving birth. That was because the one who I helped was not my own wife, but other’s. I felt awkward. And the husband was not at home. But I asked permission from my wife and she told me to help the woman immediately. At that time, she [the pregnant woman] urgently needed the help, so we [me and my wife] had to help her immediately. Then, I informed her [the woman] family [who lived far from her house] – then, they came.” (Tarmidi, 51-year-old, male, chief of neighbourhood unit)*

The above situation illustrates how complicated it was to support women in labour without their husband being present. Whilst it was described earlier that support from neighbours were needed by a woman who lived apart from her husband or family.

The village midwife also identified that religious beliefs could be a barrier for a woman to make a decision. For instance, in Islam, a woman needs permission from her husband in decision making. However, she emphasised that it was the case except in an emergency situation. Nevertheless, this notion towards religious beliefs as a constraint for a woman in decision making needs careful appraisal. Within most of Indonesian society, such as Javanese, family units are constructed through a patriarchal system in which decisions should be taken by men (usually the husband). In this culture, it is difficult for a woman make a decision without permission from her husband. The demographic data showed that all of women participants were Javanese and this strengthened this concept. The following quotation is an explanation from the village midwife about this matter:

*“So much! Yes, I have many experiences with pregnant women preparing for labour. (laughs) There was once a case of a pregnant woman experiencing severe pre-eclampsia to give birth. The pregnant woman did not want to make a decision [to be transported to the hospital] without her husband, even though her husband left for two days. She must be truly getting the permission from her husband because she is truly very Islamic. Well, I cannot blame, it is true that all actions must get permission by her husband, but if urgent means that we unavoidably have to make our own decisions.” (Arum, 31-year-old, female, Village Midwife)*

The defined gender roles also appeared to be reflected in the practice of key stakeholders. There was a perception that pregnant women related issues were the part of the village midwife’s and cadres’ duties. According to the chief of hamlet participant, the male leaders and male community had responsibility in infrastructure development. Whilst pregnancy and childbirth matters were taken care by the village midwife, cadres, and female community.

*“We hand pregnant women’s matter over to the Family Welfare Movement (PKK) (cadres), there is no discussion about pregnant women in the neighbourhood and hamlet meeting as the meetings are attended by male. In*

*the male meeting, the core discussion is about [infrastructure] development. It is usually... as I told you previously that on pregnant women's health, it is the PKK or cadre's duty. The chief of hamlet does not manage the health issues. It is [the responsibility of] PKK cadres and the village midwife. If there is something happens on health issues, then it will be [managed] by the integrated health service posts." (Darmadi 60-year-old, male, Chief of Hamlet)*

The views from Darmadi were corroborated by an observation in a neighbourhood meeting in his working area several days following the interview. From the observation, it was noted that the meeting was attended only by male villagers. Whilst the women prepared food for the meeting. It was noticed that there was no discussion about issues relating to pregnant women even though there were several pregnant women in this area. The observation notes supporting this evidence is provided in the following box.

Observation notes:

Participant: Neighborhood Meeting at Meranti Village

Setting: Saturday 14<sup>th</sup> July 2018 at 20:00 in one of citizen's home

The meeting was in one of citizen's home and attended by male villagers. Meanwhile, women villagers were preparing meals for the meeting. The meeting was held on the terrace of the house and the yard. Everyone sat on the floor. There were no objects as part of the observation. There were snacks, teas, and two microphones. The meeting began with a discussion about the preparation of the celebration of Indonesia Independence Day. A person opened the meeting. Then the Chief of Neighbourhood gave a speech. Then they started the meeting. They discussed about what kind of event would be held and how it would be funded. There was no discussion about pregnant women and related problems in their community even though in fact there were several pregnant women in their area.

In addition to the discussion about the Indonesia Independence Day celebration, they also talked about dissolution of a wedding committee. So, the neighbourhood meeting was held together with post wedding event. It was a local tradition that in a wedding event, there was committee consisting of neighbours who work for the wedding, as they did not hire a wedding organiser. There was no relation between Independence Day and the dissolution of a wedding committee. All those events were none related to pregnant women matters in the village.

After the meeting, the researcher asked to the Chief of Neighbourhood whether they ever discussed about pregnant women matters on the meeting. The answer from Chief of Neighbourhood was they never talked about that issue.

Meanwhile, within the wider society, it appeared that the community divided roles between women and men. Women were identified to provide support in terms of nurturing the mothers, whilst men were identified to give support in terms of driving the expectant mothers to reach health facilities. It was suggested that transportation matter was a physical matter that can be provided by men.

*"If there is someone who is sick including women in labour, all women in this village visit her together." (Darmadi 60-year-old, male, Chief of Hamlet)*

*“Well, I provide myself, physically, if they ask for help, like they ordered me to transport them [expectant mothers] to the hospital.” (Sayekti, 33-year-old, male, neighbour of a pregnant woman)*

This theme showed that there were strong gender stereotypes within the community, and these were embedded in everyday practice. Pregnancy and childbirth were seen as issues that should be managed by women. It becomes apparent that social, cultural and religious values influenced the roles and behaviour of the key participants in this study in terms of pregnancy and childbirth. This suggests that these values need to be addressed in the delivery and implementation of the Desa SIAGA programme.

## 4.5 Conclusion

This chapter has provided an exploration of the experiences and perspectives about Desa SIAGA from diverse participants including pregnant and post-natal women, the specific village midwife, cadre, neighbour, and key stakeholders. There were five main overarching themes that emerged from the data. The chapter has highlighted key issues regarding the delivery and implementation of the Desa SIAGA initiative. The analysis/interpretation of the interview data was strengthened and validated by non-participant observational evidence and fieldnotes. The evidence of documentary analysis to support the interpretation is described in Chapter 6. The following chapter will present the findings from the second study case, Sendang.

### **Key summary points:**

- Family was seen as the main substantial support in pregnancy and childbirth. Therefore, the involvement of the community in taking care of women in pregnancy and childbirth was limited.
- There was a limited knowledge and understanding towards the Desa SIAGA programme at all levels. The village midwife and the village head seemed to have knowledge on Desa SIAGA, but they had different perspectives. The perception of roles was apparently affecting the key actors in delivering and implementing the initiative.
- Workload and village area/infrastructure were identified to be barriers and challenges for the specific village midwife to provide MNH services.
- Cadres were identified as enablers of the Desa SIAGA programme delivery and implementation, yet they received lack of training on the Desa SIAGA initiative.
- Social, cultural, and religious values appeared to underpin the delivery and implementation of the Desa SIAGA initiative.

## Chapter 5 Findings from Desa SIAGA Sendang

### 5.1 Introduction

In this chapter, the findings from Case 2, Desa SIAGA Sendang are presented. The study setting and characteristics of participants are provided as background. The chapter describes a detailed analysis and interpretation of the participants' interviews, the key findings and themes derived from their views and perceptions towards the topic. Key themes are presented, supported by relevant quotes from participants and fieldnotes. To amplify the interview data, evidence from non-participant observations is also included. Fieldnotes and observation data which are integrated into the themes are provided in boxes. Finally, a summary of key findings and a conclusion are also conveyed. Documentary analysis that is used as data triangulation will be presented in the next chapter.

### 5.2 Study setting

Sendang Village, as also named as Desa Sendang, was one of 14 villages located in Nampan District, Sukoharjo Regency, Central Java, Indonesia. The village covered a total area of about 1.6 Km<sup>2</sup>. As this village was adjacent to Surakarta City, the village has gradually become a lot more urban than Meranti. Surakarta was one of the Indonesian cities in Central Java that was rapidly developing, resulting in the urbanisation of its surroundings rural villages such as Sendang. Sendang Village has been undergoing a transformation from a rural to an urban settlement in the last two decades (Sendang Village Government, 2018).

The location of Sendang Village was quite far from the centre of Nampan District. Thus, the Government built a branch of Nampan Community Health Centre (Puskesmas 1 Nampan) called the Second Community Health Centre of Nampan (Puskesmas 2 Nampan). The location of this branch was very close to the office area of Sendang Village Administration (Sendang Village Government, 2018). This Puskesmas branch provided services during the day.

The total population of Sendang Village in 2017 was about 10,246, and it was now the most populated village in Nampan District. Considering the total population and to support the health care services within the village, the government assigned two village midwives in this village (Sendang Village Government, 2018). Most of the population were Javanese and their values (such as the regional language, social life, beliefs, traditions, health and healing) were influenced by Javanese culture. However, their social life was changing as Sendang became more urban. People tended to display a more individualistic type of behaviour instead of a traditional social network. Currently,

most of the villagers live in modern housing with compound security. Previously, they lived in a traditional village surrounded by farmland (Sendang Village Government, 2018).

### 5.3 Recruitment process and characteristics of participants

The recruitment process was similar to the first study case. In the Sendang case, interviews were conducted with 12 participants including two pregnant women, two post-natal women, one neighbour, one cadre, the village midwife, the village head, one chief of hamlet, one chief of neighbourhood, one religious leader, and one DASIAT (alert youth in health) member. From the two village midwives in this study case, only one agreed to participate. In comparison with the Meranti case, there was no DASIAT member participant since they do not have this youth organisation yet (described in Chapter 3). In total, there were eight female and four male participants. In terms of education, there were more participants who had higher education degrees compared to the first study case, yet there was also those who did not attend school. Profiles of the participants are provided in tables 5-1 and 5-2.

**Table 5-1: Profiles of women participants**

Women/ age (years)	Gestation age (months)/ pregnancy number	Education background
Eka (23)	7 months/ 1 <sup>st</sup>	Bachelor degree
Lilik (28)	7 months/ 1 <sup>st</sup>	Junior high school
Ratih (35)	Newly post-natal woman/ 3 <sup>rd</sup>	Elementary school
Prapti (39)	Newly post-natal woman/ 2 <sup>nd</sup>	Did not attend the school

**Table 5-2: Profiles of key stakeholders and neighbour participants**

Key participants/ age (years)/ gender	Role/ Working experiences (years)	Education background
Retno (44)/ female	Village midwife (24)	Diploma 3
Santi (34)/ female	Village head (6)	Bachelor degree in law
Giyem (43)/ female	Cadre (15)	Senior high school
Suryo (62)/ male	Chief of neighbourhood unit (16)	Elementary school
Kardi (62)/ male	Chief of hamlet (5)	Junior high school
Rohim (33)/ male	Religious leader (12)	Bachelor degree in Islamic Studies
Andi (41)/ male	DASIAT member (5)	Diploma in Mechanical Engineering
Watik (47)/ female	Housewife/ neighbour	Elementary school

### 5.4 Emerging themes from Sendang Case

The details of the analysis process are provided in Chapter 3 section 3.4.7. Similar process of data analysis that was used to analyse interview data in Meranti Case

(Chapter 4) was also employed in Sendang Case. Following transcribing and translating the interviews, the researcher manually coded the texts addressing a topic or collection of topics. The data were then managed using NVivo 12. The codes revealing patterns were refined and compressed into organising themes (subthemes) using Microsoft Excel and mind mapping, which led to identification of five main themes (Figure 5-1 – Figure 5-5).

Table 5-3 presents an overview of the five main themes and associated subthemes which emerged from the Sendang case. Similar to Case 1, the analysis/interpretation of the findings in Case 2 were also strengthened by non-participation observations, documentary and fieldnotes. The documentary review is provided in Chapter 6.

**Table 5-3: Emerging themes from Sendang case**

Main theme	Subtheme	Key points
1. <i>'Childbirth is a family matter'</i> : Support-seeking distinct pattern in childbirth	1.1. The value of family in childbirth	<ul style="list-style-type: none"> <li>- Childbirth was seen as a family business</li> <li>- Family was the main support for women in childbirth</li> </ul>
	1.2. Community support only as a back up	<ul style="list-style-type: none"> <li>- Community was not seen as the only back-up choice of support</li> <li>- There were different perspectives between women and key participants towards support from community</li> </ul>
2. <i>'I know nothing'</i> : Knowledge and awareness of Desa SIAGA	2.1. General lack of understanding and awareness	<ul style="list-style-type: none"> <li>- None of the participants except a few key actors understood about, and were aware of, the initiative</li> <li>- Lack of information and training at all levels were suggested to influence the knowledge and awareness of the programme</li> </ul>
	2.2. The challenge of promoting the programme	<ul style="list-style-type: none"> <li>- Social and cultural values in a peri-urban society appeared to prevent the key actors to promote the programme</li> <li>- Access to promote the programme to women and society was challenging</li> </ul>
	2.3. The importance of collaboration and cooperation in the programme	<ul style="list-style-type: none"> <li>- Village midwife participant, Alert Youth in Health (DASIAT*) member, and the village head explained a similar understanding of Desa SIAGA in which collaboration and cooperation across sectors is essential</li> </ul>

3. <i>'The programme covers all health problems'</i> : Programme package was not exclusive to safe motherhood	3.1. Maternal and neonatal health provision was not the main focus of the programme	<ul style="list-style-type: none"> <li>- The initiative covered various health programmes which aimed to improve community health as a whole</li> <li>- Village midwives, CHWs, and DASIAT members had a number of duties to improve the health of community in general including maternal and neonatal health</li> <li>- Lack of support from village government in terms of funds</li> </ul>
	3.2. The programme delivery and implementation lacked consistency	<ul style="list-style-type: none"> <li>- Specific elements of the programme were not consistently implemented</li> </ul>
4. <i>'Helping without any order'</i> : Contextual factors to provide support in pregnancy and childbirth		<ul style="list-style-type: none"> <li>- It was believed that villagers were already prepared to care of pregnant women since they used to help each other</li> <li>- There were three main contextual factors in providing support, including social capital, altruism, and religious beliefs</li> </ul>
5. <i>'Men have to be alert'</i> : Transformation process of gendered roles in childbearing	5.1. Views on men' roles in family	<ul style="list-style-type: none"> <li>- Men involvement in pregnancy and childbirth was important</li> <li>- Men appeared not to be dominant in decision making, but the eldest in the family, such as mothers or mothers-in-law</li> <li>- Women needed to obtain permission from husbands to take decision</li> </ul>
	5.2. Gender stereotypes in pregnancy and childbirth	<ul style="list-style-type: none"> <li>- A shift of gender roles in pregnancy and childbirth was highlighted</li> <li>- There was a perspective that pregnancy was everyone's responsibility, but the gender stereotypes still existed</li> </ul>
	5.3. Key enablers to bridge the gap on gender roles in childbearing	<ul style="list-style-type: none"> <li>- DASIAT members which consisted of young men and women were involved in activities for pregnant women</li> <li>- Religious leaders (that were mostly men) were heard by people</li> </ul>

\*DASIAT stands for *Pemuda SIAGA Sehat* or Alert Youth in Health. This is a youth organisation formed by the Regent of Sukoharjo which aimed to support the local government and health providers to empower the community to participate in improving their own health. Details about DASIAT are provided in Chapter 1.



### 5.4.1 ‘Childbirth is a family matter’: Support-seeking, a distinct pattern in childbirth

Figure 5-1 highlights codes indicating the views and perceptions of the participants towards support during pregnancy and childbirth. The codes led to an overarching theme that showed a distinct pattern in seeking support for preparing for childbirth. All women participants expressed that they would obtain support from their family as childbirth was viewed to be a family affair. Family was described as the women’s core support. When family could not meet the women’s needs, then women would seek assistance from outside the family such as friends, neighbours, and other sources. In contrast, key participants believed that community support was as important as family during childbirth.

**Figure 5-1: Coding framework revealing the emergence of theme support-seeking, a distinct pattern in childbirth**

Codes	Subthemes (organising themes)	Theme
Family was the most important support Family provided emotional support Family provided social support Childbirth was family's responsibility Childbirth was an intimate moment in family	i. The value of family in childbirth	Support-seeking, a distinct pattern in childbirth
Community was a back-up choice Women would request community's help if needed Community provided practical support Friends provided social support Poor social network in peri-urban villages Traditional vs modern lifestyle affected social network Community support was important when women's family lived far	ii. Community support only as a back up	

#### 5.4.1.1 The value of family in childbirth

This subtheme highlights that family is the most essential support for a woman during the preparation of childbirth. Most participants explained that giving birth was a family’s business. It was noted that family have accountability for taking care of each other including the family member who was pregnant. Family cohesion seemed to make women believe that their family would support them.

*“My family will help me preparing for labour. ... Because I am the part of this family.” (Lilik, 28-year-old, 7-month gestation)*

*“I think that’s fine if there’s no help from neighbours. [I think] giving birth is our own responsibility.” (Ratih, 35-year-old, newly post-natal woman)*

From the women participants' explanations, it can be seen that family provided a feeling of security. For instance, emotional and social support were identified as perceived needs that can be met by family to reduce the tension of childbirth.

*“Because this is my first pregnancy, there is worried and afraid. Well, I don't know, just afraid. Erm... To handle it, I imagine that the labour process will be normal, then pray to the God and do sholat (Islamic prayer). I don't seek prayer support from others though, well I think my husband and parents are enough [to provide prayer for me].” (Eka, 23-year-old, 7 months pregnant woman)*

Furthermore, it appeared that women had a view that childbirth was an intimate moment within a family. Most women participants reported that they preferred not to have people other than family involved during childbirth.

*“Well, in my opinion it was more difficult when there were a lot of people around during my labour. I needed a comfortable labour process, so it was enough for me to have my husband and my family around.” (Ratih, 35-year-old, post-natal woman)*

#### **5.4.1.2 Community support only as a back-up**

This study found that almost all participants felt that support from the community was essentially a 'back-up' choice. All women participants mentioned that they would not request help from their neighbours unless they or their family could not meet their needs. Eka, a pregnant woman participant gave an example that neighbours could provide practical support in the event of childbirth, such as transportation. Yet, the community was not seen as the only back-up choice of support apart from family. She had another choice to use for transportation such as online taxi.

*“[To reach the hospital when I started to labour] Well, because I don't have any car, perhaps I will ask help from my neighbours as they have cars or go online. Easy.” (Eka, 23-year-old, 7-month gestation)*

Eka also reported that she preferred to have friends to meet her social support needs rather than other people. Friends seemed to have a closer social bond to pregnant women.

*“Well, I feel happy [sharing with friends] because it is more comfortable if I can share with friend than the other people” (Eka, 23-year-old, 7-month gestation)*

The village head suggested that there was a networking problem in peri-urban villages. It seemed there was a distinct lifestyle between the traditional and modern settlements which influenced people's interactions.

*“I've been very fussy to them [people living in modern housing complex], because I think they are different from people living in traditional housing areas. They [people in housing complex] always close the access to their neighbourhood that they severe their relationship with the common people. They seek security for themselves. It's a reality. ... It's the downside of a village with urban housing areas. It's getting complicated when we talk about housing complexes.” (Santi, 34-year-old, female, village head)*

In contrast to the women's views, interviews with key participants showed that they viewed support from the community as equally important as family support. The village head proposed that there should be a strong social network within the neighbourhood. The bond between pregnant women and their neighbours should be even more intense when the family of pregnant women lived far from them. It suggested that relationship with neighbours was an asset and a support source for pregnant women.

*"... Neighbours are like their [pregnant women] own families since they [neighbours] will be the one to be bothered by pregnant women shall anything happen. So, neighbours are more than relatives. We [village government] emphasise that message [to the villagers]. We [all] have families and relatives but if they are far away, they cannot give any help unless they can perform some sort of teleport magic. You can shout as loud as you can when something happens [to our neighbours]." (Santi, 34-year-old, female, village head)*

An interview with a cadre participant informed the explanation from the village head. Her experience provided an illustration on the importance of support from neighbours. From her explanation, it can be seen that the community could be a main support instead of a back-up one. Community appeared to be essential support in childbirth when the pregnant woman's family was not present.

*"[There was once when] I took a pregnant woman to the midwife's clinic. It's my experience with my neighbour who was about to labour. Unfortunately, her husband was not around, so I took her to a private midwife. By the time we arrived at the midwife's clinic, it turned out that the birth process was difficult, and the midwife could not help. ... To make it worse, the midwife gave up because the woman was bleeding. ... Then we [me and the midwife] decided to take her to the nearest hospital. Thank God, the baby and the mother survived. Actually, I was afraid too, but I just braced myself because no one would accompany her and gave support." (Giyem, 43-year-old, female, cadre)*

This theme has shown that family appeared to be the main support for women in pregnancy and childbirth. It seemed that people had a perspective that pregnancy was a matter that should be handled by family. All women preferred to have support from their family rather than from neighbours and the wider community. There was a sense that women should keep their pregnancy and childbirth related matters within the family. Women had a trust over their family since they had emotional bond. It appeared that the social network among the community in the peri-urban village was not as strong as those in the traditional village. The mixed lifestyles among the society appeared to reduce the importance of the community network.

In contrast, key participants, such as the village head and cadres, had different views towards community support for pregnant women. These views might influence their world views and roles into safe motherhood. Pregnancy and childbirth were seen as complex and long processes where any possibilities could happen such as described in the cadre's quote. Accordingly, women needed everyone around them to be ready.

Neighbours as the closest group of people would be able to provide any support for them. Neighbourhood social cohesion was proposed to be more than just providing practical support.

### 5.4.2 ‘I know nothing’: Knowledge and awareness of Desa SIAGA

The theme of knowledge and awareness of Desa SIAGA was derived from codes indicating that there was limited understanding and awareness of the programme (Figure 5-2). This was common to all participants’ responses except a few key people, such as one of the village midwives, the village head and the DASIAT member. This overarching theme also shows the views and perceptions of the participants towards the programme.

**Figure 5-2: Coding framework revealing the emergence of theme knowledge and awareness of Desa SIAGA**

Codes	Subthemes (organising themes)	Theme
Limited knowledge about Desa SIAGA Limited awareness of Desa SIAGA Limited information about Desa SIAGA Limited training on Desa SIAGA Difference in communication between levels Lack of understanding towards roles Lack of programme promotion	i. General lack of understanding and awareness	Knowledge and awareness of Desa SIAGA
Difficult access to housing complexes Individualistic lives in housing complexes Temporary residents affected programme promotion Migration of residents influenced programme promotion Good household incomes affected decision to choose private health providers Easy access to private health providers influenced people to choose private health providers The availability of private health facilities influenced people to choose private health providers	ii. The challenge of promoting the programme	
Community should be independent to solve problems Cross-sectoral partnership Shared-responsibility Community was the centre of the programme Desa SIAGA needs power-sharing Everyone should be ready to provide support Community empowerment Village government as facilitators Village midwives as facilitators	iii. The importance of partnership in the programme	

### 5.4.2.1 General lack of understanding and awareness

Findings show that most of the participants apparently did not have knowledge and awareness of the programme. All women said that they had ‘never heard’ about the Desa SIAGA programme. Accordingly, none of them could explain the initiative. This limited understanding and awareness of the programme was not only from lay participants. Even from the lower local government participants, such as chief of neighbourhood and chief of hamlet, they stated they had ‘never heard’ of it either.

*“What is alert village? No. I never heard about it.” (Suryo, 62-year-old, male, a chief of neighbourhood unit)*

*“[I] never heard about Desa SIAGA. I don’t know about it, at all (laughs).” (Kardi, 62-year-old man, male, a chief of hamlet)*

It was obvious throughout most of the interviews with the participants that they did not realise that they were part of the programme. Giyem, the cadre participant, mentioned that she had knowledge of some of the health activities programmes since she was a health volunteer. Yet, she did not know that the programme she was actively involved in was also part of Desa SIAGA.

*“Honestly, I don’t know much about [Desa SIAGA] in details, because I’m not actively involved in Desa SIAGA. [However] I know a lot about Posyandu (integrated health service post) and PKK.” (Giyem, 43-year-old, female, cadre)*

One of the underlying factors which was identified to influence the lack of understanding and awareness of the programme was that information and training support was limited to all levels within the Desa SIAGA programme. Most of the participants emphasised that they had never been exposed to information related to the programme. When being asked about what information received from the midwives, all of women participants stated that they ‘had never received information about Desa SIAGA even though they attended routine ANC. It was only general information related to pregnancy and childbirth that they received from health professionals.

This phenomenon was supported by the interview with the lower local government level officials, such as chief of neighbourhood and chief of hamlet. The quote below is an explanation from a chief of neighbourhood participant about what kind of information he obtained from village government. None of the information was regarding the aspects of the programme designed to protect pregnant women.

*“I never got information from the village head related to alert village. Information session [from village office that I received] was usually during the election of village head or legislative member, so it was about the election process.” (Suryo, 62-year-old, male, chief of neighbourhood unit)*

Yet, findings show that there was a difference in communication between levels of stakeholders in Desa SIAGA. Santi, the village head, explained that she and other

village heads often had meetings with various sectors who were involved in Desa SIAGA. She highlighted that the provincial government had a special programme called "*Jateng Gayeng Nginceng Wong Metheng*". This phrase, a Javanese term, means Central Java on Pregnancy Watch. It was suggested that the provincial government seriously considered MNH as the duty of all sectors. However, it appeared that the information was not well distributed to all elements in Desa SIAGA.

*"The meetings [about Desa SIAGA] are usually attended by all village heads, subdistrict heads, Sukoharjo Health Office, midwives and doctors as well. In the meeting, the Central Java Governor's programme entitled "Jateng Gayeng Nginceng Wong Metheng" is always brought up. All layers of government under the Central Java Governor must adjust to take part in the programme."* (Santi, 34-year-old, female, village head)

Andi, the DASIAT member, acknowledged that DASIAT as one of the key actors in the programme has not promoted the initiative to the community.

*"We [DASIAT] haven't formally given information [programme for pregnant women] intensely to the residents."* (Andi, 41-year-old, male, DASIAT member)

Retno, the village midwife participant, expressed that promoting the programme to the community was the responsibility of Health Promotion Officers of the Community Health Centre and village government. She reported that village midwives were the only facilitators of the programme. However, it was suggested that the promotion of the programme did not work. As a result, the community was not aware of the programme.

*"In Desa SIAGA, the main point is that, in accordance with the path provided by the government programme, the programme preparation is from the community. The resources are from the community and supported by the village government and Puskesmas (community health centre). The Health Office may only provide a programme, but the one who [should] encourages the community is the Health Promotion Officers of the Community Health Centre and the village government. In these circumstances, the village midwives only give an approach to the community for Desa SIAGA so that the village can be truly alert."* (Retno, 44-year-old, female, village midwife)

Data from the village midwife participant above was strengthened with a fieldnote. Data from the fieldnotes confirmed that the Health Promotion Officers could not promote the programme to all community. From the fieldnotes, it can be seen the performance of Health Promotion Officers to promote the programme was affected by workload and limited officers.

**Fieldnotes:**

Day/ date: Tuesday, 24/07/2018

Place: Nampan Community Health Centre

When the researcher obtained document related to Desa SIAGA in Nampan Community Health Centre, she met a person in charge from the Health Promotion Officers. This person spoke to the researcher and said that the Health Promotion

Officers had a massive task in the village with very limited personnel. There were only three officers in the Department to carry out duties for 14 villages. Hence, they could not promote all of the programme to the community and stakeholders.

In contrast to the explanation from the village midwife participant, Santi, the village head said that it was the obligation of village midwives and DASIAT members to implement the programme including its promotion. She thought that the village midwives and DASIAT members acted as her representatives in the health programme. It appeared that the key actors had different perspectives towards who was responsible for promoting Desa SIAGA.

*“There is no direct information [to residents] from the village government [about preparing pregnant women for safe childbirth], because such activities [mobilising residents to help pregnant women] have been managed by DASIAT and village midwives.” (Santi, 34-year-old, female, village head)*

Apart from the lack of information, all of the stakeholder participants, including the village head reported that they had never received any training related to the programme. Santi, the village head, explained that the training was for DASIAT members.

*“Training [related to supporting women in birth preparedness] tends to be given more to DASIAT, but for village heads themselves cross-sector meetings are always held.” (Santi, 34-year-old, female, village head)*

However, Andi, the DASIAT member participant reported that he had never undergone the training. Instead, he received training related to other health issues. In fact, the training that was received by Andi was also part of the initiative, but it did not cover about providing care for pregnant women.

*“We haven’t had any training on that [preparing women for birth] specifically. For the development of DASIAT related to Desa SIAGA, we have acquired training for PHBS (healthy and clean lifestyle) and HIV/AIDS prevention, infectious disease prevention and promotion of the JKN-KIS [national health insurance scheme]. The training aimed to strengthen our knowledge [in health sector]. ... because we are obligated to spread the information to other people.” (Andi, 41-year-old, male, DASIAT member)*

#### **5.4.2.2 The challenge of promoting the programme**

Findings showed that promoting the programme to the community was a challenging process. Peri-urban community norms were indicated as one of the barriers. As described in section 5.2 about study setting, Sendang village was rather a peri-urban area where many housing complexes were developed. Santi, the village head reported that urban houses were difficult to access. Accordingly, the programme could not reach all of community.

*“As I said before. Our constraints are in certain areas such as in housing complex that are difficult to enter. Nothing else. Other regions are very open to our presence, even so with the chairman of DASIAT who also being a village government, so they have been very welcome. We have no power in areas that have never had activities and are not willing to hold activities [related to the government programme].” (Santi, 34-year-old, female, village head)*

Similarly, Giyem, described that she experienced difficulties to carry out her duties for women who live in housing complexes. It was identified that people living in an urban housing complex seemed to have individualistic lives in which they tend to refuse suggestions from others outside from their own ‘circle’. They also looked like to have better household income so that they could access private doctors instead the community health centre. Additionally, in this urban settlement, there were many temporary residents. They were identified as a challenge to deliver a sustainable programme since the people at the core part of the programme frequently changed.

*“I live in a housing complex; I think the community has individualistic way of thinking. ... Especially in my area, there are many new residents. Many people live temporary and stay for a while. Well, sometimes, we just give suggestions, because we do not feel very comfortable to dictate them since they have their own life and decision. For example, when I suggest them to check their pregnancy at the Community Health Centre due to affordable price and the lower dosage [of medicine] than the specialists have. Sometimes they have their own preference to see the doctor. Especially, for those who live in housing complex. (Laughs)” (Giyem, 43-year-old, female, cadre)*

Given the fact that Sendang village is located in a peri-urban area, it was found that there were many private health providers and health facilities within the village and surrounding areas. The chief of hamlet participant stated that pregnant women within the village had many choices in terms of health facilities for booking antenatal visits and places of childbirth. On the one hand, it was a positive point that women were already aware of booking antenatal visits and there were plenty of health providers in the village or near by the area. These situations gave advantages for the village midwives since it might reduce her workload.

*“If in this area, insha Allah [with God’s permission] the pregnant women who will give birth... Well, because they have been examined by doctor or at Puskesmas routinely, so I think they have got all help needed for the delivery preparation. For example, they go for antenatal visit accompanied by their husbands, usually [residents] here are used to it, because [this area] near the health centre, near the doctor, [so] they may already know [about the preparation for childbirth].” (Kardi, 62-year-old, male, chief of hamlet)*

On the other hand, it was suggested that the village midwives would face challenges in recording data of pregnant women if there was no clear collaboration system with the private health providers. Data from the fieldnotes reflected that the village midwives met some barriers in delivering and implementing the programme. Data noted that



many pregnant women in Sendang did not go to the integrated health service posts and did not meet the village midwives for antenatal visits, instead they went to private clinics. It was identified that there was no data transfer from the private clinics to the village midwives, despite village midwives being responsible for recording the details all of pregnant women in their working area. Accordingly, the village midwives faced difficulties to monitor the pregnant women. The village midwives advised that it would be difficult also to map how the community could participate to support pregnant women. In addition, the private health providers were found not to write the P4K sticker and pledge card. As a result, community engagement might be not working.

Fieldnotes:

Integrated Health Service Post

Date: Saturday, 21<sup>st</sup> May 2018 at 09:00 West Indonesian Time

Place: Ngaso, Sendang Village

After the integrated health service post finished, the village midwife brought me to visit a pregnant woman who was about to go into labour. During the visit, the village midwife asked several points to the pregnant woman including whether she had national health insurance, transportation to deliver her to the hospital, and family planning. The midwife also asked about where this pregnant woman went for health assessments during her pregnancy since the midwife had never seen her before. The pregnant woman answered that she always met a private obstetrician for pregnancy check-ups. When I observed her main door, I found no P4K sticker attached. Whereas the P4K sticker was one of the elements of Desa SIAGA. When I asked the village midwife about the private practice in her working area, she said that it was very challenging if pregnant women seeing private practices (both obstetrician and midwives), never met her and never gone to *Puskesmas*. She said that it affected her records related to MNH. And when there was a problem such as maternal death, she had to be responsible and report it, yet she never met the pregnant women. Sometimes, the family of the pregnant women were angry with the midwife because their loved ones died. The midwife told me her experience, she ever met a pregnant woman, she has had given information about national health insurance and health-related pregnancy, but the pregnant woman and her family ignored her. Then this pregnant woman died when she was in labour as she run out of blood. Then the village midwife found that this pregnant woman ever fell off and she did not tell her family as well as the health professionals. The family of this pregnant woman was very angry to the village midwife and they asked her to accept responsibility. Then the village midwife explained about her death and the family accepted it since then.

It was indicated that private health providers could be a barrier to deliver and implement to programme if the private health providers did not want to collaborate with the village midwife. There was a need for a collaboration between private practices and village midwife, such as private doctors and midwives should report to the village midwives if a pregnant woman had made an antenatal visit booking with them.

#### 5.4.2.3 The importance of partnership in the programme

Data showed that there was a similar interpretation of Desa SIAGA amongst those who seemed to be clearly understand the initiative, that was the village midwife, the DASIAT

member, and village head. The DASIAT member and village midwife participants argued that Desa SIAGA was a programme to overcome all health problems including pregnancy within the village with a coordination from cross-sectoral area. Andi, the DASIAT member participant was not confident that he fully understood about Desa SIAGA. However, he explained concisely about the programme during the interview. In his explanation, he highlighted about the independence of the community in resolving its own health problems with cross-sectoral collaboration. There was a sense of shared responsibility in the programme implementation.

*“I don’t understand how it works theoretically. In my point of view, since Desa SIAGA is a village that must be able to solve its issues independently, it is expected that all parties can cooperate and there must be cross-sectoral coordination to make it working well. ... DASIAT as one of the communities in Desa SIAGA must be able to work with other parties such as Community Health Center, community leaders, and MUSPIKA (District Leaders' Association) to create a good partnership. In this way, all parties can support each other.”*  
(Andi, 41-year-old, male, DASIAT member)

The description from the DASIAT member about Desa SIAGA was similar to the understanding of the village midwife towards the programme. The village midwife participant described that Desa SIAGA aimed to make the village more independent, to solve problems within the village and that it needs cross-sectoral collaboration either from ‘top-down’ or ‘bottom-up’. It suggested that there should be a power-share within the programme, between the community as the programme receiver and government as the provider.

*“Desa SIAGA is a government programme. It is for, from and by the society. And here, we [village midwives] as government servants should carry out this programme, but the main person who have to be participated in this programme is the society itself. And those who support it are the village administration, community health centre and the Health Office. My role here as a village midwife is that I must be ready 24 hours, whenever it is needed by the community. However, what is needed in Desa SIAGA is not only me, but there must also be cross-sectoral collaboration between village administration, the chief of neighbourhood, and the chief of hamlet. Because everyone in Desa SIAGA must be ready [if something happens]. In Desa SIAGA, community leaders must also be prepared, mainly because of the presence of pregnant women who are at risk. Then with the existence of P4K programme [birth preparedness sticker], that anyone who is written on P4K sticker must be ready whenever is needed... In Desa SIAGA, everything must all be covered.”* (Retno, 44-year-old, female, village midwife)

The explanations from the DASIAT member participant and the village midwife above showed that the intention of the national government was to empower the community to be able to tackle their own health issues. This included preparing pregnant women to have a safer birth. It was identified that there were two groups of actors within the programme. Community was identified as the key drivers to plan and implement the programme. They were responsible for the success of the Desa SIAGA initiative, since

the programme was designed for their own interest. In doing so, the community should be facilitated by village administration, community leaders and village midwives. It indicated that everyone in the village should be working together as a unit.

Meanwhile, the village head, even though she could describe the programme throughout the interview topics, did not concisely explain about Desa SIAGA like the DASIAT member and the village midwife. She focused on the support for pregnant women and highlighted about collaboration between pregnant women and related sectors.

*“The word ‘SIAGA’ means everyone have to always be ready by a pregnant woman’s side and have to cooperate with her. We always tell the villagers that the village government is always ready [to help].” (Santi, 34-year-old, female, village head)*

Exploring the understanding of the key actors towards the programme is important. The knowledge of the key actors about the initiative can be a determining factor in programme delivery and implementation. It was highlighted that although evidence showed that everyone shared some common sense and responsibility for taking care of pregnant women, it was found that there was a confusion over who carries most of the responsibility.

#### **5.4.3 ‘The programme covers all health problems’: Programme package was not exclusive to safe motherhood**

The theme of ‘programme package was not exclusive to safe motherhood’ emerged from codes that showed the Desa SIAGA programme has various interventions, and that maternal provision was not a main priority. The codes also reveal the information on how the programme was delivered and implemented. In addition, the coding framework provided data about the factors which are identified to be both facilitating and barriers. Figure 5-3 below shows the contextual codes that led to the overarching theme.

**Figure 5-3: Coding framework revealing the emergence of theme programme package was not exclusive to safe motherhood**

Codes	Subthemes (organising themes)	Theme
Diverse interventions to tackle health problems in general Community engagement for various programme Covering disaster and outbreak management Lack of budget allocation for MNH programme	i. Maternal and neonatal health provision was not the main focus of the programme	Programme package was not exclusive to safe motherhood
Village midwives carried significant workload Village midwives as the main driver Village midwives had the main role Cadres supported village midwives' works Cadres collected data from women Cadres as notification system Cadres provided report to village midwives Cadres monitored community's health in general Cadres monitored pregnant women DASIAT as village midwives' assistant DASIAT supported women in birth preparedness DASIAT supported all sectors to improve community's health	ii. Main actors in the programme	
Lack of information about pledge card and birth preparedness sticker Women had limited knowledge about pledge card and birth preparedness sticker The attachment of birth preparedness sticker was inconsistent The fulfilment of pledge card was inconsistent Lack of monitoring on the programme implementation Lack of participation from women Women underestimated pregnancy and childbirth People underestimated pregnancy and childbirth Social and cultural values affected programme delivery and implementation	iii. The programme delivery and implementation lacked consistency	

#### **5.4.3.1 Maternal and neonatal health provision was not the main focus of the programme**

This study found that the focus of the Desa SIAGA programme was not only on supporting women in birth preparedness but also how to improve the health of people in the village in general. This notion can be seen from the explanation of the key actors in the Desa SIAGA programme, including the village midwife and DASIAT member

participant towards the definition of Desa SIAGA under section 2.3. From the DASIAT member's explanation below, it was noticed that there was a diverse focus within the agenda and therefore MNH was not a main priority.

*"... we tried to introduce the [Desa SIAGA] programme [to the society] to make them [society] familiar through [programme implementation such as] JKN-KIS [national health insurance scheme] campaign. Nearly half of the sub-village territory has been covered by the familiarity of the programme. In addition, Eradication of Mosquitoes Nests Programme that we do together with the cadres help us to communicate with the villagers in order to make the programme [Desa SIAGA] successful." (Andi, 41-year-old, male, DASIAT member)*

It was obvious that the agenda had a number of interventions in the programme. Based on the explanation from the village midwife participant, it was clear that community engagement applied to various elements of the programme to solve health issues in the village. The agenda also seemed to cover disaster and outbreak management.

*"How I do I foster participation from the community... Well, because it concerns to health, [for example] from the little ones, we always engaged the community to be participated in every programme such as posyandu (integrated health service post). If anyone is sick, or there is a disaster or an outbreak [extraordinary incident], we give counselling about what this means, this disease, then we engage the community like 'let's do PHBS (healthy and clean lifestyle), PSN (Eradication of Mosquito Nests)'. Then the community gradually becomes more aware." (Retno, 44-year-old, female, village midwife)*

The way the village administration allocated the budget also showed that maternal provision was not a main priority. Financial issues were perceived by the village midwives to be a barrier to deliver the programme. She explained that the top priority list of the village administration was infrastructure development.

*"The funds for Desa SIAGA depends on the village government. ... in Sendang, the priority of the development, which is based on village budget, is for infrastructure development such as village government office building and village road. ... We [village midwives] have to receive what is given [by the village government]. If the proposal is declined, it's OK. Take it as it comes. We continue to do the antenatal class but obstructed by the funds. Actually, we want to do it [antenatal class] every month, but it is hit by the funds. To be honest, we are happy [to conduct the class] even though there are only a few pregnant women who come, but well, the place and funds were not possible." (Retno, 44-year-old, female, a village midwife)*

#### **5.4.3.2 Main actors in the programme**

Data showed that there were three key actors in delivering and implementing the Desa SIAGA initiative, including village midwives, DASIAT members, and cadres. All of those key actors had duties to take care of the community, including pregnant women. In this circumstance, improving MNH was not the only main priority of the programme. Retno,

the village midwife asserted that she had a substantial workload. She described her duty in the quote below:

*“My role here as a village midwife is that I must be ready for 24 hours, whenever it is needed by the community. And my role here especially must be ready to help either the pregnant woman or anyone who is sick.” (Retno, 44-year-old, female, village midwife)*

The village head explained that the village midwives had a crucial role in improving MNH, yet they had an enormous task. The village head argued that the number of village midwives in the village was not equal to the population and the number of responsibilities. The village midwives had to be ready anytime in the village, yet they also had duties in the community health centre. The workload hindered the village midwives performing their duties, such as home visits to pregnant women.

*“There is a bit of extra activities [in MNH sector] because two years ago, there was a case of a mother giving birth who passed away. In Sendang Village, there are two midwives because the number of the citizens in Sendang Village is about 15,000 people, more than other villages in Nampan District. Actually, two midwives are enough, but in reality, because of the big number of people, it is less [optimal] for the midwives to come directly to the people [for home visit], as they have shift work too in Puskesmas (community health centres), in addition to support the people [in the village]. (Santi, 34-year-old, female, village head)*

In delivering and implementing the Desa SIAGA programme, it appeared that the village midwives obtained support from cadres. It was noticed that cadres could be a support for the notification system. She illustrated that cadres were ready to notify village midwives in the event of emergency and childbirth.

*“If there is anything happen with the pregnant women we will be told by the cadres. For example, ‘ooo it is not yet giving birth, the pregnant woman like this’ or ‘there are complaints like this...’” (Retno, 44-year-old, female, village midwife)*

Giyem, the cadre participant, described her roles in taking care of women in the village. Her explanation added to the village midwife's view. She reported that the cadres also had a duty to collect data from pregnant women and report this to the village midwives.

*“The main role of cadres in terms of taking care of pregnant women is actually collecting data. We [cadres] take data of pregnant women then hand in them to the village midwives. Afterwards the village midwives monitor, visit the pregnant women, and stick the [P4K] stickers on the front door to give a sign [to everyone]. Finally, when the pregnant woman goes into labour, cadre who lives nearby must report to the village midwives that there is a new-born baby in the village. Cadre must report the detail information of the new-born baby to the village midwives.” (Giyem, 43-year-old, female, cadre)*

Nonetheless, similar to the village midwives, cadres' tasks were not only focussed on maternal, neonatal and child health but also the health of society in general. Amongst cadres, there was no clear division towards who should carry out which task.

*"The main point is we [cadres] have to keep monitoring the residents' health record." (Giyem, 43-year-old, female, cadre)*

In addition to cadres, village midwives also received support from DASIAT members in carrying out their duties. DASIAT was formed by the regional government to help the health providers in delivering and implementing the Desa SIAGA programme. Findings showed that DASIAT members acted as village midwives' assistants. Andi, a member of DASIAT illustrated that DASIAT played an essential role in the programme. He identified that DASIAT members provided any support to pregnant women including practical and emotional support.

*"... In terms of health, the village midwives play the role. However, we [DASIAT members] play a larger role in motivating and arranging plan for the women in labour. So, our activity is attaching the sticker [P4K sticker], then we have to make sure all aspects that they need the most before going into labour have been available. For instance, the availability of the transportation to take them to the hospital, their plan where to have labour, and people who are willing to assist and help them before and during the labour." (Andi, 41-year-old, male, DASIAT member)*

However, DASIAT members seemed to have an immense task too. It appeared that DASIAT members were in a similar position to cadres in which they were formed by the local government to help their work in the health arena.

*"DASIAT's main role in Desa SIAGA is actually to give a great influence on the community. DASIAT members are expected to be able to support other sectors to improve public health status, especially improving the health status of pregnant women. As I mentioned earlier, our responsibility includes accompanying and taking care of pregnant women. And also planning activities that can improve the health of communities, such as planning, counselling and implementing it." (Andi, 41-year-old, male, DASIAT member)*

#### **5.4.3.3 The programme delivery and implementation lacked consistency**

Data showed that many specific elements of Desa SIAGA which were described in the first chapter, such as the pledge card and birth preparedness (P4K) sticker were not consistently implemented. All women participants reported that they did not know about these two elements of the programme. When the researcher looked at their maternal book, it was found that some of the pledge cards and P4K stickers were blank, and some were written up. All women confirmed that they had routine antenatal care, yet most of their pledge cards and P4K stickers remained empty. They also stated that they did not receive any information about them. Even for those whose pledge cards

were written up, they stated that they did not know about it since they did not get information related to the programme. Ratih, she had delivered her baby, but she still did not know about the card.

*“The village midwife filled out the [pledge card], but she didn't explain anything.” (Ratih, 35-year-old, post-natal woman)*

Likewise, it was identified that the attachment of the sticker was not monitored. Prapti, a newly post-natal woman participant reported that her P4K sticker was written up by one of the village midwives when she attended an integrated health service post. She said that her P4K sticker was attached to the door. But it turned out to be on the back of the door.

*“My son attached the sticker on the back of the door.” (Prapti, 39-year-old, post-natal woman)*

Nevertheless, findings found that the adherence of women to the programme intervention seemed to be low. Prapti reported that the village midwife had written important information on her pledge card. She said that the village midwife had informed her about what was written and what action should be taken when the labour started based on the card. Yet, she did not carry out the village midwife's instructions. This lack of participation from the woman herself was suggested to be a barrier to the success of the programme.

*“The village midwife who filled up that [pledge] card. Erm... (pause)... Well, if I am not mistaken, what the village midwife said about that [pledge] card was should the labor start, if there was anything happened, the wife of chief of neighbourhood unit had to deliver me [to healthcare facilities] or any help I need, she should give assistance. But I didn't contact the wife of the neighbourhood chief. Because it [the labour] was so sudden. So, I just went to the private midwife clinic straightaway, then to the hospital. (Laughs)” (Prapti, 39-year-old, post-natal woman)*

Prapti reported that the hospital kept her baby since she could not pay her baby's hospital expenses. From Prapti's explanation, it seemed that the village midwife anticipated this issue in terms of financial difficulty, yet Prapti was not aware of it. Prapti did not act based on the village midwife's suggestion as explained above and it resulted in another problem for her in which she has had to go home without her newborn. She was in a post-partum period and very fragile both physically and mentally.

*“When I was discharged from the hospital, I didn't go home together with my baby. Because [the treatment of] my baby hadn't been paid. I went home on Wednesday. I could bring my baby home on Saturday evening. Well, I was so sad since I couldn't go home together with my baby. I borrowed some money from my boss to pay my baby's hospital bill.” (Prapti, 39-year-old, post-natal woman)*



Based on Prapti's explanation, it can be seen that the village midwife provided her with information related to the support that she might utilise during her childbirth. Yet, she ignored it. In this case, women seemed to downplay birth preparedness.

To strengthen the interview data, fieldnotes are provided in the following box. These fieldnotes provide additional information related to data from Prapti. During the participant recruitment, when the researcher attended an integrated health service post, cadres informed the researcher about Prapti. They reported that she needed support from her neighbours since her husband did not care about her. The researcher met Prapti in the integrated health service post when she was pregnant, and the interview was conducted with her after she delivered her baby.

Fieldnotes:

Integrated Health Service Post

Date: Saturday, 21<sup>st</sup> May 2018 at 09:00 West Indonesian Time

Place: Ngaso, Sendang Village

In this *Posyandu*, I met Prapti, a 39-year-old pregnant woman. Cadres said that her husband did not care about her pregnancy. They said also that it was so hard to develop a good communication with her, probably due to her education background. She looked quite shy. This pregnant woman worked as a housekeeper. It seemed that this woman needed support from the community to take care of her pregnancy and the event of childbirth.

Furthermore, it was identified that social and cultural values affected women's views on pregnancy and childbirth. Eka, a pregnant woman participant expressed that she should not prepare her childbirth until her pregnancy reached seven months. When the interview was conducted, her pregnancy just reached seven months of gestational age.

*"Not yet, I haven't prepared the delivery. [it is] because we have to wait until seventh month to prepare the stuff [for childbirth] according to Javanese culture." (Eka, 23-year-old, 7 months pregnant)*

The village head's statement below supported the findings that demonstrated people had underestimated the pregnancy and childbirth. It appeared that pregnancy and childbirth were viewed as a part of woman's ordinary life events.

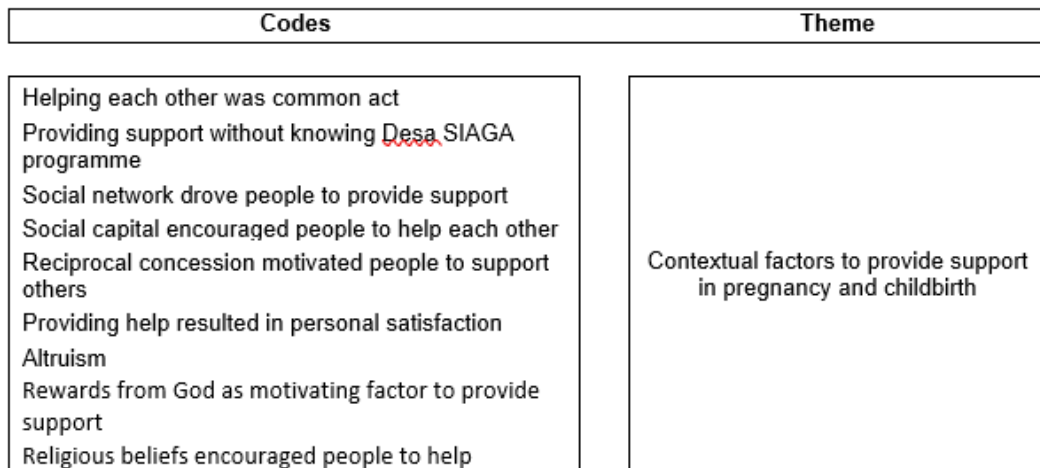
*"I believe that the main job of a village head is to constantly raise the awareness of the people. Ignorant people will become so stubborn if you let them be. They will think that nothing wrong will ever happen during pregnancy. Always like that. They think that a woman's duty is [naturally] to carry babies. The older generation told them so... People think it's the nature of women to be pregnant and to deliver babies. They don't know the burden that the women should bear during their pregnancy because when you are pregnant, you are not only responsible for yourself but also for the baby inside your womb. So, we should always remind them [society] and take actions." (Santi, 34-year-old, female, village head)*

Findings have shown that all key actors in Desa SIAGA had a broad range of duties in delivering and implementing the initiative. The design of the programme seemed to be complex. In addition, the management of human and financial resources as the two core fuels of the programme were suggested to be weak. Meanwhile, pregnant women as the programme recipients suggested to have a low adherence to the programme. Social and cultural values were also identified to play an essential leverage for people to accept the programme. It was highlighted that people’s views that downplay pregnancy and childbirth could be barriers to the delivery and implementation of the programme.

**5.4.4 ‘It is common to help each other’: Contextual factors to provide support in pregnancy and childbirth**

Considering all themes presented above, it was found that the community thought that they were already prepared to care for pregnant women. From the interviews, there were some codes that can be grouped as contextual factors motivating the community to provide support women in pregnancy and childbirth, in which it can stand as a theme. Figure 5-4 shows the coding framework relating to the theme.

**Figure 5-4: Coding framework revealing the emergence of theme contextual factors to provide support in pregnancy and childbirth**



Community claimed that they would support pregnant women in childbearing even if there was, or was not, such programme from the government. Andi, a member of DASIAT explained that community was always ready to provide support for anyone in need.

*“We [DASIAT members] didn’t do anything extra to help the pregnant women. We only did the normative aspects in the society such as the assistance for them because it is common for the villagers to help each other. Therefore, villagers are really concern and care that they should handle*

*their neighbours in labour quickly without waiting for the health staff or the midwife to come.” (Andi, 41-year-old, male, DASIAT member)*

It was identified throughout all the interviews that there were three main contextual factors which drove the community to provide support for women in pregnancy and childbirth. These factors were social capital, altruistic behaviour, and religious beliefs. Social capital appeared to be embedded within the neighbourhood living environment where the community had common shared values. The closeness between villagers allowed them to interact with each other like a family, to work together and to support each other. This social network gives a sense of belonging between the villagers.

*“As a good neighbour, we have to help each other. She [my neighbour who pregnant] and her family are nice, and I think of them as my own family.” (Watik, 47-year-old, male, neighbour of a pregnant woman)*

The social capital, however, appeared to be accompanied with a tendency that by doing a good deed for others then they would get an exchange. This reciprocal concession became the motivation to support pregnant women. Andi said that even though he did not receive an incentive to be involved in DASIAT activities, he indeed expected to receive a reciprocity from others.

*“Since DASIAT is a volunteering organization, we don’t get paid. We do, however, get lots of new friends. My expectation is simple to help each other, there is a hope that someday my family and I can get a chance to be helped by others.” (Andi, 41-year-old, male, DASIAT member)*

Furthermore, altruism appeared also to influence the community to act. Data showed that people had the spirit to help women in childbirth with sincerity. Most participants stated that childbirth is between life and death. Pregnant women were seen as ‘vulnerable’ people, so they need support from others. Accordingly, people would prioritise them to promote their welfare. This act suggested to give them personal satisfaction.

*“Oh that [helping a woman in labour] is really important to me. If possible, it must be immediately because it is related to someone’s life. If I am asked for help, I will deliver [her to health facility] immediately because the person who will be giving birth is between life and death. So that’s very important.” (Kardi, 62-year-old, male, a chief of hamlet)*

*“I personally feel that half of my life is to be dedicated to others. Especially for basic things such as helping pregnant women in labour because it is a matter of life and death. Contributing gives a special pleasure to us. Contributing can benefit others without having to lose anything.” (Andi, 41-year-old, male, DASIAT member)*

In addition, it was obvious that religious beliefs played a key role in encouraging the community to support pregnant women. Rewards from God were described as a factor that can motivate people for doing a good deed.

*“First [factor to give help is] good deeds factor, expect reward from Allah the Almighty. Whoever give one good deed or do good, Allah will surely give rewards. Whoever help a human, Allah will ease his business in this world and in the hereafter. It is one of motivations in helping pregnant women and their husbands.” (Rohim, 33-years-old, male, Islamic religious leader)*

Community and key stakeholders had a view that support for women in pregnancy and childbirth were provided anyway, even if the community did not know about the programme. It appeared that there were diverse intentions which influenced the community to provide support regardless of whether there was a Desa SIAGA initiative or not. However, even though the community argued that they were already providing support for women, it indicated that their help was disorganised since it was a spontaneous act. Whereas in birth preparedness, there were many aspects that needed careful consideration. The social, cultural, and religious values, therefore, had a downside in the delivery and implementation of the Desa SIAGA programme.

#### **5.4.5 ‘Men have to be alert’: Transformation process of gendered roles in childbearing**

The findings of this study suggested that there were mixed views towards gender roles in pregnancy and childbirth. Some women participants reported that their husbands supported them, yet other participants expressed different experiences. Whilst some codes show that there were gender stereotypes in pregnancy and childbirth, several codes reveal that the participants had views that men’s involvement in taking care of pregnant women and during childbirth was important. The codes led to the theme of ‘transformation process of gendered roles in childbearing’ (Figure 5-5).

**Figure 5-5: Coding framework revealing the emergence of theme transformation process of gendered roles in childbearing**

Codes	Subthemes (organising themes)	Theme
Husband as social support Husband was the most decision maker in some family Husband was not always dominant in decision making in some family The eldest in family as decision maker	i. Views on men's roles in family	Transformation process of gendered roles in childbearing
Pregnancy and childbirth were women's business Gender segmentation about pregnancy and childbirth Gendered roles in pregnancy and childbirth as cultural and social beliefs from generations Men talking about pregnancy and childbirth was awkward Women gradually accepted men involvement in pregnancy and childbirth Government's gender influenced their roles in supporting women	ii. Gender stereotypes in pregnancy and childbirth	
DASIAT as key enabler Women accepted men involvement in DASIAT Religious leaders as key enablers Women and men asked about pregnancy and childbirth according to religious tenet to religious leaders People obtained advice from religious leaders Religious leaders were respected figures	iii. Key enablers to bridge the gap on gender roles in childbearing	

#### 5.4.5.1 Views on men' roles in family

This study had found that there were several views towards men's roles in family. This view appeared to influence the care of women in pregnancy and childbirth. Most women expressed that their husband could be their social support. Eka, a pregnant woman participant reported that she engaged her husband in pregnancy exercise. She illustrated her husband as her comforter. It was clear that there was an emotional bond that her husband could offer during pregnancy. It indicated that men involvement in pregnancy and childbirth was essential.

*"I don't want to [go to antenatal class]. I want to practice it [pregnancy exercise] at home. Because my husband can accompany me at home, I do it with my husband. He makes me feel more comfortable [to practicing pregnancy exercise] at home. (Eka, 23-year-old, 7-month gestation)*

Moreover, data showed that men did not seem to be dominant in terms of decision-making. Most women claimed that the eldest one in the family was the decision maker, mainly those who lived in extended families. Ratih, a post-natal woman participant,

spoke about there was a hierarchy in her family in decision-making. The hierarchy was based on the age order, not gender.

*“Mainly [it] is my mother [who make decision to solve any problems including pregnancy and childbirth], then my husband. My mother is the eldest, that’s why if there is anything happens, I discuss it with my mother. Mother, then my husband, then myself.” (Ratih, 35-year-old, post-natal woman)*

However, the cadre participant stated that there were some of women who still had to obtain their husbands’ consent in order to decide something such as the birthplace.

*“Usually it [where to give birth] is the patient [decision] along with the husband’s permission.” (Giyem, 43-year-old, female, cadre)*

Broadly speaking, within most Indonesian society, there are two types of norms in decision maker within a family. Firstly, it is based on age order. This norm allows the oldest adult within the family to take decision. It overrides gender differences. The second norm is according to gender in which men should make decisions. From both norms, however, it was suggested that the pregnant women do not have power on their own to make a decision, such birthplace. This delay might affect the women to reach health facilities and to receive care. Accordingly, the decision-making process was identified to be essential in pregnancy and childbirth.

#### **5.4.5.2 Gender stereotypes in pregnancy and childbirth**

This study found that there was a sense of gendered roles in taking care of pregnancy and childbirth. There were some people who believed that pregnancy and childbirth was women’s business. Kardi, the chief of hamlet participant said that preparing women for birth was a woman’s affair. He described that within the village, there were women representatives who managed MNH issues. Even though he was a leader in a hamlet level, he did not think that he had the responsibility to look after of his citizens who were pregnant.

*“Well, I don’t have any experiences about that [helping pregnant women in birth preparedness] since that is women’s business. I never take care of that business since in this area there is a woman who become chief of hamlet and other women facilitators who usually take care of it. My wife and I are busy, but when people need to get my signature or anything else, I will be always ready. But for pregnant women or something like that, it’s not on my working area.” (Kardi, 62-year-old, male, a chief of hamlet)*

In addition to the chief of hamlet participant, even the village midwife seemed to have gender stereotypes in pregnancy and birth. Based on an observation of an antenatal class, she informed the pregnant women that they should manage their own birth since their husband had a limited knowledge around pregnancy and childbirth. The village midwife was the main actor in the Desa SIAGA programme, instead of empowering the women to involve men to be responsible in MNH issues, she was apparently

'emphasising' gender segmentation. In contrast, during an interview with the same midwife, she said that collaboration from all sectors was needed in order for the initiative to succeed. Accordingly, it seemed she had a view that there was a 'boundary' towards community involvement. It appeared that her practice was influenced by social and cultural values. The following notes are from the observations of an antenatal class in the Sendang case.

Observation notes:

Participant: Antenatal Class at Sendang Village

Setting: Tuesday, 14<sup>th</sup> August 2018 at 9.30 West Indonesia Time at Village Administration Office Area

The antenatal class is held at *mushola* (Islamic prayer place) in the local government office area at Sendang Village. Everyone sits on the floor.

A cadre opens the antenatal class. Following that, Midwife One gives the pregnant women material about signs and dangers of labour, and birth preparedness. She referred to a Pink Book in explaining the material. She asks the pregnant women one by one to read the material on their own books, and then the midwife gives the explanation.

The interesting thing is when the Midwife One tell the pregnant women that they have to prepare everything in birth preparedness because their husbands have no skills at such things. It looks like that instead of encouraging males to be involved in the birth preparation, the midwife also believes that birth preparation is not male oriented, echoing what male participants said in their interviews.

A statement from the village head emphasised that there were gender stereotypes about pregnancy and childbirth within the society. She explained that social and cultural values from generations have affected these views.

*"They [people] think that a woman's duty is to carry babies. The older generation told them so. What they don't realize is that there so much more of a woman's role than just being pregnant." (Santi, 34-year-old, female, village head)*

In this context, most people viewed that pregnancy and childbirth as women's concerns. This sense of gender segmentation in pregnancy and childbirth was also felt by Andi, the DASIAT member participant. It was likely that he was struggling to implement his tasks initially. Yet, he then found that women and society had become more aware of men's involvement in pregnancy and birth preparedness after the introduction of DASIAT involvement in the programme activities for pregnant women. Accordingly, the transformation process of gendered roles seemed gradually to appear.

*"They [women and society] mostly felt welcome and happy without feeling annoyed. It was us who felt hesitant at first. Seeing pregnant women are normal thing for us, but asking about the prediction on due date of labour, the age of pregnancy, and how they prepare their labour are a bit awkward to do. ... Once, we helped a pregnant woman with her insurance process. We helped*

*everything including reporting the update of her labour to the municipality. She appreciated our help and asked many questions about the programme. She became interactive. Again, they mostly felt welcome.” (Andi, 41-year-old, male, DASIAT member)*

Furthermore, gender roles appeared to influence the key stakeholders’ world views towards to the importance of safe motherhood. These views were identified to affect their roles as policy makers and programme implementers since it was relevant to their own sex. Santi, the village head reflected her own experience when she faced problems with her pregnancy. She used her experience to improve the awareness of women and community of the Desa SIAGA programme.

*“Well, I learned from my recent [pregnancy] experience in which the due date [for delivery] was estimated to fall around February, but suddenly I was rushed to the hospital in December. That experience could be a lesson for the other pregnant women. So, if anything happens, they can call the village government so that the ambulance driver can take them [to the health facility]. I always make them aware of it. Use it [the ambulance] to your benefit.” (Santi, 34-year-old, female, village head)*

#### **5.4.5.3 Key enablers to bridge the gap on gender roles in childbearing**

The village head reported that the village government’s attempt to raise the awareness of men engagement in pregnancy and childbirth through the DASIAT initiative showed a positive impact. DASIAT members consisted of young women and men. They have certain duties in improving MNH, such as participating in antenatal classes. The village head argued that pregnant women needed men during pregnancy and childbirth. She viewed that men had particular tasks in pregnancy and childbirth, such as providing social support and practical support. She said that people have apparently become aware of men’s participation. She expressed that taking care of pregnant women is everyone’s responsibility, irrespective of their gender.

*“I always explain so [about DASIAT to community]. I also informed pregnant women that there would be DASIAT members in the antenatal class. They asked what DASIAT was, then I explained that DASIAT was the same as the village midwife. Don't feel weird if there are men [as part of DASIAT member] in the antenatal class. There are people who think like that [pregnancy is women's matter]. So, I told them [women] that it was precisely men who had to be alert, since it was them [husbands] who would accompany you to the antenatal check-up, if it's not them [husbands] who would take you [to the hospital] to deliver the baby, then who would? I said it jokingly. And finally, the women have accepted [the DASIAT].” (Santi, 34-year-old, female, village head)*

It was clear that DASIAT with both female and male members could address gender stereotypes in taking care of pregnant women. It was identified also that through male involvement in DASIAT, people became more aware that pregnancy did not only lie on women’s hands. Therefore, DASIAT members seemed to have a role as a ‘key



enabler' which could break the fortress between women and men in the care of pregnant women.

Additionally, religious leaders were also identified as the potential key enablers of the programme. Their advice was 'listened' by both men and women in the community. An Islamic religious leader, Rohim, stated that he often received questions from women and men around pregnancy related matters in the context of religion. In this circumstance, women and men were not 'clumsy' to talk about pregnancy and childbirth. It appeared that religious leaders could be actors who deliver messages to everyone.

*"... what I usually deliver [to people] is about law [in Islam], for example when a woman is pregnant in the month of Ramadhan, or law of a breastfeeding mother, should she replace the amount of fasting left behind or pay fidyah (give an amount of money or goods to the poor). There were so many questions around that, not only from mothers, but also from fathers. I give answers based on my capacity." (Rohim, 33-years-old, male, Islamic religious leader)*

From Rohim's explanation, it was suggested that religious leaders were respected figures in the community. The society seemed to value religious leaders and appreciated their words.

*"... A religious leader often becomes the one to talk to [to vent], becomes someone to ask to, for example [they ask] what should be done during pregnancy so that the baby can be pious in the future. Religious leaders can give tips based on their own education and experiences. Most of the time, people ask to be prayed for and given good names for their children." (Rohim, 33-years-old, male, Islamic religious leader)*

It appeared that religious leaders can be actors who can enter any level of community and any group of people. They could be key enablers in a community where social as well as cultural norms are highly influencing people's lives. In a society where religious values are highly upheld such as in Indonesia, people tend to regard their religious leaders. Religious leaders seemed to be social influencers. If both men and women respect their advice, it can be an opportunity to raise the awareness of men being involved in the safe motherhood programme.

In summary, gendered roles in pregnancy and childbirth seemed to shift in Sendang village in the way that pregnancy and childbirth were no longer the business of women only, but also that of men. The village government have undertaken action to engage men in the care of pregnant women. Through DASIA initiative, they introduced the importance of men's involvement to support women during pregnancy and childbirth. Even though, it seemed that the campaign by the village government was influenced by the gender status of the village head as a woman. It then suggests that women who sit at the government level are important in order for the programme to be successful.

However, findings showed that social and cultural values still had a great influence on people's perspectives towards gender segmentation in pregnancy and birth. It was suggested that DASIAT members and religious leaders could be key enablers to address these social and cultural influences.

## 5.5 Conclusion

All in all, this chapter has described an in-depth exploration towards the views and experiences about the Desa SIAGA programme from lay participants and key actors in the initiative in the second study case. The chapter has highlighted several key issues related to the delivery and implementation of the Desa SIAGA programme. Observational evidence and fieldnotes have strengthened and validated the analysis/interpretation of the interview data. From the data, five main emerging themes have been developed. Documentary analysis that supports these findings is provided in the next chapter. In Chapter 7, findings from both cases will be further compared and contrasted to gain a holistic and deeper understanding about the delivery and implementation of the Desa SIAGA initiative in improving MNH.

### **Key summary points:**

- Pregnancy and childbirth were seen as family's matter. It resulted in limited involvement of the community to support women in preparing for birth.
- All participants except village midwives, DASIAT member, and the village head appeared to have a limited understanding and awareness towards the Desa SIAGA initiative. The key actors were identified to have a lack of role clarity in the delivery and implementation of the Desa SIAGA initiative.
- Even though the key actors emphasised that partnership was essential in the Desa SIAGA programme, it appeared that there was a limited collaboration in the delivery and implementation of the programme. This situation affected the performance of the key actors in delivering and implementing the initiative since they carried a considerable workload.
- Limited training had challenged the cadres and DASIAT members to deliver and implement the Desa SIAGA programme.
- Social, cultural, and religious values were identified to underpin the delivery and implementation of the Desa SIAGA programme.

## Chapter 6 Documentary analysis

### 6.1 Introduction

Documentary analysis was used to strengthen the analysis/interpretation of findings from the in-depth interviews, non-participant observations, and fieldnotes. The key documents were a set of supplementary data sources which provided information related to the issue of the delivery and implementation of the Desa SIAGA programme. The documents were gathered from diverse sources, including women, Health Offices at the regional level, Health Officers from the community health centre, village government, village midwives, DASIAT (Alert Youth in Health), and websites. Within this chapter, there are three main group of documents that will be explained, including: (1) Decree of Ministry of Health of Indonesia regarding the programme; (2) P4K sticker and pledge card; and (3) DASIAT document. This section highlights the gap that was identified between the guidance of the Desa SIAGA initiative and the implementation of the programme data in Meranti case and Sendang case. Evidence from both cases is presented under the same chapter since it was found that they both followed the same national guidance.

### 6.2 National guidance of Desa SIAGA

There were two national guidance documents regarding the Desa SIAGA initiative. These documents were the Decree of Ministry of Health of Indonesia<sup>1</sup> year 2006 and the Decree of Ministry of Health Indonesia year 2010<sup>2</sup>. Both documents were available online and were outlined in Chapter 1. When the researcher sought documents from the Health Office of Sukoharjo Regency, an officer provided guidance related to the Desa SIAGA programme which was identical to the document that was available online (MoH Decree 2010).

#### National guidance versus the implementation

Several points of discrepancy were found between the Desa SIAGA guidance and the programme implementation in both Meranti and Sendang. Key national guidance on the programme and its implementation are as follows:

##### 1. *Pos Kesehatan Desa / Village Health Post*

The name of *Pos Kesehatan Desa (Poskesdes)* or Village Health Post was used interchangeably with *Poliklinik Kesehatan Desa (PKD)* or Village Health Polyclinic. This

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<sup>1</sup> Decree of MoH Indonesia Number 564/MENKES/SK/VIII/2006 date 02<sup>nd</sup> August 2006.

<sup>2</sup> Decree of MoH Indonesia Number 1529/MENKES/SK/X/2010 titled *Pedoman Pengembangan Desa dan Kelurahan Siaga Aktif* or The Guidance of the Development of Active Alert Village and Active Alert Urban Village

programme was one of the community participation interventions. In MoH Indonesia 2006 Decree page V-4, it was stated that this programme aimed to empower the community to build their own health facility in their village in order to be Desa SIAGA. In this programme, the government acted as the facilitator and support system.

Poskesdes provided all basic healthcare services including emergency, maternal, newborn and childcare, epidemiological surveillance and measurement, communicable and non-communicable diseases surveillance and measurement, and disaster management.

To run Poskesdes, there should be at least one midwife and two cadres in charge. The government assigned one village midwife in Poskesdes, while the cadres should come from the community. Yet, it was expected that the community could afford to provide a midwife on their own. Additionally, the infrastructure and other facilities should also be provided by the community. The available facilities could be a *Pondok Bersalin Desa (Polindes)*. In the past, *Polindes* was a childbirth facility that was provided by community. Then the childbirth place was merged in Poskesdes. In terms of financial resources, the community was expected to fund it themselves and/or from the private sectors, organisations, and government.

### *Implementation*

It was found that there was no village health post in Sendang. The data showed that the village midwives provided the services from their own homes. However, one of the village midwives in Sendang did not live in the village. She only came to the village during the day and provided care in the integrated health service posts. Whilst in Meranti, the village health post was developed by the village government. The village midwife lived in and delivered the services from the village health post. Yet, it was found that one year following data collection, the village midwife no longer lived in the post, since she moved to a new house in the village.

Moreover, it was found that all village midwives delivered the health services in the integrated health service posts in the morning. Before starting activities in the village, they had morning meetings in the community health centre for coordination.

## **2. Programme management**

In the Desa SIAGA initiative, there should be programme management that is levelled from the national government, provincial level, regency, district until village level (MoH Indonesia, 2010). The roles within the management are held by related government in each level, for instance the highest position at the national level is held by the Minister of Home Affairs and Minister of Health. At the village level, the head of Desa SIAGA is the head of village and the secretary is village secretary. Also at the village level, there

are member positions that consist of several stakeholders including village administration, Family Welfare Movement (PKK) team, religious organisations, scouts, cadres, and community leaders (MoH Indonesia decree 2010, pp 33).

### *Implementation*

There was no document that was found either in the Meranti case or the Sendang case that detailed the programme management. This finding strengthened the interviews data from both cases that reported the programme management remained unclear.

### **3. Training**

It was noted that in the MoH Indonesia 2006 Decree page V-6 and year 2010-page 20, training on the Desa SIAGA initiative was recommended for facilitators in the programme, health professionals, and stakeholders. The training was divided into three main categories and different levels of training:

- Training for programme facilitators

Based on the MoH Indonesia Decree, the facilitator of the programme included health promotion officers from the health office and appointed persons from related parties, such as non-government organisations (NGOs). The training material focused on community empowerment and organisation.

- Training for health professionals

This training had two main categories namely, management training and implementation training. The management training was aimed at head of community health centres and officials from health offices. Whilst the implementation training was for health professionals from community health centres that were appointed to develop the programme in the village and health professionals that manage health activities in the village, such as village midwives.

- Training for cadres and stakeholders

This material should be based on technical guidance from the Ministry of Health. However, this technical guidance could not be found during the data collection.

In the document, it was clearly stated that the training was for programme facilitators and health professionals at a provincial government level. Nonetheless, for the cadres and stakeholders, there was no clear explanation on who should manage the training. Moreover, there was no clear guidance about the training.

### *Implementation*

From the interview data in both cases, it was noted that only the village midwives had received training related to the Desa SIAGA programme. Even though in the Meranti

case, the village midwife reported that the former village head and the former treasurer had received training, but that the training was not sustainable since then. It was reported that the training was provided by MoH Indonesia. As in the Sendang case, the DASIAT member participant stated that DASIAT members had received training however, the training did not cover about MNH programme.

#### **4. Survey *Mawas Diri* / Community Self Survey**

In the MoH Decree year 2006, page V-6 it is stated that there should be a community survey called a *Survey Mawas Diri* (SMD) or Community Self Survey in the village. This survey aimed to collect data from all community levels regarding health issues in the village. It was explained that the SMD should be arranged by community leaders and facilitated by health providers. Nevertheless, there was no clear information on how to conduct the survey.

##### *Implementation*

According to the document from the Health Promotion Department of Nampan Community Health Centre, SMD meetings should be conducted in both villages following surveillance through a set of questionnaires. The SMD meeting in Meranti was attended by the village midwife, cadres, PKK members, and some community leaders. Meanwhile, the SMD meeting in Sendang was attended by cadres, PKK members, community leaders, village officials, DASIAT members, village midwives, and healthcare officials from Nampan Community Health Centre.

On the SMD report, there was an example of the questionnaires. Yet, there was no explanation about how many samples were required to complete the questionnaires, who were the enumerators were, and how the data would be collected. Table 6-1 below shows survey results from both cases that were presented by the SMD report.

**Table 6-1: Example of Community Self Survey (SMD) results**

<b>Meranti</b>	<b>Sendang</b>
- High risk pregnant women	- High risk pregnant women
- Children with malnutrition	- Dengue fever
- Dengue fever	- Open defecation
	- Blocked drains/ sewers
	- Household waste

It was written on the SMD report that the intervention plan to solve the problems would be discussed in the village community meeting which would be held within the following month.

### **5. *Musyawarah Masyarakat Desa* / Village Community Meeting**

It was written on the MoH Decree 2006, page V-6 that there should be a community meeting following SMD. This meeting called as *Musyawarah Mufakat Desa* (MMD) or Village Community Meeting. The main purpose of MMD was to discuss plans to solve the health issues that appear from SMD and what resources can be used. The MoH Decree 2010 page 20 showed that MMD should be held at the hamlet level first, then the village level. In both MoH decrees, it was described that community meetings at the village level should be attended by community leaders, female representatives, village officials, cadres, village midwife, health promotion officers from community health centre, youth, business sectors, and related sectors.

#### *Implementation*

Data from interviews and observations showed that there were no meetings at hamlet level in Meranti or Sendang. Based on the interview with chief of hamlet participants from both cases, the meeting was at the neighbourhood level instead with a chief of hamlet attending the meeting. The meeting at neighbourhood level was divided into two. One meeting at neighbourhood level was attended by men to discuss about infrastructure development or sanitation. The other one was attended by women in Meranti, while in Sendang was attended by cadres only. The women's meeting in Meranti was for '*arisan*', whilst in Sendang, they discussed integrated health service posts' activities, health problems, and '*arisan*'. *Arisan* is an Indonesian term for a regular social gathering in which the members contribute to, and take turns at, winning an aggregate sum of money. There were women meetings at village level both in Meranti and Sendang that were attended by all cadres and sometimes also by the village midwives. These meetings discussed the integrated health service post activities, maternal and child health, and other health problems in the village.

Evidence from the Health Promotion Department from Nampun Community Health Centre showed that the MMD in both cases were held a month after the SMD meetings. In Meranti, the meeting was attended by cadres, members of PKK, village midwife, and health promotion officer. Whilst, in Sendang it was attended by cadres, PKK members, village officials, DASIAT members, village midwives, health promotion officer, and several health officials from Nampun Community Health Centre. The attendance of MMD meeting in Sendang was more complex compared to Meranti. However, none of the MMD meetings, either in Meranti or Sendang, were attended by community leaders.

The community leaders were invited to SMD where data was collected but not to the MMD, where the plan to solve the problems was the focus. Hence, it was highlighted

that community leaders were not actively involved in the programme. In both cases, most of community leaders were men. If they were not actively involved in the planning discussions in MMD, they would have limited knowledge around the importance of male involvement in the programme to improve MNH. In these circumstances, their absence may influence gender stereotypes in the care of pregnant women as described via the data from the interviews, observation, and fieldnotes.

Moreover, the national guidance on the Desa SIAGA initiative recommends that an MMD meeting should be held once a year. However, it was found that the document report of the meeting was incomplete. When the data was collected on 24 July 2018, the latest report was a part of MMD that was conducted in 2016. The Health Promotion Department said that report from MMD 2017 has not been finished yet. On that report, it was written that women with high-risk pregnancies was one of their priorities. In addition, the other priorities were health issues on children with poor nutrition, and communicable diseases such as dengue. However, the report stated that the seminar given by the village midwife, during the meeting in Meranti, was only about tuberculosis. Whilst, in Sendang, the village midwives discussed not only about high-risk pregnant women but also about dengue prevention and an open defecation free campaign. This evidence showed that the programme was not exclusive to MNH issues. Therefore, it might influence the implementation of the programme unless the resources were adequate. These findings have consequently strengthened the interview data.

With regards to the intervention plan for high-risk pregnant women, in general both Meranti and Sendang had plans for:

- Health education regarding the importance of pregnancy assessment, Fe (iron) consumption, and nutrition in pregnancy.
- Promotion of MNH to all community levels.
- Cadres should report to village midwife if they identify a newly pregnant woman.
- Cadres should monitor women with high-risk pregnancies.
- Home visits by village midwives and cadres.
- Motivate pregnant women to attend antenatal class.
- Motivate pregnant women to book routine antenatal visits.
- P4K sticker attachment in order to monitor the health of pregnant women.

However, there was no clear evidence regarding how often the village midwives and cadres should visit the pregnant women. This evidence strengthened the interpretation of the findings from both cases that showed there was lack of role clarity in the delivery and implementation of the Desa SIAGA initiative.



### 6.3 P4K sticker and pledge card

In addition to the Decree of MoH, as stated in Chapter 1, there are two other key documents which related to the Desa SIAGA initiative, including the P4K sticker and the pledge card (KAP). The overall purpose of these document is to make people aware that there is a pregnant woman in the house, so whenever this woman needs help in emergency and birth preparedness, her neighbours will be ready to support. This awareness is expected to reduce the three delays in childbirth that are suggested to lead to maternal mortality.

The document analysis related to the P4K sticker attachment showed that the intervention was not properly implemented. Figure 6-1 presents the P4K sticker recording and attachment in relation to one of the women participants in the Meranti case, Rina, 23-year-old, newly post-natal woman. Some points to consider about the sticker are:

- The birth attendant was written as *bidan* (midwife), but it was unclear what the midwife's name was.
- The birthplace was in *rumah bidan* or midwife's house. It was unclear where the address was.
- It was written that the delivery companion was *suami* or husband. There was no alternative name.
- Transportation to be used was *pribadi* / private vehicle. It was unclear what the type of the transportation was.
- There was no name of the blood donor (*calon pendonor darah*).
- The attachment of the sticker was on the back of the window, so that when the window was opened no one would see the sticker or as the information that was written on it.

**Figure 6-1: Evidence of P4K sticker recording and attachment from Meranti case**



When this sticker was cross-checked with Rina's pledge card (Figure 6-2), there were several points that did not match each other, such as birthplace, birth attendant, transportation and a contact number. Details of these discrepancies are provided in Appendix W.

Figure 6-2: Evidence of pledge card recording from Meranti case

CATATAN KESEHATAN IBU HAMIL

**MENYAMBUT PERSALINAN**  
(Agar Aman dan Selamat)

KEMENTERIAN KESEHATAN REPUBLIK INDONESIA

Saya : [redacted]  
 Alamat : [redacted]

Memberikan kepercayaan kepada nama-nama ini untuk membantu persalinan saya agar aman dan selamat, yang diperkirakan pada, Bulan: 2 - 7 Tahun: 18

Penolong persalinan:  
 1. Dokter/Bidan: pusk. Grodol **a**  
 2. Dokter/Bidan: .....

Untuk Dana Persalinan, disiapkan sendiri/ditanggung JKN/ dibantu oleh:  
BPKS

Untuk kendaraan/ambulan desa oleh:  
 1. MOTOR HP ..... **b**  
 2. .... HP .....  
 3. .... HP .....

Metode KB setelah melahirkan yang dipilih:  
SUNTIK

Untuk sumbangan darah (golongan darah A) dibantu oleh:  
 1. .... HP ..... **c**  
 2. .... HP .....

SMN 19 - 2 - 2018

Mengetahui, Bidan/Dokter Saya  
 Suami/Orang Tua/Wali [redacted] **d** [redacted] **f** [redacted] **e**  
 (.....) (.....) (.....)

Based on the guidance, the pledge card should be written up by health professionals before the expected delivery date. However, from the example of Rina's pledge card above, the card remained incomplete until she delivered her baby and was never completed.

Similar to Meranti, the document in Sendang also showed that the recording and attachment of the P4K sticker were not appropriately conducted. Some of the stickers were completed with the birth plan and some remained empty. Again, similar to Meranti, some stickers were attached to home doors, and some were not. Figure 6-3 below are photos of the P4K sticker from one of the women participants, Prapti, 39-year-old, post-natal woman. Prapti's P4K sticker was attached to the back of the door.

Therefore, it seemed that the information would not reach her neighbours since no one would see it.

**Figure 6-3: Evidence of P4K sticker recording and attachment from Sendang case**



The information on the P4K sticker was similar with that written on the pledge card. However, this pledge card was incomplete. Figure 6-4 shows the recording of Prapti's pledge card.



1. Support Village Health Forum (FKD) to manage the Desa SIAGA initiative through community-based health activities (UKBM) including the integrated health service post and village health post in general.
2. Support FKD activities such as:
  - Supervision and support to drug adherence for people with tuberculosis.
  - Guarding families with high-risk pregnant women.
  - Guarding breastfeeding mothers.
  - Guarding families with malnourished children.
3. Providing support to develop and manage other UKBM programmes including:
  - *Perilaku hidup bersih dan sehat* (PHBS) or healthy and clean lifestyle.
  - Health surveillance based on community.
  - Improving the environmental health.
  - Improving the health of mothers, babies, and toddlers.
  - *Keluarga sadar gizi* (KADARZI) or awareness of family towards good nutrition.

Documents collected from DASIAT in the Sendang case appeared to belong to DASIAT at a district level (Nampan District), instead of the village itself. The documents included in this analysis were meeting reports, annual reports, activity reports, and photos. These documents were stored in Sendang, since the former chief of DASIAT in Nampan District was one of Sendang's representatives. He was also an interview participant in this study. From the documents, it was found that DASIAT at this district level should be responsible for the promotion of health awareness to all 14 villages under Nampan District including Meranti and Sendang. DASIAT at a district level should consist of youth representatives from those 14 villages. Yet, not all villages had delegations, such as Meranti Village.

Based upon the documents, it was noticed that there were a number of tasks that had been planned and implemented by DASIAT members in Nampan District. One of the tasks was the taking care of and monitoring pregnant women within the district. However, one of meeting notes showed that for the present, this programme only focused on Sendang case. This evidence which informed the interview data from the DASIAT participant mentioned that the agenda to guard pregnant women was only available in Sendang case. Figure 6-5 is an exemplar of the meeting notes from DASIAT. The translated version is available in Appendix X.

Figure 6-5: Exemplar of meeting notes from DASIAT

**PEMUDA SIAGA SEHAT  
( DASIAT )**

KECAMATAN [REDACTED] KABUPATEN SUKOHARJO  
Sekretariat : Komplek PUSKESMAS [REDACTED] No. [REDACTED]  
Telp. 0271- [REDACTED]; 085 [REDACTED]; 087 [REDACTED]

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**NOTULEN**

Hari / Tanggal : Sabtu, 01 Oktober 2016  
Jam : 10.00 WIB  
Tempat : Ruang Dasiat Puskesmas [REDACTED]  
Keperluan : Rapat Rutin Dasiat membahas program pemantauan Ibu Hamil dan Pesti bunil dan PSN

Rapat dihadiri oleh Dasiat, Kepala Puskesmas [REDACTED]

Susunan Acara

1. Pembukaan
2. Sambutan Kepala Puskesmas terkait dengan program kegiatan Dasiat  
tuntut memantau Ibu Hamil sangat bagus, mengingat saat ini talk sedikit. Dasiat akan dapat memantau dan mendampingi untuk memberikan edukasi. Kemudian dim tuntut anjil dlm kegiatan PSN. Ibu sangat bagus mengingat tiap pelayanan hujah, kasus DB masih banyak terjadi, dan PSN ini cara yg sangat bagus untuk memotong pertumbuhan nyamuk.
3. Pembahasan dipimpin ketua Dasiat. Langkah yg diambil berkoordinasi dengan bidan desa [REDACTED] (sementara konsultasi sat desa) untuk memint data bunil yg sementara pemantauan sat guluh saja.  
- Untuk Gerakan PSN dengan berkoordinasi dengan kader kesehatan desa dan bersama-sama melaksanakan PSN.
4. Penutup

One of DASIAT's roles in the improvement of the women's health programme was that they were involved in antenatal class, together with the two village midwives of Sendang. Figure 6-6 provides an illustration on how DASIAT was involved in the programme for pregnant women. One of DASIAT members who attended the class was a man. He and the pregnant women seemed to have no 'barrier' between each other. This evidence suggested that men can participate in the care of pregnant women. This data strengthened one of the themes in Sendang case that suggested there was a transformation process of gendered roles in childbearing. In addition, it also supported data regarding the potential key enablers to promote the agenda. DASIAT was identified as one of the key factors that could eliminate barriers in the Desa SIAGA programme in terms of gender stereotypes in pregnancy and childbirth.

**Figure 6-6: Picture document of antenatal class in Sendang case**



DASIAT activities in Sendang case were identified to conform with the DASIAT manual (2017) developed by Health Office of Sukoharjo Regency. Nonetheless, despite the fact that DASIAT members contributed to the agenda to improve the health status of the community within Sendang case, the data also identified that they carried an enormous duty with limited volunteers. As explained by Andi, DASIAT member participant in the interview, DASIAT faced difficulties in recruiting volunteers. This statement was strengthened by the attendance sheets of many DASIAT meetings which showed that they were only attended by several youngsters.

### **6.5 Information gained from the documentary analysis**

The documentary sources supported the analysis/interpretation of the evidence from the interview findings and observational data which, in turn, add strength to the findings. Several gaps were found between the recommendations from national guidance about the Desa SIAGA initiative and its implementation, both in the Meranti



and Sendang case. Nevertheless, it was also found that the documents provided limited information on how to deliver the programme, resulting in sub-optimal implementation. For instance, with regards to the P4K sticker attachment, there was no explanation in the guidance as to where this sticker should be attached. This data supported the sub-theme “*The programme delivery and implementation lacked consistency*” in both cases.

None of the national guidance explained clearly about the P4K sticker and pledge card. There was no information, such as a definition and the aim of the programme, or how to deliver the campaign. The only information available was the recording procedures that were available in the technical guidance document. However, the information was not comprehensive. In the guidance, on the pledge card section, there was no information as to whether it was mandatory to write down an alternative person’s name who would transport the pregnant woman to the health facilities. Whereas it was highlighted from the interview data from both cases that alternative people were essential to be a back-up support when husband and family were not around when labour started. In these circumstances, it seemed that the unclear information in the document had influenced the village midwives to perform the programme. For example, they did not complete all sections on the pledge card and the sticker.

All pledge card and P4K sticker documents stated that husbands would be the pregnant women’s companion during the delivery. These documents informed the interview data from both cases in which family was the main support of the women. This evidence strengthened the findings described by themes “*‘Family first’: Support seeking hierarchy in childbirth*” in the Meranti case and “*‘Childbirth is a family’s matter’: Support-seeking distinct pattern in childbirth*” in Sendang. There were no pledge cards and P4K stickers which appointed neighbours as a support in the childbirth, or at least as a back-up support. In contrast, information from the interview data indicated it was difficult for a woman to obtain help from others when her husband and family were not available. Based on the pledge card and P4K sticker, the neighbours were not to be included in the plan for preparing the birth. Help from neighbours was sought spontaneously, hence the support was not well-prepared. This evidence demonstrated that the engagement and empowerment of the community in the Desa SIAGA initiative was limited. This following fieldnotes provide an illustration when the village midwife in Meranti delivered the campaign in which she did not involve any family members or neighbours. This phenomenon happened also in Sendang case.

## Fieldnotes

Date: Friday, 20<sup>th</sup> May 2018 at 09:00 West Indonesian Time

Place: Integrated Health Service Post in Ublik, Meranti case

During the familiarisation to study site and participant recruitment, I attended an integrated health service post in the study site.

1. There was a village midwife who attended that post. She was a healthcare professional from Nampan Community Health Centre who was responsible for the integrated health service post in her area of Meranti case. Her activities at the integrated health service post were:
  - Conducting health-related assessments to pregnant women who came to the integrated health service post. At that time, there was one pregnant woman who came to the integrated health service post. She was the owner of the house where the integrated health service post was located. The midwife gave the pregnant woman a maternity book and explained the contents, such as signs of labour. Then the midwife filled out the P4K sticker and pledge card. Following that, the midwife took pictures of the maternity book and put the P4K sticker on the main door of pregnant woman's house.
  - Giving consultation to babies and toddlers who have health problems.
  - Doing health assessments, such as blood pressure and treatment to elderly.
2. There were some cadres who giving services to babies and toddlers who came, such as:
  - Baby and toddler health assessments, such as measuring weight and height.
  - Giving babies and toddlers healthy snacks and juices. The snacks and juices were provided and cooked by cadres with funding from the regent government. The menu of snacks and juices were scheduled by the Health Office.
  - Elderly health assessments, such as weight measuring.

## Reflection:

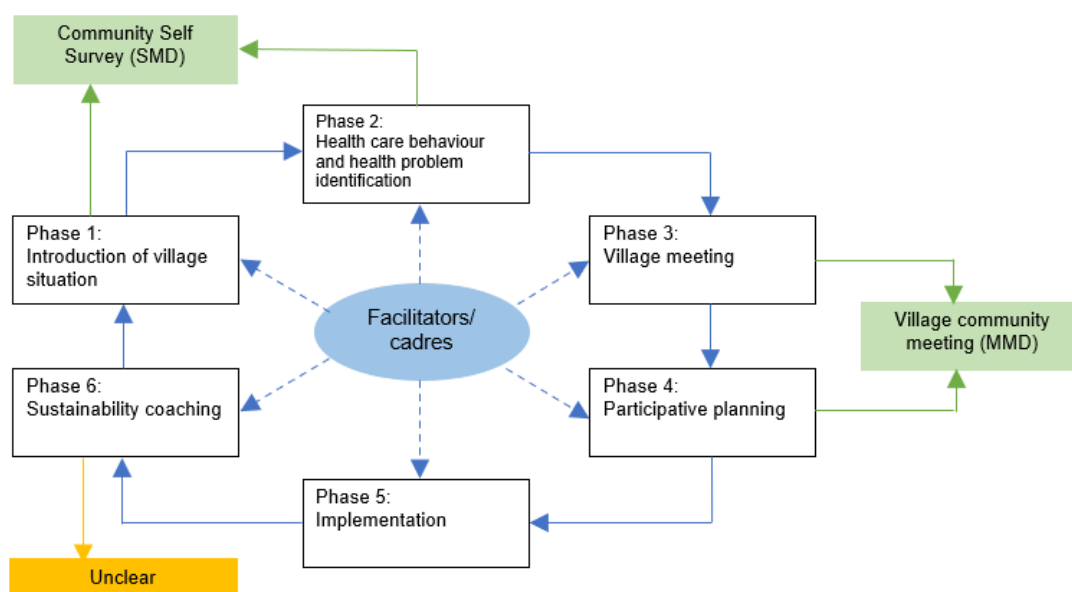
1. The integrated health service post ran for one hour only as there was a neighbour who passed away, so the cadres and midwife wanted to go to their neighbour's house to pay their condolences.
2. I noticed that some parts of the P4K sticker were still blank, such as place of delivery, transportation, and the donor; and one point was unclear which was who would help the delivery (featured the letter B only, assuming it stood for *Bidan / midwife*). The village midwife did not involve any family members or neighbours in completing the sticker and pledge card. Whereas there was a section on the pledge card that should be signed by husband/family or neighbours who would help the pregnant woman when labour started.

Furthermore, the document review provided evidence that there was lack of engagement and empowerment of both women and the community in the participatory meetings. The meetings only involved key actors in the Desa SIAGA initiative. The meeting contents were also broad-based and not only focussed on the MNH issues.

In addition, the implementation of the PLA cycle within the Desa SIAGA initiative remained unclear. The original cycle was presented in the MoH Decree Year 2010, page 19. As described earlier in Chapter 1, this cycle had six phases. The SMD

appeared to reflect Phase 1 and Phase 2 in which health issues in the village were discussed. While MMD represents Phase 3 and Phase 4 in the cycle. These two phases were the follow-up to Phase 1 and Phase 2 where plans to solve the health problems were developed. Then Phase 5 was the implementation of the MMD results. As for Phase 6, this study found that there was no clear implementation of how key actors in Desa SIAGA maintained the sustainability of the initiative. There was no follow-up or evaluation meeting after the plans from MMD were implemented. This data strengthened the sub-theme “The programme delivery and implementation lacked consistency” both in Meranti and Sendang. Figure 6-7 provides an illustration of these findings. The blue coloured lines represent the original cycle; the green coloured lines reflect the correlation between SMD and Phase 1 and Phase 2; as well as the correlation between MMD and Phase 3 and Phase 4; and the orange-coloured line is to describe Phase 6.

**Figure 6-7: Participatory learning and action cycle in Desa SIAGA in the context of the findings**



The documents from DASIAT captured that DASIAT in the Sendang case belonged to the district level. Yet, the programme for guarding pregnant women was only focused in Sendang, instead of applying to all villages under Nampan District. It also appeared that DASIAT carried several duties to support health providers in order to tackle health issues in the village. Whereas DASIAT members were very limited. These conditions were suggested to be barriers for DASIAT members to perform their tasks. This data supported one of the themes in Sendang: ‘*The programme covers all health problems*’: *Programme package was not exclusive to pregnant women*. Workload was perceived

to be one the main barriers in the delivery and implementation of the Desa SIAGA initiative.

In summary, the documents from both MoH Decrees in 2006 and 2010 stated that taking care of pregnant women is one of Desa SIAGA main objectives. Hence, it is the responsibility of all sectors in the village, such as village officials, health professionals, community leaders, religious leaders, society, business sectors, and other relevant key stakeholders. In contrast, data from the interviews, non-participant observations and fieldnotes revealed that it was only the village midwives and cadres who felt it was their responsibility. In doing so, the village midwife did not only manage the maternal and child health issues, but also the health of community in general. Cadres and DASIAT were identified to be key enablers in the delivery and implementation of the Desa SIAGA initiative. However, they received minimum training on the programme. Workload and perception of roles were identified to hinder the key actors in carrying out their duties.

## 6.6 Conclusion

This chapter has illuminated the evidence from the review of a number of documents related to the Desa SIAGA initiative that have been gathered from various sources. The analysis has shed light on the gap between the guidance of the Desa SIAGA initiative, and with data from in-depth interviews, non-participant observations and fieldnotes from both cases, the implementation in practice. It has strengthened and validated the analysis/interpretation of the findings that have been presented in Chapter 4 and Chapter 5. The next chapter will compare and contrast findings from both cases by using an appropriate approach and will therefore, present the synthesis.

### **Key summary points:**

- The document review showed there was limited engagement and empowerment of women and the community in the delivery and implementation of the Desa SIAGA programme.
- There are several main gaps highlighted between the guidance of Desa SIAGA and evidence in both cases including training, community meetings, and the programme delivery and implementation.
- The documents supported the findings that showed the key actors in the Desa SIAGA initiative had a heavy workload.
- DASIAT programme was formed to support the work of health professionals and government in all villages under Nampan District, yet they were only focused on Sendang case.

## **Chapter 7 Synthesis from the two study cases**

### **7.1 Introduction**

In order to synthesise the findings, a narrative synthesis was conducted to compare and contrast the findings from the two case study sites (Meranti and Sendang). Similarities and differences were identified to draw further in-depth explanations that have the potential to illuminate the findings (Khan and Van Wynsberghe, 2008). This chapter presents the underlying approach of the synthesis, the synthesis process, and provides in detail the key findings.

### **7.2 The synthesis processes**

This study used a narrative approach to synthesise the findings from both cases. Details about the rationale to choose this approach were provided in Chapter 3. Initially, the synthesis was planned to use a cross-case analysis approach drawing on guidance from Miles and Huberman (1994). However, after the researcher tried to use the approach, it was found that it did not work well with this particular data set and did not reflect the richness of the findings, as the data from both cases were too similar. Several synthesis approaches were then explored (see Appendix Y). Following a discussion with the supervisory team, the researcher made the decision to perform a narrative synthesis, this approach enabled the researcher to draw out the more unique features of the data. The diagram of the synthesis process is available in Chapter 3. The narrative synthesis process was informed by the work of Popay et al. (2006) and Creswell (2013). The first stage was organisation of the data in order to prepare the data for analysis. At this stage, the information contained in each case were organised in a matrix (Table 7-1). Then the data across cases were compared and contrasted. The second stage was reading for a sense of general information and understanding. A set of initial themes from the charts were drawn. These themes were further developed and discussed with the supervisory team. Lastly, finding the final synthesis from the charts that clearly demonstrated themes relating to both the research questions and the theoretical basis. Table 7-1 presents the matrix that shows the main themes across Meranti and Sendang cases. In total, four themes were identified: including: (i) Family as the primary source of support; (ii) Knowledge and awareness; (iii) The programme package was not exclusive to pregnant women; and (iv) Gendered roles in pregnancy and childbirth. The themes were further explored in terms of their similarities and differences. In addition, a cross cutting theme emerged "Contextual factors to support women in pregnancy and childbirth". The matrix highlights the similarities and differences from both cases.

**Table 7-1: Case Ordered Matrix showing the Key Similarities and Differences in Cases**

Theme	Meranti	Sendang
<p><b><i>Family as the primary source of support</i></b></p> <p>1. Value of family in childbirth</p> <p>2. Community support as a back-up</p>	<p>Similarities</p> <ul style="list-style-type: none"> <li>• The family was a key source of support in pregnancy and childbirth, mainly for emotional support</li> <li>• Women had easy access to their families if they lived near to each other or in an extended family</li> <li>• The community was relied on to provide practical support</li> </ul>	
	<p style="text-align: center;">Difference</p> <ul style="list-style-type: none"> <li>• The family was the primary provider of informational support and financial support</li> <li>• Women would seek support from the community if the family unit could not provide the women's needs and or if their families lived at a distance</li> <li>• Head of village had a view that family was the most important support for the women</li> </ul>	<p style="text-align: center;">Difference</p> <ul style="list-style-type: none"> <li>• The family was the primary provider of a feeling of security and social support</li> <li>• Family's accountability and cohesion were believed to drive the family to support women</li> <li>• Women considered they had many support sources if the family unit could not provide the women's needs</li> <li>• Women identified friends as one of the social support sources</li> <li>• There were different perspectives between some women and key actors towards support from the community. The key actors viewed community support was equally important as family support; While women had perspectives that childbirth was their family business</li> <li>• Key actors viewed community was helpful mainly when a pregnant woman's family lived at a distance</li> </ul>
<p><b><i>Knowledge and awareness</i></b></p> <p>1. Lack of understanding and awareness</p>	<p>Similarities</p> <ul style="list-style-type: none"> <li>• Most participants were not aware of and had limited understanding of 'Desa SIAGA</li> <li>• Only key actors (village midwife and head of the village) were aware and knowledgeable about the programme</li> <li>• The promotion of the programme was the duty of the Health Promotion Department from the Community Health Centre. Still, it did not work well as they had limited personnel with many responsibilities</li> <li>• Lack of information and training at all levels. The training/ seminar was ad hoc and not sustainable</li> </ul>	

	<ul style="list-style-type: none"> <li>• There was no transfer of knowledge (either oral or written) from those who received training/ seminar to the other actors</li> </ul>	
	<p style="text-align: center;">Difference</p> <ul style="list-style-type: none"> <li>• Only the village midwife participant had received training related to the programme</li> </ul>	<p style="text-align: center;">Difference</p> <ul style="list-style-type: none"> <li>• There was a challenging access to women and society who lived in a peri-urban village</li> <li>• Village midwife respondent reported Desa SIAGA training was for DASIAT members</li> </ul>
2. Key actors' knowledge	<p style="text-align: center;">Similarities</p> <ul style="list-style-type: none"> <li>• The programme involved various interventions to improve the health of the community in general</li> <li>• The programme aimed to empower the community to be able to tackle their health issues</li> <li>• There was confusion over who carries most of the responsibility for the implementation of Desa SIAGA</li> </ul>	
	<p style="text-align: center;">Difference</p> <ul style="list-style-type: none"> <li>• The village midwife and head of the village had different perspectives of what the programme means</li> <li>• Head of the village viewed that in Desa SIAGA government and related sectors were the facilitators/ service providers and the community was seen as the recipient</li> </ul>	<p style="text-align: center;">Difference</p> <ul style="list-style-type: none"> <li>• Village midwife participant, DASIAT member, and head of the village explained a similar understanding of Desa SIAGA in which collaboration and cooperation across sectors were essential, either from 'top-down' or 'bottom-up'</li> </ul>
<p><b><i>The programme package was not exclusive to pregnant women</i></b></p> <p>1. Maternal and neonatal health provision was not the main priority</p>	<p style="text-align: center;">Similarities</p> <ul style="list-style-type: none"> <li>• The agenda focussed on general health status in the village, and maternal and neonatal health (MNH) was an integral part of it</li> </ul>	
	<p style="text-align: center;">Difference</p> <ul style="list-style-type: none"> <li>• There was a village health post in the village as one of programme in Desa SIAGA</li> </ul>	<p style="text-align: center;">Difference</p> <ul style="list-style-type: none"> <li>• There was no village health post in the village. The village midwife said it was because there was lack of support from village government in terms of funds</li> </ul>
2. Key actors	<p style="text-align: center;">Similarities</p> <ul style="list-style-type: none"> <li>• Village midwives had a considerable workload</li> <li>• Village midwives had duties to take care of mother and children and the health of the community in general</li> </ul>	

	<ul style="list-style-type: none"> <li>• Village midwives' workload had become a burden for them to make a home visit as one of the Desa SIAGA implementation and provided care in the village health posts</li> <li>• Village midwives had cadres who support their roles</li> <li>• There was a strong collaboration between village midwives and cadres, yet limited task shifting</li> </ul>	
	<p style="text-align: center;">Difference</p> <ul style="list-style-type: none"> <li>• There was only one midwife in the village</li> <li>• Women and community viewed cadres as village midwife's assistants</li> <li>• Women and community held the village midwife in high esteem and trusted the village midwife more than other key actors</li> </ul>	<p style="text-align: center;">Difference</p> <ul style="list-style-type: none"> <li>• There were two midwives in the village</li> <li>• In addition to the village midwives, cadres and DASIAT members were also identified as key actors in the programme</li> <li>• Cadres and DASIAT members provided assistances for village midwives</li> <li>• Cadres and DASIAT members had a considerable task in the village</li> </ul>
3. Programme delivery and implementation	<p style="text-align: center;">Similarities</p> <ul style="list-style-type: none"> <li>• Many parts of the programme were not delivered and implemented consistently</li> <li>• Poor recording and attachment of Kartu Amanat Persalinan (KAP) or pledge card and birth preparedness (P4K) sticker, which they were main elements in the programme</li> <li>• The community believed that pregnancy was something 'usual'</li> <li>• People avoided talking about the worse problems such as complications in pregnancy and childbirth</li> <li>• Most women appeared to 'underestimate' pregnancy and childbirth. They thought their pregnancy would always be fine and so the childbirth</li> </ul>	
	<p style="text-align: center;">Difference</p> <ul style="list-style-type: none"> <li>• There was good communication between the village midwife and private midwives, yet limited communication with private obstetricians</li> </ul>	<p style="text-align: center;">Difference</p> <ul style="list-style-type: none"> <li>• There was difficulty to access housing complex in the peri-urban village. This situation prevented the promotion, delivery and implementation of the programme</li> <li>• There was a lack of communication between village midwives as key actors in the programme either with private midwives or private obstetricians</li> <li>• There was woman who was not able to pay hospital fees and resulted in she could not bring her baby out of the hospital</li> </ul>



<p><b><i>Gendered roles in pregnancy and childbirth</i></b></p>	<p style="text-align: center;">Similarities</p> <ul style="list-style-type: none"> <li>• There were gender stereotypes in relation to pregnancy care and childbirth</li> <li>• Men talking about pregnant women/ childbirth was a 'taboo' in society</li> <li>• Men felt strange to help women in preparing childbirth</li> <li>• Men and women had different roles in pregnancy care and childbirth</li> </ul>	
	<p style="text-align: center;">Difference</p> <ul style="list-style-type: none"> <li>• Men act as the prominent decision-makers and providers of financial support for the family. It led to delay in decision making towards childbirth such as choosing the birthplace</li> <li>• Some women believed that their religions had taught them to obtain husbands' permissions before taking actions</li> </ul>	<p style="text-align: center;">Difference</p> <ul style="list-style-type: none"> <li>• The village head viewed that men had particular tasks in pregnancy and childbirth</li> <li>• Men engagement through DASIAT programme increased people's awareness that pregnancy care was not only the women's responsibility</li> <li>• DASIAT members were identified as a 'key enabler' to tackle gender issues in the programme since the member consisted of men and women</li> <li>• In this peri-urban village, it was found that men did not seem to be dominant to make a decision in family. The eldest adult in the family could make a decision regardless of their gender</li> <li>• There was a perspective that pregnancy was everyone's responsibility, but the gender stereotypes still exist</li> <li>• The village midwife participant seemed to have gender stereotypes in pregnancy and birth</li> <li>• Most religious leaders, the majority of who were men, were identified as key enablers too as they were respected figures in the community. Most people listen to their religious leaders</li> </ul>
<p><b><i>Contextual factors that cut across both cases</i></b></p>	<ul style="list-style-type: none"> <li>• The support given by the community was a spontaneous act</li> <li>• There were three elements that drive the community to support women, including social capital, altruistic behaviour, and religious beliefs</li> </ul>	

	<ul style="list-style-type: none"> <li>• It was believed that villagers were already 'alert' and prepared to care for pregnant women regardless of whether there was or was not Desa SIAGA</li> <li>• There was a tradition to help each other called 'Gotong royong' – a Javanese te</li> <li>• Religious beliefs were described as a factor that can motivate people for doing a good deed, including helping women</li> </ul>
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### 7.3 Synthesis of the findings

There are two main findings from the synthesis of both cases, these include the limited community involvement in birth preparedness; and it was noted that there were several facilitators and barriers in the delivery and implementation of the Desa SIAGA initiative.

#### 7.3.1 Limited community involvement in birth preparedness

The findings from both cases study sites shed light that the community was not actively involved in the community participation under the Desa SIAGA initiative. This notion emerged from the fact that all women and most of the other participants reported that pregnancy and childbirth were the responsibility of their own families. In addition, the support from the community was only a 'back-up' and limited to practical support only. The community support appeared to be spontaneous and was not well organised. The limited of community involvement in the birth preparedness appeared to be influenced by several facilitators and barriers to deliver and implement the Desa SIAGA as a community participation programme to improve MNH.

#### 7.3.2 Facilitators and barriers in the delivery and implementation of the Desa SIAGA initiative

Both case study sites revealed that the Desa SIAGA programme did not work well across communities which resulted in limited community involvement in delivering and implementing the programme. The overall synthesis showed that several main factors influenced the delivery and implementation of the Desa SIAGA initiative, including: (a) lack of role clarity, (b) unmanageable workload, (c) lack of communication, (d) lack of support from policy guidance/government, and (e) lack of training for key workers.

In addition, social, cultural, and religious values were noted to influence the delivery and implementation of the programme. Emerging evidence suggested a role for social and cultural factors in the community belief that pregnancy was always a natural event, a belief that could potentially hinder women and the community in preparation for a safe birth. In addition, gendered roles in pregnancy and childbirth were found to play a role in the delivery of the community-based programme. Religious beliefs were identified to be interrelated with social and cultural values. Even though social, cultural,

and religious values motivated the community to support women, yet the beliefs and practice also appeared to reduce the awareness of the relevance of the Desa SIAGA initiative.

## 7.4 Summary

This chapter provided a synthesis of the findings from both study cases in which the analysis/interpretation from the interview data was strengthened by the data from non-participant observations, documentary review, and fieldnotes. The synthesis found that there was limited involvement of the community in the Desa SIAGA initiative. The synthesis showed that several factors were identified to have potentially contributed to the lack of the delivery and the uptake of the programme. Further exploration of these factors will be discussed in the following discussion chapter.

### **Key summary points:**

- The aim narrative synthesis approach was to provide an overview and explanation of the key findings from the two study cases.
- An initial approach of cross-case analysis, as recommended for case study did not fit well with the data.
- The narrative approach has identified that the individual cases shared a high level of similarities across the study sites, whilst key differences and cross-cutting themes are highlighted.

## Chapter 8 Discussion

### 8.1 Introduction

This is the first in-depth study using a comparative case study design to explore the role of community participation through the Desa SIAGA initiative to improve maternal and neonatal health (MNH) in Indonesia. The overall aim of this study was to investigate the role of a community participation approach through Desa SIAGA (alert village) in preparing and supporting pregnant women for birth in the Sukoharjo Regency of Central Java, Indonesia.

The overall aim of this study was to understand how community participation through the Desa SIAGA model supports pregnant women in preparing for birth. This was achieved through a case study approach, incorporating in-depth interviews with women and key stakeholders, non-participant observations, and documentary analysis. The data collection and analysis were supplemented by detailed fieldnotes. The data was collected in two villages (Meranti and Sendang) which were located under the same community health centre (Puskesmas), however, each village implemented different strategies of Desa SIAGA. The characteristics of the villages were also distinct; Meranti was more rural, and Sendang was a peri-urban village. These characteristics allowed the study to capture data about Desa SIAGA from different contexts. Details of the data collection methods are provided in Chapter 3. From the data, several key findings emerged, and these are reported in Chapters 4 and 5. The interviews findings were informed and strengthened a detailed review of key documents (Chapter 6). Subsequently, the findings from both cases (villages) were synthesised in Chapter 7.

In the following section, the unique contributions of the study will be identified. The main study findings will be discussed and summarised in the context of current literature. The strengths and limitations of the study will also be reported. Finally, a set of recommendations for practice, education, research, and policy will be provided.

### 8.2 Unique contributions of the study

There were two main areas within the current study that make a unique contribution to this area of knowledge. This was the first in-depth study to explore the role of a specific community participation model (Desa SIAGA) to improve MNH in Indonesia. The perspectives and experiences of a range of key stakeholders, including pregnant women, post-natal women, neighbours of pregnant women, village midwives, cadres, and key stakeholders (chief of neighbourhoods, chief of hamlets, and village heads) were explored within two villages. Earlier studies employed survey methods to investigate the effectiveness of the initial development of the Desa SIAGA programme (Sood et al., 2004; Fachry et al., 2009). One of the previous studies (Fachry et al.,

2009) used focus group discussions to collect qualitative data, however, the data was limited to the satisfaction of the experience of women, village midwives, and stakeholders of the Desa SIAGA initiative. Therefore, these earlier studies (Sood et al., 2004; Fachry et al., 2009) were predominantly descriptive accounts and did not provide an in-depth understanding of how the Desa SIAGA process worked in practice.

Moreover, this current study investigated how a community participation model (CPM) worked in the Desa SIAGA programme that has been implemented for about 20 years and therefore was able to explore the sustainability of the programme. The previous studies (Sood et al., 2004; Fachry et al., 2009) were conducted immediately after the initial development of the Desa SIAGA programme. However, there was a lack of regular evaluation and responding to the evaluation so that the model can evolve to meet the needs of the community.

Another innovation of this study was the use of the case study approach. In the Indonesian context, there was scarce research that employed a case study approach to explore the complex phenomenon of CPM within Desa SIAGA, specifically for the improvement of MNH. The case study approach has allowed the researcher to obtain in-depth data from a variety of lenses and provided a unique opportunity to understand of the 'how' and 'why' questions that shed light on the underlying processes of the model. In-depth interviews were conducted with pregnant women, post-natal women, neighbours of pregnant women, village midwives, cadres, and a wide array of key stakeholders. These in-depth interviews enabled the researcher to hear the voices of key stakeholders. The researcher also collected data through non-participant observation at essential community meetings, providing further insight into how the community responded to MNH issues. In addition, documentary analysis of key documents and guidance provided evidence of the programme at both implementation and policy level.

### **8.3 Community participation models for maternal and neonatal health**

A considerable body of literature has shown that there are several key elements as to how community participation models (CPMs) are structured that lead to successful outcomes. These elements include using the participatory learning and action (PLA) cycle, programme facilitators, supervision, training, and the provision of clear guidance. The phases of the PLA cycle are not the same across all studies, yet they have similarities, such as identifying problems, planning the intervention/strategies to solve the problems, implementing the intervention(s), and evaluating the implemented

strategies (Manandhar et al., 2004; Tripathy et al., 2010; Azad et al., 2010; Lewycka et al., 2013; Miltenburg et al., 2019).

Importantly, evidence indicates that community participation is a continuous process, and that the process ongoing and active community engagement is required for it to be effective (Rifkin and Pridmore, 2001; Rosato et al., 2008; Draper et al., 2010; Akhtar et al., 2014). The existent literature shows that the implementation of CPMs is a complex process underpinned by complex mechanisms. It appears that community participation is inherently a context dependent model. The delivery and implementation of CPMs are noted to be influenced by social, cultural, economic, political, and contextual factors of the particular area where the models were being implemented (Draper et al., 2010; Mafuta et al., 2016), for example, it may depend on the strength and cohesion of local social networks (WHO, 2014). These arguments strengthen the conceptual and theoretical debates that show community participation is a dynamic process that requires a range of implementation strategies (Rifkin, 1986; Rifkin, 1996; Morgan, 2001; Rifkin, 2014). The CPM strategies might differ from one location to another since they are dependent on the situations and the needs of specific communities (Rowe and Frewer, 2005; Gilchrist and Taylor, 2016).

In line with the available evidence, the findings of this current study demonstrated that the Desa SIAGA initiative, in theory, had all key components of CPMs that lead to successful outcomes. Nonetheless, there were a range of facilitators and barriers that influenced the delivery and implementation of the initiative, including lack of community empowerment; the performance of the key actors; government support and policy; as well as social, cultural, and religious values. These facilitators and barriers, however, appeared to be interrelated to one and another. In the development of this study, several theoretical propositions were established to guide the analysis of the findings (Chapter 3). The theoretical propositions are as stated in Table 8-1.

**Table 8-1: Theoretical Propositions of the Study**

<b>Theoretical proposition</b>	<b>Sources</b>	<b>Proposition supported?</b>
Empowerment in decision making, knowledge and economic factors influence the participation of women and community in the Desa SIAGA initiative to improve MNH	(MoH Indonesia, 2006; Rifkin et al., 2003; Rosato et al., 2008)	Supported
The performance of the key actors in delivering and implementing the Desa SIAGA initiative is affected by their perception towards their roles, workload, and the training that they received	(Goeman et al., 2011; Kilewo and Frumence, 2015; Howard-Grabman et al., 2017)	Supported

Government support and policy have an impact in achieving the goals of the Desa SIAGA initiative	( Goeman et al., 2011; Howard-Grabman et al., 2017; Miltenburg et al., 2019)	Supported
Social, cultural, and religious values underpin the delivery and implementation of CPM within the Desa SIAGA initiative	(Azad et al., 2010; Howard-Grabman et al., 2017; Fabbri et al., 2019)	Supported

As can be seen in Table 8-1, all the theoretical propositions were fully met in this study. The following sections will discuss how the findings supported the theoretical propositions in the context of wider literature.

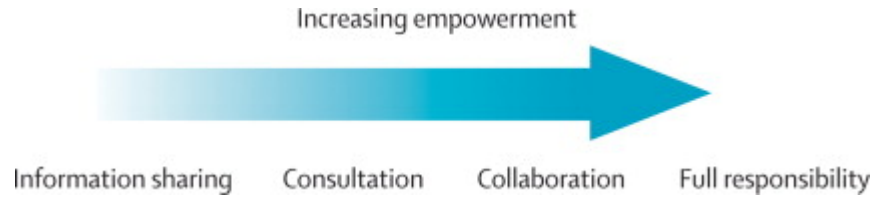
### 8.3.1 Power and empowerment

The findings of this study demonstrated that the Desa SIAGA initiative had the potential to improve MNH outcomes. However, the involvement of the community in Desa SIAGA was limited to increasing the community awareness to support women in birth preparedness, rather than full and sustained engagement. This is in contrast with the definition of Desa SIAGA (MoH Indonesia, 2006) in which it aimed to enable the community to develop capabilities to prevent and overcome their own health problems, independently. The literature has shown that in order to develop specific capabilities to prevent and overcome health problems, the community needs to be empowered (Rifkin, 2003; Laverack, 2006). Community empowerment will allow the community to address the determining factors that underpin health and to build partnerships in finding solutions (WHO, 2008). A large and compelling body of literature shows that diverse factors other than medical care, such as social, cultural, political and economic factors, have contributed to poor health outcomes (Wagstaff, 2002). These factors are defined as social determinants of health (WHO, 2008). In Central India, it was found that the high prevalence of stunting was caused by low household income (Deshmukh et al., 2013).

The definition of community participation is debatable, as has been described in Chapter 1. In the literature, the terms of community participation and community empowerment are used interchangeably (Rifkin, 2003). However, some scholars argue that the concept of participation indicates either an active or passive involvement of the community (Rosato et al., 2008), and that in order to achieve an active community involvement, empowerment is an essential component (Rosato et al., 2008; Haldane et al., 2019). Empowerment refers to 'the process and outcome of those without power gaining information, skills, and confidence and thus control over decisions about their own lives, and can take place on an individual, organisational, and community level' (Rosato et al., 2008, pp. 963). A concept of participation and empowerment offered by

Rosato et al. (2008) has described a clear understanding towards the discrepancy and the relationship between participation and empowerment (Figure 8-1).

**Figure 8-1: 'From passive to active community participation' (Rosato et al., 2008)**

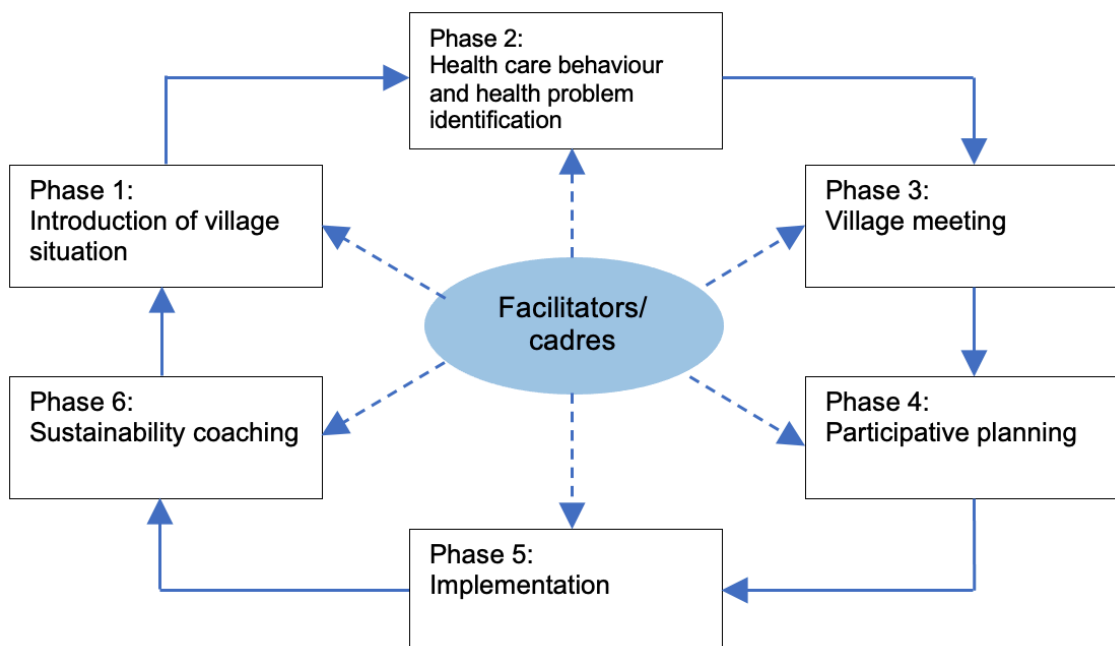


The findings of this current study demonstrated that empowerment was not a central part of the delivery and implementation of the Desa SIAGA initiative. The findings of this study highlighted that the delivery and implementation of the Desa SIAGA programme lacked the facilitation of empowerment in three main essential areas: decision making, knowledge, and economic, as described below.

### 8.3.1.1 Community empowerment in decision making

One of the apparent strengths of the delivery and implementation of the Desa SIAGA initiative was that the initiative had six phases of PLA cycle (Figure 8-2) (MoH Indonesia, 2010), as described in Chapters 1 and 6. However, the findings of this study demonstrated that community engagement and empowerment within the PLA cycle was limited.

**Figure 8-2: Participatory learning and action cycle in Desa SIAGA**



Source: MoH Indonesia, 2010



One of the key tools to facilitate community empowerment is the participatory meeting (Bhutta et al., 2011; Prost et al., 2013). In a study in India, it was found that regular participatory meetings enabled policymakers and the community to have open discussions for decision making (Sinha, 2008). Through facilitated participatory meetings, the community was empowered to identify the problems within the community, identify the resources required, and develop solutions (Sinha, 2008; Farnsworth et al., 2014; Gram et al., 2019). Yet, it was revealed that in the delivery and implementation phases of the Desa SIAGA programme, the women and community were not adequately engaged in participatory meetings. The meetings only included village government officials, cadres and village midwives. This suggests that the voices of women and the community were not directly heard. Accordingly, the strategic plans developed to overcome MNH problems were limited to MNH promotion delivered by the village midwives and cadres. These findings add to the existing literature that argues that many CPMs do not include relevant key actors from the local community in the participatory meetings. Literature has noted that the voices and views across a variety of communities have been mainly represented by CHWs and non-government organisations (NGOs) (Marston et al., 2016). Most community participation programmes show that they have lack of involvement of the community in the participatory meetings (Marston et al., 2016). However, CHWs and NGOs have not necessarily had consultation with the members of the community; nor have they been nominated by the community to represent them (George et al., 2015; Marston et al., 2016). It is suggested that community representative might be engaged in the meetings to represent the voice of the community so that the power holders could hear their problems and find solutions together accordingly.

In addition, the evaluation phase in the PLA within the Desa SIAGA initiative was unclear. It was found that there were no evaluation meetings held in the two villages. Whereas the existing evidence shows that evaluation is important to help the community, programme facilitators, supervisors, and local leaders to learn what has been achieved through the strategies implemented, and to enable the community to decide what needs to be done going forward (Hubley, 1990; Miltenburgh et al., 2019). Without an evaluation, the community and key stakeholders in the Desa SIAGA initiative might not understand whether they have achieved the programme goals and what further actions need to be addressed. Evidence from the literature reveals that involving communities in participation programmes is a long and slow process; and the outcomes are difficult to measure since the process is ongoing, often over several years (Laverack and Labonte, 2000). Yet, the process can be evaluated through a cycle of evaluation in order to identify what works and what does not (Laverack and Labonte, 2000; Butterfoss, 2006; Wandersman, 2009). Wandersman (2009) proposed a framework of participation/ empowerment programme evaluation that comprises ten

indicators, these include: 1) needs and resource assessment, 2) identifying goals, targeting populations and mapping the desired outcomes, 3) drawing on science and best practices, 4) the fit of new programmes with existing programmes, 6) detailed planning and implementation, 7) process evaluation, 8) outcome evaluation, 9) quality improvement, and 10) sustainability of the programme. However, it should be noted that the evaluation indicators (Wandersman, 2009), particularly on the aspect of science and best practices, might need to be translated into more lay language, so that it can be easily understood by the community.

Overall, the limited involvement of the local community in the PLA cycle has challenged CPMs to successfully achieve participation and/or transformation in health (Marston et al., 2016), including the Desa SIAGA initiative. A CPM is built on power sharing from those who hold the power within the community (Cyril et al., 2015). In order for the community to be able to receive the power, they need to be encouraged and empowered through facilitated participatory meetings. The empowerment will enable the community to gain more knowledge and confidence to make decisions, to access and process information and to improve their capacity to participate in a community participation programme (Marston et al., 2016; Laverack and Pratley, 2018).

### **8.3.1.2 Knowledge empowerment**

Another issue in the delivery and implementation of the Desa SIAGA initiative was that there was no participatory learning component to improve the knowledge and understanding of the women and community towards MNH problems. The findings showed that MNH education was delivered to most women during antenatal booking visits. While there were antenatal classes conducted by the village midwives, only few women joined the class due to time constraints. No strategies were identified involving the local community in MNH education. The promotion of the safe motherhood and community-based alert system in the Desa SIAGA initiative was delivered through a mass media campaign, including posters, radio, and advertisement on the television. However, the campaign was rolled out in the launch phase only in early 2000.

In line with the findings from the current study, the majority of community participation projects do not clearly explain how community intervention can increase knowledge of women and community, even though some studies showed that CPM can improve knowledge, awareness and practice of MNH. A recent mixed methods study (George et al., 2018) investigated the effects of community action to improve care seeking and service delivery of maternal health services in Gujarat, India. The project employed a report card as a monitoring tool that contained information of maternal health services to track the key services received by the women. The cards were completed by programme facilitators, who were recruited from NGO. The data from the cards was shared in separate meetings with local health authorities and medical officers, as well

as with the women. The findings demonstrated that there was improvement in women's awareness of the maternal health service entitlements and access to services. Yet, the study revealed that women had limited knowledge on the details of the monitoring tool. The NGO reported there was no ownership of the tool by the women and community since they had no knowledge about the tool. This Indian study was similar to the findings of this current study in which women had a lack of knowledge of the birth preparedness sticker (P4K sticker) and pledge card. Lack of knowledge empowerment was identified to influence the knowledge of women and community about the programme.

Knowledge empowerment is argued to be more than simply educating people. In the area of healthcare, knowledge enhancement shifts from the traditional health education in which health providers provide information to patients/community into transferring power to patients/people to enable them to be more active in improving their own knowledge (Glanz et al., 2008). Literature suggests that enhancing patient's knowledge in healthcare services has helped patients in decision-making and has improved the outcomes of patient-centred care (Jerant et al., 2013). For example, a randomised controlled trial (RCT) (Jerant et al., 2013) to evaluate the effect of tailored knowledge enhancement on colorectal cancer screening preference found that an interactive multimedia computer programme (IMCP) helped the patients to decide their preferences on the screening. The IMCP allowed patients to 'self-tailor' screening knowledge information they received that led to decision-making. The programme appeared to be user friendly since the educational background of the participants was varied. The growing development and the use of internet are suggested to help in enhancing people's knowledge in healthcare areas (Glanz et al., 2008). In the Indonesian context, many communities use social media groups to communicate, such as Instagram (Chan and Leung, 2018). This current study also found that women could easily consult with the village midwives through an instant messaging app. In addition, women often browsed information related to pregnancy/birth/postpartum online rather than asking someone else. The use of social media, therefore, could facilitate the knowledge empowerment in the Desa SIAGA programme. However, literature argues the technologies also have potential to cause harm. For example, the information may be misleading or inaccurate (Swartzendruber et al., 2018). In addition, the use of internet-based technology could be difficult in low resource settings with poor internet connection (Nugraheni et al., 2019). Thus, the use of radio, such as in Africa (Srinivasan and Diepeveen, 2018), can be improved. Knowledge enhancement can use many forms of media, either internet-based or non-internet-based, yet it is essential to engage women and community in the direct learning process to encourage them to gain more knowledge independently.

### 8.3.1.3 Economic empowerment

One of the aims of the Desa SIAGA initiative is to overcome the financial barriers that are suggested to cause delay for women to access MNH services, mainly in the events of birth or in a situation (MoH Indonesia, 2010). Community-based funding is advised as a strategy to support women to address financial barriers (Fachry et al., 2009). Nonetheless, the findings of this current study demonstrated that there was limited financial support for women that came from the community. The findings showed that the main financial resource was the family. If the family had insufficient funds, then women would borrow money from others, and this would lead to debt. Whilst the government provided a national health insurance scheme (KIS) for childbirth, it was found that the insurance provision was problematic. It was reported that the insurance only covered the childbirth expenses, and it did not automatically cover the newborn expenses. For example, if the newborn needed to be cared by a paediatrician and the newborn had no insurance, then the mother needed to pay for the service. One of the women participants had difficulty in paying her hospital costs during her childbirth, which meant she was prevented from taking her baby home from the hospital until she paid the fees.

Multiple studies have shown that economic disparities are important determinants in health (Wagstaff, 2002). For instance, the poor cannot afford adequate nutritious foods that may lead to iron deficiencies in pregnant women which in turn results in poor health outcomes, such as anaemia, to mothers and their children (Abu-Ouf and Jan, 2015). Medical interventions and health promotions alone are argued not to be sufficient to address the problems caused by the poor socioeconomic conditions (Navarro, 2009). In Sri Lanka, it was found that a national programme of free iron supplementation was less effective. It was revealed that despite the maternal compliance with iron supplementation increased, the prevalence of maternal anaemia was still high due to poor dietary compliance (Pathirathna et al., 2020). Other evidence demonstrated that poverty may cause food insecurity (Siddiqui et al., 2020). Therefore, empowering people to have better socioeconomic conditions, such as good income, will bring a greater effect (Navarro, 2009).

The existing literature has illustrated the association of economic empowerment and health status (Kim et al., 2008). Combining strategies to improve MNH and socioeconomic status is suggested to be a more effective way to address MNH problems, compared to health education alone (Isangula, 2012; Sharma et al., 2020). In India, a peer-led community-based intervention to improve awareness and knowledge of MNH care and services, and to access livelihood opportunities has increased women's capabilities to save money and use it for health emergencies, such as to cover childbirth expenses (Sharma et al., 2020). The peers were women's groups. From one group, a woman was selected to be peer educator, trained by

outreach workers, and supervised by CHWs and midwives. The peer educators conducted meeting sessions and shared training materials with other women in the groups using various tools, such as flipbooks and posters. In addition, women were advised to save money monthly in a piggy bank. However, the same study (Sharma et al., 2020) also revealed that meeting sessions with women's husbands and mothers-in-law, as an added intervention to peer groups, had more impact to provide financial access to women compared to the peer groups. It was reported that many women needed to gain permission from their husbands or mothers-in-law to join the groups. Only less than 50% of women opened bank account and it was suggested that this was because they depended on their husband's income. Similarly, in this current study, it was found that even though women were aware about financial preparation/saving to meet childbirth expenditures, they also relied on their husbands for financial support for childbirth. As a result, delays to accessing health services still existed. Therefore, women's economic independence needed to be enhanced.

### **8.3.2 The performance of the key actors**

A particular facilitator of the Desa SIAGA initiative was that there was a village midwife in each village who was supported by cadres. The village midwives had several essential duties in Desa SIAGA, including providing maternal, neonatal, and child health (MNCH), as well as elderly services, providing home visits to pregnant and post-natal women; primary health care services; surveillance; and promoting the Desa SIAGA programme. They provided the services in the village health posts and in integrated health service posts. They were residents in the village which enabled them to provide immediate services and to be part of the community. The village midwives were therefore well placed to promote the success of the Desa SIAGA initiative. Cadres were also noted to act as facilitators within the Desa SIAGA programme. Since the cadres were recruited from the local community, they appeared to be motivators and drivers to empower the community to be able to act and become agents of change (Azad et al., 2010). However, in carrying out their tasks, both village midwives and cadres faced several challenges, such as the perception of their roles, workload issues, and training needs.

#### **8.3.2.1 Perception of roles**

Role clarity was identified in this study to be essential to enable the key actors in the Desa SIAGA programme to effectively deliver and implement their duties. The findings illustrated that neither village midwives nor cadres had a clear perception regarding their position within the Desa SIAGA initiative. Even though the village midwives acknowledged that they had an essential role in Desa SIAGA, it was highlighted that they only perceived their roles as the main health providers in the village. Meanwhile cadres perceived their role to be a supporting element for the village midwives. Cadres

appeared to have lack of knowledge and awareness that they had a role as programme facilitators for the Desa SIAGA initiative as stated on the MoH Indonesia (2010). These findings add to the available literature that found many health professionals and CHWs were not aware of their roles in implementing or supporting community participation programmes (Glenton et al., 2013). The lack of role clarity affected health professionals in providing supervision for CHWs (Glenton et al., 2013; Akhtar et al., 2014). Limited role clarity appeared to weaken the delivery and implementation of the Desa SIAGA initiative. Similarly, previous studies demonstrated that unstipulated roles and responsibilities of key actors would lead poor participation in CPMs (Kilewo and Frumence, 2015). Inadequate supervision is reported to hinder CHWs to facilitate the community to actively participate in participatory programmes since CHWs feel that they lacked the confidence and motivation to perform their duties (Rosato et al., 2008; Azad et al., 2010; Saprii et al., 2015).

### **8.3.2.2 Workload and task shifting**

The work burden perceived by the village midwives appeared to affect their performance in the Desa SIAGA programme. These findings correspond to findings from other studies (Probandari et al., 2017), which reported the workload of the village midwives had hindered them to provide post-natal care in the village health posts, yet they lacked partnerships with cadres and private midwives or other private health providers to carry out the tasks. In this case, task shifting is argued to be an important strategy to overcome the challenge of workload of health professionals (Jennings et al., 2011; Dawson et al., 2014). The term of task shifting is used interchangeably with task sharing. Task shifting or task sharing refers to the delegation of non-technical duties that were traditionally performed by professional workers to workers with lower qualifications (Jennings et al., 2011).

Evidence suggests that CHWs are able to receive task shifting from midwives (Dawson et al., 2014; Sevene et al., 2020). In Mozambique, CHWs supported midwives to conduct home visits to pregnant women. They also were able to perform basic health assessments such as measuring the blood pressure of pregnant women (Sevene et al., 2020). Similarly, the findings of this current study showed that cadres had the ability to provide home visits to attach birth preparedness stickers on the pregnant women's homes. Home visits were identified by village midwives in this current study as one of the duties that they found hard to carry out. Therefore, maximising task shifting may reduce the midwives' workload. An earlier study in South Africa showed that task shifting also increased the satisfaction of health professionals since it allowed the health professionals to have time for sick leave (Tobi et al., 2008). Yet, the same study (Tobi et al., 2008) also pointed out that the task shifting required a high turnover of the staff. This current study illustrated that task shifting would be beneficial for the village

midwives since it was reported that village midwives had limited annual leave. But it appeared it could be difficult to implement task shifting if there was only one village midwife in each village (or two in the village with the higher population) with no equal partner, as there would be no supervision for cadres in her absence.

Task shifting can be problematic since some studies demonstrate that task shifting may bring disadvantages. A study in Uganda (Alamo et al., 2012) revealed that CHWs delivered a poor performance when conducting home visits and to follow up HIV/AIDS patients with antiretroviral therapy (ART). In this current study, the quality of care provided by cadres appeared to be a concern too. Most women reported that they did not attend ANC services in the integrated health service posts if the village midwives were not present, since they found that the cadres could not answer their pregnancy related queries. These findings add to the literature that argues which task can be shifted, what tasks can be delegated, and to whom (Callaghan et al., 2010). Therefore, adequate support, supervision and training should be provided for the cadres to improve their confidence and skills to enable them to provide a good quality of health services.

### **8.3.2.3 Training needs for cadres**

Despite the emphasis on training as one of the key components in the Desa SIAGA initiative, it was revealed that only a limited number of people had received training to deliver and implement Desa SIAGA (the village midwives and several village leaders). This may have contributed to a more limited implementation of the Desa SIAGA programme. A body of literature has shown that adequate training is pivotal to improve the knowledge and skills of programme facilitators in delivering and implementing CPMs (Bhutta et al., 2010). Adequate training is required for CHWs since they are recruited from lay community members without professional education in health (Kok et al., 2014). It is reported that training may enhance the performance of CHWs and their confidence to carry their tasks; and gain the community's trust (Gopalan et al., 2012; Tumbelaka et al., 2018). In contrast, limited training for CHWs was evident to hinder CHWs to perform their duties (van Pelt et al., 2020).

There is an ongoing debate on how adequate training should be delivered to CHWs. The training duration, contents, activities, locations, providers and the approach are diverse across programmes (Lehmann and Sanders, 2007; Schaaf et al., 2020). Existing evidence emphasises on several elements to embed the training: the training should be competence-and practice-based, located in CHW's working area, specific training contents and activities, and the training should be continuous (Lehmann and Sanders, 2007; Lopes et al., 2014). Research shows that even though CHWs can receive training, their knowledge and skills may vanish over time (Lopes et al., 2014). Therefore, refresher training is required (Bhutta et al., 2010; Lopes et al., 2014;

Rabbani et al., 2016). In Pakistan, Lady Health Workers (LHWs) who received a long duration of training and regular refresher training were found to be more equipped and motivated to support their communities (Bhutta et al., 2010; Rabbani et al., 2016).

However, designing structured and well-scheduled training is crucial. Previous work in India (Tripathy et al., 2016) described a sustainable training and support was provided for the CHWs; those who had undergone training were given the status of Accredited Social Health Activists (ASHAs) to facilitate women's groups intervention. This study found that trained ASHAs successfully supported the women's groups activities and that this approach led to a 31% reduction in the neonatal mortality rate (NMR) during the first two years of implementation of the community participation programme (Tripathy et al., 2016). In contrast, another study reported that too much training was also found to be one of demotivating factors for CHWs since frequent refresher training may cause them to have lack of personal time (Gopalan et al., 2012).

### **8.3.3 Government support and policy strengthening**

Previous studies provide evidence that the commitment and active involvement of local leaders in community participation programmes could bring positive impacts to the programme (Walsh et al., 2018; Fabbri et al., 2019; Miltenburg et al., 2019). In Malawi, the role of traditional leaders to encourage women to utilise maternal and neonatal healthcare services reduced the use of traditional birth attendants (TBAs), and that improved the MNH status (Walsh et al., 2018). All local governments (village heads, chief of hamlets, chief of neighbours) in this current study were aware that improving maternal health status was important. However, it was found that there was a lack of active involvement from the local government in the Desa SIAGA programme. Most village leaders handed over full responsibility to guard community health to the village midwives and CHWs. Yet, the village midwives viewed that the support from local government was scant, mainly in providing funds. This acted as a barrier in achieving several goals under the Desa SIAGA programme, such as the development of village health clinics.

Moreover, national guidance can provide a useful framework that can be used as a reference in delivering and implementing the programme over time. Evidence on women's groups practicing PLA shows that facilitation materials can be useful to guide the participatory meetings and enhance the project implementation (Manandhar et al., 2004; Tripathy et al., 2010). In West Nusa Tenggara, it was reported that a comprehensive toolkit supported the programme facilitators and key stakeholders to develop the Desa SIAGA programme (Fachry et al., 2009; Kusuma et al., 2009; Goeman et al., 2011). In contrast, lack of national guidance in the Pakistan project on CPM was reported to lead to limited success of the programme. The guidance stated that the Pakistan government should implement CPM to tackle MNCH problems within



the country. Yet, the guidance was unclear on how the programme should be set up and delivered by the policymakers; and how the community should be involved in the intervention (Akhtar et al., 2014).

Likewise, in this current study, limited national guidance appeared to influence the role clarity as described above, the training provided, as well as the delivery and implementation of the Desa SIAGA programme. It was identified that national guidance for Desa SIAGA was available, however, the documents provided a limited explanation in terms of the technical way to deliver and implement the programme. For instance, there was limited explanation on how the cadres should facilitate the programme and conduct meetings to establish the alert system; how the village midwives should supervise the cadres; and how community should be engaged in the PLA. The Desa SIAGA toolkit that was developed in the West Nusa Tenggara study (Fachry et al., 2009; Kusuma et al., 2009) seems to have the potential to provide guidance for the key actors to deliver the programmes. Nevertheless, the toolkit was not affirmed by the national government to be used at the national level (Goeman, 2011). Therefore, the utilisation of the toolkit was limited to the project area only. It should be noted that the toolkit from West Nusa Tenggara appears to lack content on the supervision of programme facilitators. To date, there is no published update version of the toolkit.

### **8.3.4 Social, cultural, and religious values**

The influence of social, cultural, and religious values in the delivery and implementation of the Desa SIAGA programme were prominent throughout the findings. There were three main areas of social and cultural values that were identified as facilitators and barriers in the delivery and implementation of the Desa SIAGA programme, including: gender stereotypes in pregnancy and childbirth, perspectives towards pregnancy and childbirth as natural events, and social capital. Whilst the role of religious beliefs and practices appeared to cut across both social and cultural values.

#### **8.3.4.1 Gender stereotypes**

Evidence has shown that MNH is influenced by gender stereotypes (Tokhi et al., 2018). According to the Office of the High Commissioner of Human Rights (OHCHR) of the United Nations (UN), gender stereotypes are “generalised views or preconceptions about attributes or characteristics, or the roles that are or ought to be possessed by, or performed by women and men” (OHCHR, 2021). The gender stereotypes view that there is different distribution of social roles, in which men have more responsibilities as the breadwinner, while women have more tasks in routine domestic work and caretaker roles (Eagly et al., 2000). Evidence has shown that social and cultural values in society shaped the gender stereotypes where pregnancy is considered to be ‘women’s business’ (Davis et al., 2012; Tokhi et al., 2018). The findings of the current study

demonstrated that there was a perception that pregnancy and childbirth were the responsibility of women. These perceived values appeared to hinder men from being actively involved in the safe motherhood programme under the Desa SIAGA initiative. A study in Mozambique (Audet et al., 2016) found that men tended to avoid accompanying their wives to attend ANC services since it was taboo for men to take responsibility in pregnancy. They also found that the lack of support in pregnancy resulted in more physical and psychological abuse in pregnant women. In contrast, the high level of male attendance at ANC in Uganda was evident to the improved uptake of skilled ANC (Tweheyo et al., 2010). These findings support the literature that suggests male involvement is crucial to improve MNH outcomes (McGowan and Quinlivan, 2019).

Gender stereotypes were found to influence women's role in decision making that can impact indirectly on MNH outcomes. For example, women were required to obtain their husbands' permissions to decide the place of birth even in the case of emergency. Even though men did not feel responsible for pregnancy and childbirth, they still had power over what women did. Therefore, gender stereotypes were one of the barriers to the Desa SIAGA programme to reduce the three delays in childbirth (delay in decision making, delay to reach the health facility, and delay to receive care). These findings support the existing literature which argue that gender inequalities have been associated with maternal health problems (Rosato et al., 2008; Ahmed et al., 2010). In two studies (Hou and Ma, 2012; Ganle et al., 2015), it was evident that women with limited power in decision making are more likely to have less access to and use maternal health services. The studies found that the decisions to utilise maternal health services were taken by husbands and mothers-in-law.

It was found that in some communities, mothers or mothers-in-law had the power in decision-making. Gendered roles appeared to change with age and status due to the influence of ethnicity. This finding is supported by the existing literature which argues the ethnicity influences the position of women's autonomy in decision making (Acharya et al., 2010). All of the participants in this current study were of Javanese ethnicity, as the majority of the villages' inhabitants (Meranti Village Government Report, 2017; Sendang Village Government, 2018). Javanese is renowned as one of many ethnicities in Indonesia that upholds patrilineal tradition in which men have the power to control over the family. Yet, the tradition also teaches the Javanese people to respect the older people (Irawanto et al., 2011). Within the Javanese context, mothers earn a highly respected status since the figures of mothers nurture the children and the whole family (Hakim et al., 2012). Hence, it might be the reason why mothers or mothers-in-law can have the same power as men in a family.

The gender stereotypes in pregnancy and childbirth appeared also to influence the policy regarding midwives in Indonesia. It is written on the MoH Indonesia document

that in the Indonesian context, midwives should be women (Kepmenkes, 2017). Nevertheless, there is scarce scientific literature that discusses the underlying reason on the gender-based rule of the midwifery system in Indonesia. According to an article (Nugroho, 2013) that was published by a national daily newspaper in Indonesia, the main influencing factor of why Indonesian midwives should be women was related directly to cultural and religious beliefs. It was reported that most Indonesian people had cultural and religious beliefs in which women should be taken care by women. Thus, a same-sex approach for maternity services was believed to be more patient-centred (Nugroho, 2013).

#### **8.3.4.2 Perception of pregnancy and delivery as natural events**

Women and the community appeared to have a conception of pregnancy and childbirth as natural occurrences in life. In this circumstance, pregnancy and childbirth as natural events are defined as natural process in which pregnancy and delivery do not require any medicalisation intervention and that treatment is sought when needed (Withers et al., 2018; Prosen and Krajnc, 2019). Although this may be perceived as a positive approach to pregnancy and birth, a lack of awareness or appreciation of the potential complexities relating to childbirth may affect the sense of importance put upon preparation, and therefore, the engagement with the programme for safe motherhood under the Desa SIAGA initiative. For instance, none of the women reported that they would seek a volunteer blood donor as a part of birth preparedness. These findings add to the growing evidence in Asian countries that show pregnancy and childbirth were seen as a natural event (Syed et al., 2008; Agus et al., 2012). These beliefs are demonstrated to hinder women in utilising maternal health services and institutional deliveries since they view that medicalisation in pregnancy, childbirth, and post-partum period will only be needed if there is an emergency (Titaley et al., 2010a; Withers et al., 2018; Ahmed et al., 2020). Interestingly, in this current study, it was not found that women viewed healthcare services as an unimportant element since women reported that they attended ANC visits and the majority had chosen an institutional delivery. However, the beliefs of pregnancy and childbirth as natural event might lead to a lack of preparedness and therefore increase the risk of a poor outcome.

#### **8.3.4.3 Social capital**

One of the facilitators in delivering and implementing the Desa SIAGA programme was the value of social capital. Social capital refers to social networks among individuals or groups in a community that result in social support (Portes, 2000; Kawachi et al., 2013; Villalonga-Olives and Kawachi, 2015). The social capital drives individuals to invest in social relations and expect that these investments will give a benefit in return (Lin, 2002). This study found that the strong social capital in the villages has encouraged local participation to support women in pregnancy and childbirth. These findings

support the long discussion in the existing literature that show the social capital could result in health benefits (Rodgers et al., 2019; Xue et al., 2020). Evidence has shown that social capital is one of the determining factors to influence people in rural areas to support women in solving maternal health problems (Story, 2012). The social capital enables the community to work together and improve their capacities to resolve the problems by utilising their own resources (Hamal et al., 2018). In the Indonesian context, strong social capital is embedded in everyday life practices, for example working together to hold a wedding party and visit a community member who is ill (Suwignyo, 2019; Slikkerveer, 2019). This value is utilised by the national government to be the root of the development of the Desa SIAGA initiative (MoH Indonesia, 2010). This finding obviously showed that the community already was an asset to the success of the Desa SIAGA programme, yet the limited empowerment of the community in the initiative might weaken the positive value of social capital.

#### **8.3.4.4 Religious beliefs and practices**

The religious beliefs and practices were identified to traverse social and cultural values. For instance, religious beliefs were found to influence gender stereotypes. In this study, religious beliefs could be a challenge for women's freedom to make decisions. It appeared that some women required their husband permission to make a decision due to their religious tenet, such as Islam. In addition, religious practices limited women's interaction with men, therefore men other than women's husbands (such as neighbours) faced challenges to support women in the event of emergency. Likewise, considerable literature from LMICs demonstrated that religious beliefs are associated with the limited uptake of maternal health services (Gyimah et al., 2006; Yaya et al., 2018). In India, religious judgments were reported to hinder CHWs to deliver their tasks, such as maternal health education and immunisations. It was reported that the CHWs that mostly were Hindus were not allowed to enter Muslim women's houses (Sarin and Lunsford, 2017). Nevertheless, a study in Nigeria (Al-Mujtaba et al., 2016) showed that it was not always the case that religious beliefs impeded women to access maternal health services. In their study, Al-Mujtaba et al. (2016) found that both Muslim and Christian women had no preferences towards the gender of the health providers, the competencies and positive attitudes of the providers were more essential.

The religious beliefs appeared to bring a complex influence in improving MNH outcomes. It was identified that the different interpretation of religious beliefs was influenced by cultural norms within the community. In the Indonesian context, for instance, according to the history, Islam was spread out in Indonesia through social and cultural approaches. As a result, cultural and religious practices were embedded in the daily life (Moodward, 2010). The exegesis of Islamic religious practices is identified to be influenced by cultural norms (Alexander & Welzel, 2011). For example, as of the

interpretation of patriarchal practice in Islam, scholars believe that the Holy Quran in fact states that men and women are equally the same and it is written throughout the text (Barlas, 2019). One of the Quran verses says:

*“And for women are rights over men similar to those of men over women.”*  
(2:226)

However, the findings of this study also illustrated that religious beliefs had a positive aspect in delivering and implementing the Desa SIAGA programme. Religious beliefs appeared to be a significant motivation for the community to provide social support, in which in turn could bring benefit to the Desa SIAGA programme. These findings strengthened the body of literature that studied the association between religious beliefs and health improvement which found the religious beliefs could have positive and negative sides in the health development (Chatters, 2000). Previous studies found that the correlation between religiosity and social supports came from the role of the religious congregations (Chatters, 2000; Lim and Putnam, 2010; Maselko et al., 2011). A frequent and regular congregation were suggested to build a friendship and sense of belonging that allowed people to seek social supports (Stroope, 2011). Different mechanisms of how religious beliefs influenced social support were found in this current study. It was revealed that social support was a result of the religious tenet of ‘rewards’ from and ‘fear’ of God. In this case, providing support for other people would bring benefit in return, in contrast ignorance would cause punishment from God. The complexity of religious beliefs’ influences in Indonesian society showed that there is a need to use approaches which are sensitive to Islamic beliefs within the delivery and implementation of the Desa SIAGA programme to improve MNH outcomes.

#### **8.4 Strengths and limitations of the study**

A core strength of this study was the use of the case study approach. The case study method has allowed the researcher to gain an insider perspective and (crucially) understand the underlying processes to enable a detailed identification of the facilitators and barriers to the Desa SIAGA initiative; providing evidence on ways the programme could be tailored and improved going forward. In addition, the researcher was a community nurse working in maternal care. Since she is also a Javanese woman, she knows the language as well as social and cultural values upheld by the participants. She was aware that being an insider in the study provided advantages during data collection, such as easy access to the study sites, building and obtaining trust/acceptance from the participants. Thus, the participants were more open to the researcher and that allowed the researcher to gain a deeper and wider understanding to the data gathered. The researcher was also aware that being an insider also might give disadvantages. For example, she understood Islam was the majority of the participants’ religion, in which it could lead to interpretation bias about the complexity of

religious influences in delivering and implementing the Desa SIAGA initiative. However, the supervisory team had different cultural and religious background with the researcher and the participants. Therefore, there were many queries from the supervisors and long discussions in interpreting the findings of this study.

The study had several limitations. First, this study did not interview husbands and the wider family since this study intended to investigate the community support outside the core family. Desa SIAGA was aimed to empower the whole village to be alert and ready to support pregnant women. In the Indonesian context, it is common that husbands are working out of the village or town. Hence, examining the support outside the core family could provide further insights. Secondly, this study was conducted in two study sites only. It was relatively a small number compared to the total number of Desa SIAGA in Sukoharjo regency (167 Desa SIAGAs). Nonetheless, the two villages had distinct characteristics, Sendang village was more urban than Meranti. These diversities added the richness of the data.

Thirdly, the interviews were in the Indonesian Language and all transcripts were translated into English. The meaning loss of the interpretation during translation process was anticipated. In order to mitigate the meaning loss, several English versions of the transcriptions were back translated by professional translators. The researcher conducted all the interviews, transcript verbatims and translations by herself. The meaning loss was suggested to be minimum since the researcher could observe the facial expressions and intonations of the participants during the interviews. Accordingly, the researcher could ensure the meaning consistency of the transcripts in the English version.

## **8.5 Recommendations for practice, education, research, and policy**

The following recommendations were developed based on the findings of this PhD thesis. The recommendations are expected to strengthen the policy, promotion, delivery and implementation of the Desa SIAGA initiative that leads to the improvement of MNH outcomes.

### **8.5.1 Recommendations for practice and education**

The mechanism to deliver and implement the CPM through Desa SIAGA is a multi-faceted process which requires the involvement of micro, meso, and macro elements. In order to initiate the enhancement of the potential of the Desa SIAGA initiative to improve MNH in Indonesia, several recommendations for practice and education will consist of:

- a. Raising the awareness of the importance of community participation in the Desa SIAGA programme through dissemination of the findings of this current study. The details of the dissemination plan are available in Appendix Z. Some of the strategies will include:
  - Dissemination to Indonesian Midwives Association (IMA), Indonesian National Nurses Association (INNA) and Indonesian Public Health Association (IPHA). Presentations of the findings will be delivered at annual meetings at a national, provincial and regional level.
  - Presentation of the findings to Nampan Community Health Centre and in the two study sites (Meranti and Sendang) through village meetings. A summary of the findings, without identifiable quotations, will be developed as interactive media. This strategy is expected to initiate further discussion with health professionals and key stakeholders of how to develop the Desa SIAGA initiative going forward.
- b. Designing and developing a curriculum/toolkit for training and education in the Desa SIAGA programme. The curriculum/toolkit should cover:
  - The PLA cycle contents, participatory communication techniques and cultural/religious sensitivity. The PLA cycle will include a start-up meeting, information campaign via social media/ radio/ posters, ensuring the involvement of key actors, mid cycle review, end review, feedback loop to assure the model is responsive to the needs of women and community.
  - The participatory communication techniques. The techniques will use an approach based on dialogue that allows the sharing of perceptions, information and opinions among women, husbands, wider family (mothers and mothers-in-law), local community, cadres, health providers, and key stakeholders in participatory meetings, thereby facilitating empowerment.
  - The development of a community-based alert system that covers notification, transportation, financial, and blood donor system. Communication/alert system in the Desa SIAGA initiative can be improved by using social media, for example WhatsApp groups, Instagram, and Facebook. In the Indonesian context, it is common that in a neighbourhood environment, there is WhatsApp group as a means of communication. The group consists of a chief of neighbourhood and head of families/ households. Thus, the WhatsApp group will enable to spread information and to take action. In the area with limited internet connection, the use of radio communication will be enhanced.
  - Women empowerment that includes decision making, knowledge and economic empowerment.
  - Joint training between health providers, cadres, DASIAT members and key stakeholders to strengthen the partnership.

- An integrated and regular training for programme facilitators (cadres and DASIAT members). It is expected that the training will incorporate actions to help embed cadres within the community.
  - Effective task shifting between village midwives and cadres/DASIAT members (alert youth in health) members, as well as supportive supervision.
  - Engaging private midwives and private health providers to be involved in the Desa SIAGA initiative.
- c. Developing an application for community-based alert system. The researcher has initiated a consultation with a colleague that is an expert in the development of software. It is expected that the application can link a pregnant woman, husband, family, nearest neighbours, cadres, village midwife, and key stakeholders. The basic information that is included in the birth preparedness sticker and pledge card can be merged into the application. Once a woman becomes pregnant, she then can activate the alert-system.
- d. Incorporating the Desa SIAGA initiative in the curriculum for the community nursing subject (theory and practice) for the bachelor degree. The curriculum will adopt the similar topics as planned in point (b) above.

### **8.5.2 Recommendations for research**

Further research is required to address the limitations of this current study. An investigation needs to be carried out in the following areas:

- In-depth qualitative research which investigates the perspectives and experiences of husbands, wider family (mothers and mothers-in-law), and key stakeholders. This research will allow an in-depth understanding towards the underlying process, the facilitators and barriers of father and family involvement in the Desa SIAGA initiative, particularly in the decision making to utilise maternal health services.
- Qualitative research to explore how women can be more involved within the Desa SIAGA programme. Further insight is needed to inform the development of the strategy for the empowerment of women.
- Participatory evaluation research to build in an evaluation cycle in the Desa SIAGA initiative. This research will provide a valuable data on the evaluation cycle that was identified to be missing in the Desa SIAGA programme delivery and implementation. This research will also allow the gathering of feedback on how CPM in the Desa SIAGA can be improved, for example by using a feedback model such as Pendleton's that includes: 1) highlighting positive behaviours; 2) reinforcing these behaviours and including a discussion of skills to achieve them; and 3) discussing what the person could have been done differently.

Follow-up research has been initiated to develop study on integrating Desa SIAGA with group antenatal care (group ANC). The study aims to empower women and community



through pregnancy class. Pregnancy class was one of the essential elements in Desa SIAGA to provide health information to women in a group care, however it was identified that the programme was not yet optimal. Several initial meetings were conducted with supervisor and TNO. TNO is a research team from the Netherlands that builds group ANC and tests it in 7 countries: South Africa, Ghana, Kosovo, Suriname, Netherlands, UK (England and Northern Ireland) and Belgium. From their study and this PhD thesis, it can be seen that there is potential to combine group ANC with the Desa SIAGA programme.

Several parts of this current study have been presented both internationally and nationally in Indonesia. The feedback received from the events were used to develop the study. Further disseminations were also developed. Please see Appendix Z for the details.

### **8.5.3 Recommendation for policy**

It is expected that the findings of this study can inform policymakers in developing the policy regarding community participation programme. Several pivotal points for the policy are:

- Create clear guidance for each area within the Desa SIAGA initiative, including maternal and child health, elderly, environmental health, communicable and non-communicable diseases, as well as disaster management.
- Assign health professionals in accordance with the area of expertise. The national government needs to consider assigning several health professionals in the village who will be responsible to carry out each goal in the Desa SIAGA initiative, in addition to the village midwives. Community health nurses and public health practitioners have the potential to be included in the team.
- Incorporate the Desa SIAGA with the MoH Indonesia programme called *Nusantara Sehat* or Healthy Archipelago which has run since 2015. This programme aims to strengthen primary health care services and to close the gap of the health professional shortage in rural and remote areas across Indonesia. The programme recruits fresh graduates from diverse health professionals. Salary and facility are provided by the MoH Indonesia. However, adequate training in the Desa SIAGA initiative is required to be merged in the placement preparation.

Since the study was funded by the Indonesian Government, the report will be handed to the policymakers at the national level, thus will enable the researcher to discuss the findings as well as its recommendations.

## 8.6 Conclusion

This study has addressed the overall study aim by exploring the perspectives and experiences of pregnant women, post-natal women, neighbours of the pregnant women, village midwives, cadres, and key stakeholders (chief of neighbourhoods, chief of hamlets, and village heads). This study also made several unique contributions to the area of knowledge. An in-depth understanding of how community participation works within the Desa SIAGA initiative was revealed through a case study design. Several facilitators and barriers appeared to influence the delivery and implementation of the Desa SIAGA programme to improve MNH: 1) lack of empowerment in decision making, knowledge, and economic; 2) lack of clearly defined roles; 3) government support and policy; and 4) social, cultural, and religious values.

However, it appeared that all these core factors were interlinked. The findings strengthen the ongoing debate that community participation is a complex phenomenon and context dependent. The delivery and implementation of a CPM to improve MNH needs to consider the micro, meso, and macro elements that underpin the complexity of MNH. Active participation from the community will remain limited unless it is underpinned by strong policy and supported by key actors who are committed to work in partnership across disciplines and sectors to deliver and implement the initiative.

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## Appendices

### Appendix A: Procedure to record pledge card

#### 2. Menyambut Persalinan (hal 19)

Pengisian amanat persalinan harus terisi lengkap dan diharapkan sudah selesai pada kunjungan K4 kehamilan.

Cara pengisian sebagai berikut:

- Saya : Nama Ibu
- Alamat : Tempat tinggal ibu, suami, dan keluarga pada kehamilan ini
- Penolong persalinan  
Ditulisikan nama dokter/bidan yang akan diharapkan menolong persalinan. Bisa lebih dari 1 jika ibu berharap dokter atau bidan yang memberi pelayanan antenatal menolong persalinannya.
  1. Dokter/Bidan: nama dokter/bidan alternatif 1 yang menolong persalinan
  2. Dokter/Bidan: nama dokter/bidan alternatif 2 yang menolong persalinan
- Untuk Dana Persalinan, disiapkan sendiri/ditanggung JKN/dibantu oleh: sebutkan nama yang akan membantu (Dilingkari bagian yang dipilih)
- Untuk kendaraan/ambulan desa oleh: Tuliskan nama dan nomor telepon orang yang dipastikan siap pakai saat dibutuhkan pada tanggal perkiraan persalinan. Bisa ditulis lebih dari 1 orang
- Metode KB setelah melahirkan yang dipilih: tuliskan rencana metode KB yang akan digunakan oleh ibu setelah melahirkan.
- Untuk sumbangan darah (golongan darah, tulis jenis golongan darah) dibantu oleh: Sebutkan nama dan nomor telepon orang yang mempunyai golongan darah yang sama dan bersedia menyumbangkan darah (bisa lebih dari 1 orang).
- Tulis tempat, tanggal, bulan dan tahun dilakukan kesepakatan amanat persalinan.
- Mengetahui suami/orang tua/wali (Dilingkari bagian yang dipilih): tulis nama dan tanda tangan suami/orang tua/wali yang ada saat dibuat amanat persalinan ini.
- Bidan/Dokter (Dilingkari bagian yang dipilih): Tulis nama dan tanda tangan bidan/dokter yang bersama ibu saat membuat amanat persalinan ini.
- Saya: Tulis nama dan tanda tangan ibu yang membuat amanat persalinan.

## Translation

### 2. Birth preparedness (page 19)

The recording of pledge card should be done no later than the forth antenatal booking visit.

The procedures are as follows:

- I : name of pregnant woman
- Address: where the pregnant woman lives, her husband, and family at the current pregnancy
- Birth attendant  
The name of doctor/ midwife who will assist the delivery. It can be more than one birth attendant if the pregnant woman is expecting assisted by the doctor or midwife who provide the antenatal care.
  1. Doctor/ midwife: name of doctor/ midwife alternative 1 who will assist the delivery
  2. Doctor/ midwife: name of doctor/ midwife alternative 2 who will assist the delivery
- As for birth fund, it will be self-funded/ will be borne by national health insurance/ will be assisted by: write the person who will fund the birth expenses (circle the option chosen)
- With regards to transportation/ village ambulance will be supported by: write down the name of the person who will be certainly ready to transport the pregnant woman should the labour start in the expected date of delivery. It can be written for more than one name.
- Family planning/ contraception plan after delivery: write down the plan of family planning method that will be used by pregnant woman after delivery.
- Blood donor (blood group, write down the blood group) will be supported by: write down the name and the contact number of the person who has the same blood group and will be ready to give blood donor (it can be more than one person).
- Write down the place, date, month, and year of the pledge.
- Witnessed by husband/ parent/ guardian (circle the option chosen): write down the name husband/ parent/ guardian and they should put their signature at the time of the pledge is made.
- Midwife/ doctor (circle the option chosen): write down the name of the midwife/ doctor and they should sign the card at the time of the pledge is made.
- I am: write down the name of pregnant woman and she should sign the pledge card.

**Appendix B: Example of the recording of pledge card that is available on the national technical guideline (handwriting statements are for illustration purpose)**

Contoh:

## MENYAMBUT PERSALINAN

(Agar Aman dan Selamat)



Kementerian Kesehatan  
Republik Indonesia

Saya : Ny. Surti Sunarko  
 Alamat : Rumah Rusun Jambusari, Kel. Sawangan Rt. 05/Rw. 03

Memberikan kepercayaan kepada nama-nama ini untuk membantu persalinan saya agar aman dan selamat, yang diperkirakan pada, Bulan: Januari.....Tahun: 2015...

 Penolong persalinan:  
 1. ~~Dokter~~/Bidan: Aminah  
 2. Dokter/Bidan: .....

 Untuk Dana Persalinan, disiapkan sendiri/ditanggung JKN/ dibantu oleh: BPJS

 Untuk kendaraan/ambulan desa oleh:  
 1. Tn. Sunarko HP 081216433534  
 2. .... HP .....  
 3. .... HP .....

 Metode KB setelah melahirkan yang dipilih:  
IUD

 Untuk sumbangan darah (golongan darah B ) dibantu oleh:  
 1. Anto HP 081216663435  
 2. Zulaha HP 081216663435

Jakarta, 18 Agustus 2014

Mengetahui, Suami/Orang Tua/Wali  (..... <u>Sunarko</u> .....)	(Bidan/Dokter)  (..... <u>Aminah</u> .....)	Saya  (..... <u>Surti Sunarko</u> .....)
---	---	--



## Translation

### BIRTH PREPAREDNESS

(Towards a safe and secure childbirth)

I : *Mrs. Surti Sunarko*

Address: *Rumah Rusun Jambusari Kel. Sawangan RT 05/ RW 03*

am giving my trust to the below names assist my delivery so that I can have a safe and secure birth, that is expected due in, Month: January, Year: 2015.

Birth attendant:

1. ~~Doctor~~/ midwife: *Aminah*
2. Doctor/ midwife:

As for birth fund, it will be self-funded/ will be borne by national health insurance/ will be assisted by: *BPJS*.

With regards to transportation/ village ambulance will be supported by:

1. *Mr. Sunarko*                      HP: *081216433534*
2. ....                                      HP: .....
3. ....                                      HP: .....

Family planning/ contraception plan after delivery: *IUD*.

Blood donor (blood group *B*) will be supported by:

1. *Anto*                                      HP: *081216663435*
2. *Zulaika*                                      HP: *081216663435*

*Jakarta, 18<sup>th</sup> August 2014*

Witnessed by,  
Husband/ parent/ guardian

Midwife/ doctor

I am,

*(Sunarko)*

*(Aminah)*

*(Surti Sunarko)*

### Appendix C: Procedure to record P4K sticker

#### 3. Stiker P4K (stiker terlampir)

Nama	:	Nama ibu hamil
Taksiran Persalinan	:	Diisi Tanggal, Bulan dan Tahun Perkiraan Persalinan sesuai "Catatan Kesehatan Ibu Hamil" di Hal 20 Buku KIA
Penolong Persalinan	:	Ditulis nama dokter/bidan penolong persalinan sesuai dengan "Amanat Persalinan" hal 19
Tempat persalinan	:	Ditulis nama Fasilitas pelayanan kesehatan (tempat bersalin) sesuai dengan "Amanat Persalinan" hal 19
Pendamping Persalinan	:	Ditulis nama dan hubungan keluarga yang mendampingi saat persalinan sesuai dengan "Amanat Persalinan" hal 19
Transportasi	:	Ditulis jenis transportasi yang dipakai (kendaraan atau ambulan desa) sesuai dengan "Amanat Persalinan" hal 19
Calon pendonor darah	:	Ditulis nama dan nomor telepon pendonor darah sesuai dengan "Amanat Persalinan" hal 19

Nama Ibu	:	
Taksiran Persalinan	:	20
Penolong Persalinan	:	
Tempat Persalinan	:	
Pendamping Persalinan	:	
Transportasi	:	
Calon Pendonor Darah	:	

*Menuju Persalinan Yang Aman dan Selamat*

### Translation

#### 3. P4K sticker (sticker is attached)

Nama	:	Name of pregnant woman
Expected date of delivery	:	Write down the date, month, and year of the expected date of delivery as stated on the section "Maternal health record" on page 20 of Maternal and Child Health Book.

Birth attendant	:	Write down name of doctor/ midwife who will assist the delivery as stated on the pledge card on page 19 of Maternal and Child Health Book.
Place of birth	:	Write down healthcare facility (birthplace) as stated on the pledge card on page 19 of Maternal and Child Health Book.
Companion	:	Write down name of the person who will accompany during delivery as well as its relation to pregnant woman as stated on the pledge card on page 19 of Maternal and Child Health Book.
Transportation	:	Write down transportation type that will be used (vehicle or village ambulance) as stated on the pledge card on page 19 of Maternal and Child Health Book.
Blood donor	:	Write down the name and the contact number of the donor as stated on the pledge card on page 19 of Maternal and Child Health Book.

## **Birth preparedness and complication readiness**

Pregnant woman's name :

Expected date of delivery : - - 20

Birth attendant :

Place of birth :

Companion :

Transportation :

Blood donor :

***Towards a safe and secure childbirth***

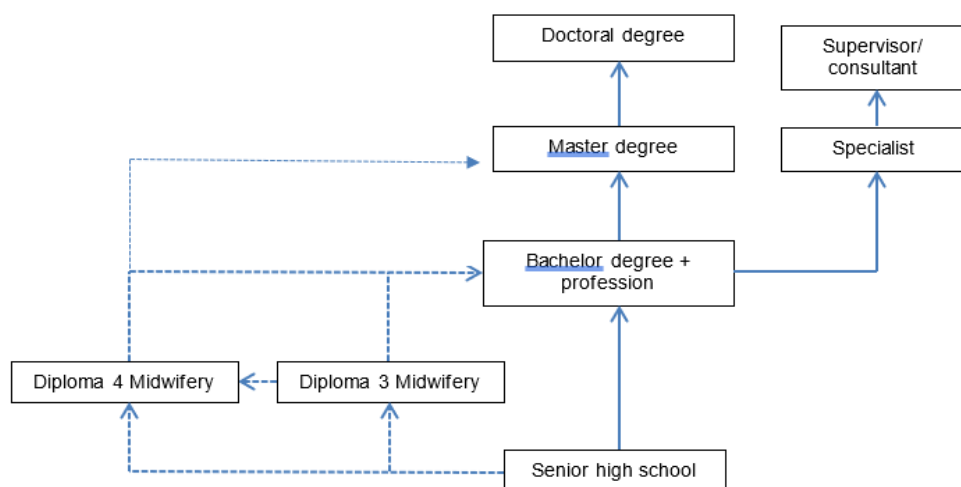
## Appendix D: Overview of Indonesian midwives

The regulation of midwifery in Indonesia is ruled by *Ikatan Bidan Indonesia* (IBI) or Indonesian Midwives Association (IMA). In designing every policy and regulation, IMA refers to the policy issued by International Confederation of Midwives (ICM) where IMA is one of the members since 1956 (Kepmenkes, 2007). In terms of the definition of midwives, IMA considers not only the international definition of midwives but also the aspect of social, cultural, and community condition in Indonesia. Based on IMA, an Indonesian midwife is “a woman graduated from midwifery education which approved by government and professional organisation of midwives under the Republic of Indonesia and have competences as well as qualifications in order to be registered, certified, and/or legally licenced to perform midwifery practice” (Kepmenkes, 2007).

### Education system

Historically, to be a midwife in Indonesia needed only one year training through the School of Midwives or *Sekolah Bidan*, in which students enrolled at the end of junior high school. Later in 1984, the School of Midwives was closed. In 1989, the government formed the Midwives Education Programme or *Program Pendidikan Bidan* (PPB) to respond to the Safe Motherhood programme, the prospective students of this programme had to have a basic nursing qualification (Heywood et al., 2010). Seven years later, in 1996, the government replaced PBB with the current Midwives Academy or *Akademi Bidan* (Akbid) programme (IBI, 2018). Nowadays, the midwife’s education has developed as described in the following figure.

**Figure of Flow chart of midwifery education system in Indonesia**



## Description:

—> : Credential lane  
 - - - -> : Transitional lane

In Indonesia, a midwife should be a woman (Kepmenkes, 2007). She has to graduate from senior high school. There are two education lanes in midwifery education namely practitioner and academic. Practitioner lane requires a woman to enrol to diploma 3 or 4 midwifery then she can continue to bachelor degree if needed. Both diploma 3 and 4 are vocational education but students graduate from diploma 4 can continue to master degree without attending bachelor level (HPEQ DIKTI, 2012). The national curriculum guidance for midwifery education stated that credit point for diploma 3 is 110 and should be undertaken within six semesters (three years) (Pusdiklatnakes Depkes RI, 2011). As for diploma 4, the credit point should be undertaken for four years study is 115 (eight semesters) (BPPSDMK Kemkes, 2014).

Meanwhile the academic lane requires a woman enrol to bachelor degree and profession then into higher education level such as master and doctoral degree (HPEQ DIKTI, 2012). Bachelor and profession degree of midwifery are quite new level in midwifery education system in Indonesia in which they were established in 2008. Bachelor degree of midwifery has credit point between 140 and 160 and should be undertaken by the students within eight semesters (four years). Bachelor of midwifery is a degree where the students are expected to understand midwifery knowledge and technology. Once the student midwives graduated from bachelor degree, they have to undertake professional degree of midwifery for two semesters (25 – 31 credit points). This degree aims to educate and train the students to act based on critical thinking and to be able to undertake independent task in addition to the collaborative once. Student midwives in professional degree are provided with special skills based on stakeholders' demand. During the study, the students are placed in various health facilities such as hospital, private clinic, and community setting (Badan Keahlian Dewan Perwakilan Rakyat, 2016).

The national curriculum guidance clearly mentioned about all core subjects should be adapted by higher education that carry out midwifery programme. However, there is no statement in any documents regarding minimum requirement of delivery should be attended by student midwives in Indonesia so that they can be called as qualified midwives. Based on Indonesian National Qualification Framework (KKNI), students graduate from diploma 3 and 4 are both categorised as qualified midwives even though diploma 4 is called as midwives of applied science. In KKNI, diploma three is

in level 5, diploma four is in level 6 along with bachelor degree, and professional degree is in level 7 (BPPSDMK Kemkes, 2015; Perpres, 2012). However, it is argued that the practice in the field of diploma three and diploma four of midwifery is difficult to distinguish (Badan Keahlian Dewan Perwakilan Rakyat, 2016).

Graduating from diploma or bachelor degree does not necessarily mean that midwives can work directly both in clinical and community settings. They need to take the national competency test or *uji kompetensi nasional* in Indonesia lingua franca. Once they have passed this test, they will get certificates confirming that they have the minimum standard competency of midwives so that they are eligible to undertake midwifery task (Indonesian Midwifery Act, 2019). Otherwise, they have to re-take the test. Following this certification stage, they have to apply for registered midwives to Indonesian Midwifery Council in which this registration has to be re-applied every five years. Once midwives obtained Certificate of Registration issued Midwives (STR) then they can work as professional midwives (Indonesian Midwifery Act, 2019; IBI, 2007).

#### ***Role of Indonesian midwives***

In accordance with the Indonesian Midwifery Act (2019), midwives in Indonesia have four major areas of services including health service for mother, service for children, women's reproductive health and family planning service, and midwifery service in community. The roles of midwives include midwifery service provider; midwifery service manager; health educator and counsellor; clinical educator, mentor, and facilitator; driver for community participation and women empowerment; and researcher. In carrying their duty, Indonesian midwives can work independently and collaboratively with other health professionals (Indonesian Midwifery Act, 2019).

#### ***Midwives practice***

In Indonesia, midwives can work either in public health facilities or private health facilities (Indonesian Midwifery Act, 2019). For those who work in public health facilities can also have their own private practice. In order to be private midwives, they have to meet several requirements such as: (i) graduated from professional degree (bachelor and profession); (ii) should have one year experience working in health facilities; (iii) in addition to competency certificates and STR, they need also to obtain private midwives' registration or *Surat Ijin Praktik Bidan* from the government; (iv) they have to be registered as *Bidan Delima* midwives. *Bidan Delima* is an accreditation programme for private midwives managed by IMA since 2003 funded by Johnson & Johnson and United States Agency for International Development (USAID). This programme aims to educate and incentives the private midwives to

meet and maintain the standard of care (Center for Health Market Innovations, 2019; IBI, 2015).

Additionally, there is special duty for certain limitation conditions for midwives from Indonesian Government. This duty requires midwives to be placed in areas where there are no health professionals providing services (Indonesian Midwifery Act, 2019). It seems that this programme is implemented by sending midwives into rural and remote areas such as *Bidan Desa* or Village Midwife programme in Desa SIAGA (Alert Village). Village midwife is a programme developed by Indonesian government in 2002 to respond the safe motherhood programme (Sood et al., 2004). The government place midwives in rural and remote areas across Indonesia to not only providing maternity service but also other diseases and outbreaks (MoH Indonesia 2019, Sood et al., 2004).

In terms of assisting birth in the community, village midwives are the main health professionals (Sood et al., 2004). However, the Indonesian government through the Decree of MoH of Indonesia regulates midwives should not provide home birth, women have to come to health facilities to give birth instead (MoH of Indonesia, 2014). In this circumstance, village midwives can assist the delivery in community health centres. For those women who live far from health facilities, they should come to maternity waiting home (MWH) provided by local government at the end phase of their pregnancies (van Lonkhuijzen et al., 2009; WHO, 2004). However, while promising, there is no report about how many MWH have been built across Indonesia and how many expectant mothers utilise the facilities (Bappenas, 2012). Meanwhile, as for hospital delivery, it is located in urban area and the main health professional who attend the delivery is obstetrician with midwives as assistance. Midwives may attend normal delivery in hospital under obstetrician supervision (National Research Council, 2013).

### **Training**

In order to ensure that their knowledge and skills are updated, Indonesian midwives are required to undertake various additional training. Some of the trainings are already undertaken by the midwives but they need to be updated whilst some trainings are new. These training are integrated in midwifery update (MU). This training is a mandatory training managed by IMA that should be taken by all midwives in order to renew STR every five years (IBI, 2016). MU training covers various important competencies for midwives such as emergency obstetric care (EmOC), integrated antenatal service, normal delivery service, post-natal service, neonatal service, low birth weight management and ethics. With regards to the

assessment for midwife's competency test, there is training for the assessors named *Pelatihan Asesor Kompetensi Kerja Bidan Indonesia (AKKBI)* or Assessor Training for Competency Assessment for Midwife Performance. The assessors come from clinical and academic background. The training is held by IMA collaborated with Human Resources Department of Indonesian Ministry of Health (IBI, 2016).

### **Professional organisation**

As professional health care providers, Indonesian midwives have a professional association named Ikatan Bidan Indonesia (IBI) or Indonesian Midwives Association (IMA) that established in 1951. This organisation aims to uniting, fostering, and empowering midwives in order to support health development in Indonesia (Indonesian Midwifery Act, 2019). As described above, IMA is an active member of ICM since 1956 (Kepmenkes, 2007). In order to maintain and develop the quality of midwifery education and service, IMA has collegium under its organisation (IBI, 2013).

Moreover, in 2008 midwifery education institution across Indonesia established an organisation called Asosiasi Pendidikan Kebidanan Indonesia (AIPKIND) or Indonesian Midwifery Education Association. This organisation aims to strengthen and develop midwifery education in Indonesia (AIPKIND, 2016).



## Appendix E: Search Strategy in Electronic Databases

### Ovid MEDLINE(R) 1946 to Present

Search	Search Terms	Results
1	Pregnancy Outcome/	50788
2	birth outcome\$.tw.	4826
3	Maternal Welfare/	6546
4	maternal outcome\$.tw.	2279
5	Maternal Mortality/	10396
6	Infant Mortality/	28664
7	newborn mortality.tw.	272
8	maternal death.tw.	3195
9	newborn death.tw.	86
10	1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9	94554
11	community participation.tw.	2701
12	women\$ group\$.tw.	1712
13	community empowerment.tw.	339
14	community engagement.tw.	1957
15	participatory learning.tw.	147
16	community organi?ation.tw.	605
17	community involvement.tw.	1382
18	community development.tw.	1394
19	community action.tw.	649
20	11 or 12 or 13 or 14 or 15 or 16 or 17 or 18 or 19	10349
21	10 and 20	298
22	limit 21 to (english language and yr="1990 -Current")	259

### Embase

1947 to 2017 June 6

Search	Search Terms	Results
1	Pregnancy Outcome/	61396
2	birth outcome\$.tw.	7399
3	Maternal Welfare/	15175
4	maternal outcome\$.tw.	4637
5	Maternal Mortality/	24161
6	Infant Mortality/	25178
7	newborn mortality.tw.	429
8	maternal death.tw.	5512
9	newborn death.tw.	141
10	1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9	124171
11	community participation.tw.	3574
12	women\$ group\$.tw.	2549
13	community empowerment.tw.	477
14	community engagement.tw.	3338
15	participatory learning.tw.	208
16	community organi?ation.tw.	858
17	community involvement.tw.	1817
18	community development.tw.	1697
19	community action.tw.	895
20	11 or 12 or 13 or 14 or 15 or 16 or 17 or 18 or 19	14689
21	10 and 20	366
22	limit 21 to (english language and yr="1990 -Current")	345

### CINAHL

Search	Search Terms	Results
S1	(MH "Pregnancy Outcomes")	24,067

S2	(MH "Maternal Mortality") OR (MH "Infant Mortality")	14,157
S3	((MH "Maternal Mortality") OR (MH "Infant Mortality")) AND (S1 OR S2)	14,157
S4	"participatory action groups" OR (MH "Action Research") OR (MH "Group Exercise")	8,166
S5	(MH "Group Exercise") OR (MH "Support Groups") OR (MH "Women's Health Services") OR (MH "Women's Rights") OR "women group"	17,260
S6	((MH "Group Exercise") OR (MH "Support Groups") OR (MH "Women's Health Services") OR (MH "Women's Rights") OR "women group" AND (S4 OR S5))	17,260
S7	((((MH "Group Exercise") OR (MH "Support Groups") OR (MH "Women's Health Services") OR (MH "Women's Rights") OR "women group") AND (S4 OR S5)) AND (S3 AND S6)) Published Date: 19900101-20171231 Narrow by Language: English	135

### Global Health 1973 to Current

Search	Search Terms	Results
1	Pregnancy Outcome.mp.	2796
2	birth outcome\$.tw.	2494
3	Maternal Welfare.mp.	26
4	maternal outcome\$.tw.	647
5	Maternal Mortality/	4291
6	Infant Mortality/	4801
7	newborn mortality.tw.	174
8	maternal death.tw.	1324
9	newborn death.tw.	44
10	1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9	14375
11	community participation.tw.	1954
12	women\$ group\$.tw.	572
13	community empowerment.tw.	235
14	community engagement.tw.	1183
15	participatory learning.tw.	88
16	community organi?ation.tw.	198
17	community involvement.tw.	4546
18	community development.tw.	1271
19	community action.tw.	979
20	11 or 12 or 13 or 14 or 15 or 16 or 17 or 18 or 19	8862
21	10 and 20	129
22	limit 21 to (english language and yr="1990 -Current")	127

### PsyInfo

<1806 to May Week 5 2017>

Search	Search Terms	Results
1	Pregnancy Outcome/	1153
2	birth outcome\$.tw.	1340
3	Maternal Welfare.mp.	715
4	maternal outcome\$.tw.	243
5	Maternal Mortality.mp.	719
6	Infant Mortality.mp.	1847
7	newborn mortality.tw.	21
8	maternal death.tw.	196
9	newborn death.tw.	18
10	1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9	5528
11	community participation.tw.	1804
12	women\$ group\$.tw.	581
13	community empowerment.tw.	341
14	community engagement.tw.	1808

15	participatory learning.tw.	167
16	community organi?ation.tw.	793
17	community involvement.tw.	1845
18	community development.tw.	1958
19	community action.tw.	696
20	11 or 12 or 13 or 14 or 15 or 16 or 17 or 18 or 19	9478
21	10 and 20	59
22	limit 21 to (english language and yr="1990 -Current")	57

**ASSIA**

Search	Search Terms	Results
1	Pregnancy Outcome/	179780
2	birth outcome\$.tw.	13252
3	Maternal Welfare/	61361
4	maternal outcome\$.tw.	6478
5	Maternal Mortality/	102133
6	Infant Mortality/	166629
7	newborn mortality/	52292
8	maternal deaths/	172551
9	newborn deaths/	98473
10	(Pregnancy Outcome/) OR (birth outcome\$.tw.) OR (Maternal Welfare/) OR (maternal outcome\$.tw.) OR (Maternal Mortality/) OR (Infant Mortality/) OR (newborn mortality/) OR (maternal deaths/) OR (newborn deaths/)	509783
11	community participation/	1349159
12	women\$ group\$.tw.	119082
13	community empowerment/	266099
14	community engagement/	1020910
15	participatory learning/	76768
16	community organi?ation/	3450815
17	community involvement/	1039467
18	community development/	6268229
19	community action/	3369177
20	(community participation/) OR (women\$ group\$.tw.) OR (community empowerment/) OR (community engagement/) OR (participatory learning/) OR (community organi?ation/) OR (community involvement/) OR (community development/) OR (community action/)	9333067
21	((Pregnancy Outcome/) OR (birth outcome\$.tw.) OR (Maternal Welfare/) OR (maternal outcome\$.tw.) OR (Maternal Mortality/) OR (Infant Mortality/) OR (newborn mortality/) OR (maternal deaths/) OR (newborn deaths/)) AND ((community participation/) OR (women\$ group\$.tw.) OR (community empowerment/) OR (community engagement/) OR (participatory learning/) OR (community organi?ation/) OR (community involvement/) OR (community development/) OR (community action/))	216430
22	limit 21 to (english language; yr="1990 -Current"; subject; database; and document type)	2580

**Social Sciences Citation Index**

Search	Search Terms	Results
1	Pregnancy Outcome	7816
2	birth outcome\$	3976
3	Maternal Welfare/	97
4	maternal outcome\$	3164
5	Maternal Mortality/	1470

6	Infant Mortality/	2564
7	newborn mortality	570
8	maternal death	972
9	newborn death	513
10	1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9	9945
11	community near/5 participation	1843
12	women\$ group\$	14528
13	11 or 12	16345
14	10 and 13	778
15	limit 21 to (english language and yr="1990 -Current" and low-middle income countries)	62

### Maternity & Infant Care Database (MIDIRS)

<1971 to August 2020>

Search	Search Terms	Results
1	Pregnancy Outcome\$.tw.	13517
2	birth outcome\$.tw.	2548
3	Maternal Welfare.mp.	9
4	maternal outcome\$.tw.	1505
5	Maternal Mortality.mp.	6846
6	Infant Mortality.mp.	7700
7	newborn mortality.tw.	130
8	maternal death.tw.	1654
9	newborn death.tw.	41
10	1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9	29766
11	community participation.tw.	63
12	women\$ group\$.tw.	125
13	community empowerment.tw.	14
14	community engagement.tw.	61
15	participatory learning.tw.	15
16	community organi?ation.tw.	3
17	community involvement.tw.	49
18	community development.tw.	41
19	community action.tw.	24
20	11 or 12 or 13 or 14 or 15 or 16 or 17 or 18 or 19	368
21	10 and 20	98
22	limit 21 to (english language and yr="1990 -Current")	97

## Appendix F: Study characteristics

A: intervention cluster

B: control cluster

No.	Study (Sorted by Publication Year)	Type of Research	Aim of Study	Participants	Data Collection	Model/ Intervention of Community participation approach	Outcomes/ Variables	Findings
1.	Ahluwalia et al., 2003	Qualitative study	To evaluate a community capacity building and empowerment initiative, undertaken by Community-based Reproductive Health Project (CBRHP).	Community member and health professionals in 52 villages in North-western Tanzania	<ul style="list-style-type: none"> <li>- Document review</li> <li>- Interviews</li> <li>- Program data from CBRHP</li> <li>- Observation</li> </ul>	<ul style="list-style-type: none"> <li>- Training for master trainers that were recruited from various sectors of the community. The training covered: the core ideas of community participation, participatory decision-making, and communication.</li> <li>- Community mobilisation: there was a participatory meeting between village leaders and master trainers to discuss the principles of community mobilisation, transportation problems for mothers with obstetric emergencies, and supportive supervision for CHWs. Then the village leaders conducted community-wide meetings to discuss, refine, and implement the transportation and VHW support plans for the communities.</li> </ul>	<p>"Increase in the recognition of danger signs and symptoms, timely referral of women with obstetrical complications to health facilities at the district level which have functioning emergency care facilities and trained staff, allocation of community resources for transport during medical emergencies, development of strategies for financial and supervision support for VHWs, and increased participation by the community, especially women, in decision making."</p>	<ul style="list-style-type: none"> <li>- CBRHP programmes were able to link and integrate the communities with the existing PHC programme and facilities.</li> <li>- The communities were actively involved in maternal health activities and supporting VHWs. For example: providing transportation system-based community during health emergencies; and financial support for VHWs.</li> </ul>

No.	Study (Sorted by Publication Year)	Type of Research	Aim of Study	Participants	Data Collection	Model/ Intervention of Community participation approach	Outcomes/ Variables	Findings
2.	Manandhar et al., 2004	Cluster-randomised controlled trial	To test community-based participatory intervention to reduce neonatal mortality rate	In Makwanpur district, Nepal; Nov 1, 2001- Oct 31, 2003; Number of clusters: A: 12; B: 12; Closed-cohort; women in reproductive age (15–49 years), married; and potential to become pregnant	<ul style="list-style-type: none"> <li>- Observation</li> <li>- Surveillance</li> <li>- Interview (verbal autopsy)</li> </ul>	<p>A: Women's group facilitated by local women practicing participatory learning and action (PLA) cycle; met once a month in 10 meetings cycle to identify problems in maternal and neonatal health; discuss the strategies to encounter problems; implement the strategies; and evaluate the results.</p> <p>B: Health service strengthening and training</p>	<p>Primary outcome: neonatal mortality rate.</p> <p>Secondary outcomes: stillbirths and maternal deaths, uptake of antenatal and delivery services, home care practices, infant morbidity, and healthcare seeking.</p>	<ul style="list-style-type: none"> <li>- Neonatal mortality reduced 30%</li> <li>- Maternal mortality was lower in intervention arm</li> <li>- Women in intervention clusters were more likely to have antenatal care, institutional delivery, trained birth attendance, and hygienic care than were controls</li> </ul>
3.	Sood et al., 2004	Cross-sectional study	To assess the effects of SIAGA campaign and interventions in Indonesia in the endline survey.	<ul style="list-style-type: none"> <li>- Women who had had a live birth in the previous 15 months.</li> <li>- The husband of every third women</li> <li>- Midwives</li> <li>- Community influential in the village where the women resided.</li> </ul>	<ul style="list-style-type: none"> <li>- Baseline survey in April 2001.</li> <li>- Midline survey in December 2002.</li> <li>- Endline survey in February 2004: quantitative face-to-face interviews.</li> </ul>	<p>SIAGA campaign including:</p> <ul style="list-style-type: none"> <li>- Bidan SIAGA (alert midwife): promoting the midwife as a skilled and friendly MNH provider.</li> <li>- Warga SIAGA (alert community): engaging 'individual citizens to be alert and prepared for childbirth by doing their part in arranging for transport, funds, and a blood donor, and by recognising danger signs, in the spirit of community help'.</li> <li>- Desa SIAGA (alert village): empowering villages 'to become alert by creating notification, transport, funding, and blood donation system' for a safe motherhood.</li> </ul> <p>The first campaign was Suami SIAGA (alert husband) that was implemented in 1999-2001. Then gradually followed by the above three campaigns.</p>	<p>"The level of message recall related to the SIAGA campaign, the level of reported actions taken as a result of exposure, and the levels of interpersonal communication related to campaign messages reported by those who were exposed to the campaign."</p>	<ul style="list-style-type: none"> <li>- The community mobilisation strategies showed that there was a positive exposure towards the SIAGA campaign to improve MNH outcomes.</li> <li>- There was an increasing of awareness level of the campaign.</li> </ul>

No.	Study (Sorted by Publication Year)	Type of Research	Aim of Study	Participants	Data Collection	Model/ Intervention of Community participation approach	Outcomes/ Variables	Findings
4.	Skinner et al., 2009	Qualitative study	To evaluate a pilot project that used a community participatory approach to introduce birth preparedness	<ul style="list-style-type: none"> <li>- Key management personnel</li> <li>- Local midwives</li> <li>- Village leaders</li> <li>- Village volunteers</li> <li>- Village members</li> </ul> <p>15 villages in Kampong Chhnang, Cambodia</p>	<ul style="list-style-type: none"> <li>- Interviews</li> <li>- Focus group discussion</li> <li>- Fieldnotes</li> <li>- Observations</li> </ul>	<ul style="list-style-type: none"> <li>- Training for midwives and village volunteers.</li> <li>- Health education to women and their families using posters.</li> <li>- Focus groups that aimed to facilitate the midwives to hear village members' voice about their concern for the health of childbearing women in their communities.</li> </ul>	<ul style="list-style-type: none"> <li>- Number of women receiving antenatal care.</li> <li>- Number of women delivered by the health centre midwife.</li> <li>- Number of women delivered by a TBA.</li> <li>- Number of referrals to hospital.</li> </ul>	"Community engagement was not only feasible but was also a successful and cost-effective way to introduce birth preparedness."
5.	Fachry et al., 2009	Mixed methods study	To evaluate the development of Desa SIAGA (DSAJ) programme in West Nusa Tenggara	<ul style="list-style-type: none"> <li>- Mothers</li> <li>- Village heads/ secretaries</li> <li>- Village midwives</li> <li>- Village facilitators</li> <li>- Health centre facilitators</li> </ul>	<ul style="list-style-type: none"> <li>- Household survey</li> <li>- Individual interviews</li> <li>- Focus group discussions</li> </ul>	<ul style="list-style-type: none"> <li>- Established community-based alert system that covered: notification network, community fund network, blood donation network, transportation network, family planning information post.</li> </ul>	<ul style="list-style-type: none"> <li>- Antenatal coverage</li> <li>- Deliveries assisted by skilled birth attendants (SBAs)</li> <li>- Family planning acceptors</li> <li>- Number of maternal and neonatal death due to delays</li> </ul>	<ul style="list-style-type: none"> <li>- Antenatal coverage increased</li> <li>- Deliveries assisted by skilled birth attendants (SBAs) increased by 88%</li> <li>- Increased on knowledge on the importance of family planning</li> <li>- The DSAJ emergency transportation system has made the handling of referral cases easier and finding blood donor was easier.</li> </ul>
6.	Morrison et al., 2010	Qualitative study	To explore how women's group practicing participatory learning and action in Nepali study that was conducted by Manandhar et al. (2004) brought a positive impact	<ul style="list-style-type: none"> <li>- Women's group members</li> <li>- Women who did not attend the group</li> <li>- Mother-in-law</li> <li>- Men</li> <li>- Community health volunteers</li> </ul>	<ul style="list-style-type: none"> <li>- Focus group discussions</li> <li>- Focus group interviews</li> <li>- Unstructured observations of group meetings</li> </ul>	<p>The intervention was from Nepali's study (Manandhar et al., 2004):</p> <p>A: Women's group facilitated by local women practicing participatory learning and action (PLA) cycle; met once a month in 10 meetings cycle to identify problems in maternal and neonatal health; discuss the strategies to encounter problems; implement the strategies; and evaluate the results.</p>	<p>Mechanisms implemented by women's groups initiative as a community participation programme.</p>	<p>Women's group practicing participatory learning and action had a positive impact on neonatal mortality.</p> <p>Four underlying factors of the successful programme:</p> <ul style="list-style-type: none"> <li>- The group learned about maternal and newborn health</li> <li>- Develop confidence of group members</li> <li>- Disseminated information to their communities</li> <li>- Built community capacity to take action.</li> </ul>

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						B: Health service strengthening and training		
7.	Tripathy et al., 2010	Cluster-randomised controlled trial	To test community-based participatory intervention to improve birth outcomes and reduce maternal depression	In three contiguous districts of Jharkhand and Orissa-Saraikela Kharswan, West Singhbhum, and Keonjhar, India; July 31, 2005 to July 30, 2008; Number of clusters: A: 18; B: 18; Open-cohort; Women in reproductive age (15–49 years), live in the project area; and who had given birth during the study	- Observation - Surveillance - Interview (verbal autopsy)	A: Women's group facilitated by local women practicing participatory learning and action (PLA) cycle; met monthly, for a total of 20 meetings in some phases to identify problems in maternal and neonatal health; discuss the strategies to encounter problems; implement the strategies; and evaluate the results.  B: Health service strengthening and training	Primary outcomes: reductions in NMR and maternal depression scores.  Secondary outcomes: stillbirths, maternal and perinatal deaths, uptake of antenatal and delivery services, home-care practices during and after delivery, and health-care-seeking behaviour	- NMR was 32% lower in intervention clusters  - There was no significant effect on maternal depression
8.	Azad et al., 2010	Cluster-randomised controlled trial	To test community-based participatory intervention to improve birth outcomes and reduce maternal mortality	In three districts in Bangladesh (Bogra, Faridpur and Moulavibazar); Feb 1, 2005 to Dec 31, 2007; Number of clusters: A: 9; B: 9; Open-cohort; Women in reproductive age (15–49 years), residing in the project area; had given birth during the study period	- Observation - Surveillance - Interview (verbal autopsy)	A: Women's groups practicing PLA that consist of four phases (identify and prioritise maternal and neonatal problems, plan strategies, community meeting, put strategies into practice, and assess effect), once a month; 20 meetings cycle  B: Health service strengthening and training	Primary: neonatal mortality rate (NMR)  Secondary: maternal deaths, stillbirths, uptake of antenatal and delivery services, home-care practices during and after delivery, infant morbidity, healthcare seeking behaviour, perinatal mortality, and early and late NMR	Women's groups did not significantly reduce neonatal mortality in poor rural populations of Bangladesh. However, it increased the knowledge and awareness of women on maternal and neonatal health issues.



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9.	Rath et al., 2010	Mixed methods of process evaluation	To report process evaluation data from women's groups practicing participatory learning and action that may have contributed to maternal and neonatal health (MNH) outcomes in eastern India.	Group facilitators, women's groups members, community members, and stakeholders.	<ul style="list-style-type: none"> <li>- Document review</li> <li>- Focus group discussion</li> <li>- Meeting observations</li> <li>- Descriptive statistical analysis of data on meeting attendance, activities, and characteristic of group attendees.</li> </ul>	Women's groups practicing participatory learning and action from Ekjut trial that was conducted by Tripathy et al. (2010)	Maternal and neonatal health outcome.	<p>Participatory interventions with community group such as women's groups can influence MNH outcomes if key interventions characteristics are preserved and tailored to local contexts.</p> <p>Scaling-up interventions requires a combination of understanding about the context that affect the acceptability and delivery of the intervention, planning of replication of key content and implementation features, and strong support from related agencies.</p>
10.	More et al., 2012	Cluster-randomised controlled trial	To test community-based participatory intervention to improve birth outcomes and reduce maternal mortality	In the capital of Maharashtra state, Mumbai, India; 1st October 2006 to 30th September 2009; Number of clusters: A: 24; B: 24; Pregnant and non-pregnant women in all age and have no plan for migration	<ul style="list-style-type: none"> <li>- Observation</li> <li>- Surveillance</li> <li>- Interview (verbal autopsy)</li> </ul>	<p>A: Women's groups facilitated by local women practicing PLA met fortnightly in 36-meeting cycle; The groups identify the available services, selecting suitable perinatal health care, knowing best practice, and discussing best care with family and providers.</p> <p>B: N/A</p>	Stillbirth and neonatal mortality rates	<ul style="list-style-type: none"> <li>- The stillbirth rate was non-significantly lower in the intervention arm and the neonatal mortality rate higher</li> <li>- The extended perinatal mortality rate did not differ between arms</li> </ul>
11.	Rosato et al., 2012	Mixed methods study	Evaluated the strategies to tackle maternal and infant health problems developed by women in rural Malawi	Women's groups which formed in 2005 by researcher team.	<p>Quantitative data:</p> <ul style="list-style-type: none"> <li>- Descriptive statistic</li> <li>- Monitoring system of the women's</li> </ul>	Women's group practicing PLA. Same with the RCT study that conducted by Lewycka et al. (2013) in Malawi.	"Local strategies identified and implemented by women's groups in rural Malawi to prevent and manage neonatal, infant and maternal health problems and reduce mortality."	"Women's groups help communities to take control of their health issues and have the potential to reduce neonatal, infant and maternal mortality and morbidity in the longer term."

No.	Study (Sorted by Publication Year)	Type of Research	Aim of Study	Participants	Data Collection	Model/ Intervention of Community participation approach	Outcomes/ Variables	Findings
					<p>group intervention - Survey</p> <p>Qualitative data was collected through focus group discussions and semi-structured interview</p>			
12.	Ogwang et al., 2012	Case series	To investigate community involvement in obstetric emergency management so as to inform strategies for improving maternal health status in the district.	Heads of households who had lived in the district for at least two years and had children born within 24 months prior to the study.	Survey using standardised semi-structured questionnaire	Community involvement in the management of obstetric emergencies.	<ul style="list-style-type: none"> <li>- Individual characteristics</li> <li>- Knowledge about symptoms of obstetric emergencies, actions to take in case obstetric emergency occurs, consequences of life-threatening conditions and what communities do when obstetric emergencies develop among women in their communities.</li> <li>- Types of community involvement available/undertaken and factors influencing community involvement in the management of obstetric emergencies including health service and community factors and individual characteristics</li> </ul>	Community participation activities in supporting women who develop obstetric complication: <ul style="list-style-type: none"> <li>- Planning for support</li> <li>- Sensitizing communities</li> <li>- Identifying transportation means</li> <li>- Referring women to health facility.</li> </ul>

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13.	Wangalwa et al., 2012	Pre-test and post-test non-randomised interventional study.	To evaluate the effectiveness of community health strategy (CHS) to improve maternal and neonatal health outcomes in Kenya.	133 women with children aged 0 ≤ 23 months in 19 villages. The villages were randomly selected.	Face-to-face interviews using a structured questionnaire	The CHS establishes a community unit (CU) to provide service for a local population of 5000 people. In each CU, there was one CHW for 20 households. For every 25 CHWs there was one Community Health Extension Worker (CHEW) to provide supervision and technical support.  There was a community dialogue session to increase awareness of maternal and newborn health issues with the aid of data displayed on chalk board.  The intervention was conducted between October 2008 and June 2010.	"Practices on antenatal care, malaria prevention and management, delivery services, thermal care, cord care, post-delivery care, breastfeeding and nutrition, integrated management of childhood illnesses, mother-to-child transmission of HIV."	The CHS appeared to be an effective approach to deliver community-based intervention.
14.	Colbourn et al., 2013	Cluster randomized trial	To evaluate facility-based intervention and community mobilisation through participatory women's groups to reduce maternal, neonatal, and perinatal mortality.	<ul style="list-style-type: none"> <li>- In three districts of the central region of Malawi: Kasungu, Lilongwe, and Salima.</li> <li>- June 2007 – December 2010.</li> <li>- Number of clusters: A: 44; B: 17.</li> <li>- Open cohort.</li> <li>- All pregnant women including in-migration and out-migration women.</li> </ul>	<p>For primary outcome:</p> <ul style="list-style-type: none"> <li>- Monthly community surveillance</li> <li>- Interview (verbal autopsy)</li> </ul> <p>For secondary outcome:</p> <ul style="list-style-type: none"> <li>- Monthly community health facility surveillance</li> <li>- Collection of process</li> </ul>	<p>A:</p> <ul style="list-style-type: none"> <li>- Community mobilisation intervention (CI): participatory women's group practicing 'action cycle' to identify and prioritise maternal and neonatal health problems, decide upon local solutions, advocate for, implement and evaluate the strategies. It was facilitated by volunteer facilitators and supported by nine staff across the allocated cluster.</li> <li>- Quality improvement (FI): breakthrough series collaboratives; coaching of facility staff (Plan-Do-Study-</li> </ul>	<p>Primary: maternal, neonatal, and perinatal mortality.</p> <p>Secondary:</p> <ul style="list-style-type: none"> <li>- For both interventions: percentage of deliveries at a health facility.</li> <li>- At facility level (for the quality improvement trial): percentage of maternal deaths subjected to maternal death audit, case-fatality rates, practice of signal obstetric care.</li> <li>- At community level (for the women's group trial): number of women's groups mobilized annually, percentage of pregnant</li> </ul>	<p>Primary outcome:</p> <ul style="list-style-type: none"> <li>- NMR was 22% lower in combined intervention arms (CI+FI).</li> <li>- Perinatal mortality was 16% lower in CI intervention arms.</li> <li>- There was no significant reduction in neonatal and maternal mortality in CI only intervention arms.</li> <li>- There was no reduction in maternal, neonatal or perinatal mortality in FI only intervention areas.</li> </ul> <p>Secondary outcome:</p>

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					data on the interventions	Act cycles); change packages; death reviews; and training on maternal and neonatal emergencies.  - 15 clusters with CI only; 15 clusters with FI only; 14 clusters with CI+FI.  B: no interventions (17 clusters).	women attending women's groups.	- The women's group had no effect on increasing health facility deliveries in all areas. - Neonatal case-fatality rates were low and not different between FI and control arms. - Stillbirth rates were low in FI than control arms. - Low percentage of women who attended the women's groups. - The interventions were highly cost-effective.
15.	Lewycka et al., 2013	Factorial, cluster-randomized controlled trial	To assess the effects of women's groups and health education by peer counsellors on mortality and breastfeeding rates in rural Malawi.	-A cohort of 43,719 women of childbearing age was defined in 2004 during a baseline household survey. Later included men. -Open cohort	- Surveillance - Verbal autopsy interview - Observations	A: - Women's groups practicing participatory learning and action - Volunteer peer counselling intervention - Health service strengthening  B: Health service strengthening	Primary: maternal, perinatal, neonatal, and infant mortality rates (MMR, PMR, NMR, and IMR, respectively).  Secondary: "for the women's group intervention were maternal and infant morbidity, skilled antenatal, delivery, and postnatal care, tetanus toxoid immunisation, use of malaria prophylaxis, insecticide treated bed nets during pregnancy, and PMTCT services, infant immunisations, early EBF, and reduced use of prelacteal feeds."	The study suggested that women's group intervention mobilising communities and volunteer peer counsellor health education could improve maternal and child health outcomes in poor rural population in Africa.  The interventions were cost-effective.
16.	Fottrell et al., 2013	Cluster randomized trial	To assess the effect of participatory women's group intervention with higher population coverage in	In Bogra, Molavibazar, Faridpur District, Bangladesh; January 1, 2009 – June 30, 2011; Number of clusters: A: 9; B: 9; Open cohort	- Observation - Surveillance - Interview (verbal autopsy)	A: Women's groups practicing PLA  B: Health service strengthening  <b>Facilitator:</b> N/A  <b>Meeting:</b> Once a month, 20 meetings cycle	Primary: neonatal mortality rate, stillbirth rate, early neonatal mortality rate, late neonatal mortality rate, perinatal mortality rate, pregnancy-related mortality ratio.	- Participatory women's groups with high population coverage in Bangladesh strongly and statistically significantly reduced neonatal mortality.  - The neonatal mortality rate was significantly lower in the intervention arm

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			neonatal mortality in Bangladesh.				Secondary: healthcare behaviour.	<ul style="list-style-type: none"> <li>- The intervention was cost-effective.</li> <li>- Improvements were seen in hygienic home delivery practices, newborn thermal care, and breastfeeding practices.</li> </ul>
17.	Tripathy et al., 2016	Cluster-randomised controlled trial	To test the effect of participatory women's groups facilitated by Accredited Social Health Activists (ASHAs) on birth outcomes, including neonatal mortality.	Women of reproductive age (15–49 years)	<ul style="list-style-type: none"> <li>- Observation</li> <li>- Interview</li> <li>- Documentary analysis</li> <li>- Surveillance</li> </ul>	<p>A:</p> <ul style="list-style-type: none"> <li>- Participatory women's groups facilitated by Accredited Social Health Activists (ASHAs).</li> </ul> <p>It followed rules of participatory learning and action and had a four-phase structure, like previous women's groups interventions" in Nepal (Manandhar et al., 2004), India (Tripathy et al., 2010; Azad et al., 2010), Bangladesh (Azad et al., 2010), Malawi (Lewycka et al., 2013; Coulbourn et al., 2013). The phases included identify and prioritise problems; identify and prioritise strategies; implement the strategies; and evaluate the meeting and cycle and progress.</p> <ul style="list-style-type: none"> <li>- Strengthening village health, sanitation, and nutrition committees.</li> </ul> <p>B: Strengthening village health, sanitation, and nutrition committees</p>	<p>Primary outcome: neonatal mortality.</p> <p>Secondary outcomes:</p> <ul style="list-style-type: none"> <li>- stillbirths</li> <li>- perinatal mortality</li> <li>- maternal mortality</li> <li>- home care and care seeking practices</li> </ul>	<ul style="list-style-type: none"> <li>- ASHA's had an essential role in supporting women's groups through participatory learning and action cycle meetings at high coverage.</li> <li>- The intervention could reduce neonatal mortality rate especially among the poorest mothers.</li> <li>- The intervention could increase health behaviour, birth preparedness, and institutional births.</li> </ul>

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18.	Sharma et al., 2016	Five-year controlled, non-randomised, repeated cross-sectional study.	To evaluate maternal health interventions focusing on women's groups to promote maternal health among rural women in Nepal.	Four villages: two intervention villages and two control villages.  Women of reproductive age: 625 in intervention area and 611 in the control.	- Survey interviews: baseline, midline and endline.	The intervention was women's groups practicing participatory learning and action that was similar to Nepali study conducted by Manandhar et al (2004).  The group consisted of women of reproductive age with at least one child under the age of two; mothers-in-law-; and husbands.	Antenatal care (ANC), skilled birth attendance (SBA), and institutional delivery.	The community-based health promotion intervention appeared to have a positive effect on the uptake of ANC (attending at least once) and PNC, intake of iron/folic acid intake, but no effect on institutional delivery. However, there was no effect on ANC attendance in the first trimester. Various barriers were found to influence the institutional delivery such as distance and social and cultural values.
19.	Esienumoh et al., 2017	Participatory action research (PAR) project (qualitative study)	Facilitating community empowerment to plan to take action in preventing maternal mortality.	Rural community in the southern Nigeria.  Women in childbearing age; Community members: chiefs, clergy, mothers-in-law/ older women, husbands, TBAs, older women of childbearing age, younger women of childbearing age, and SBAs (doctor and midwives)	- Interviews - Focus groups with member of the community - Observation to the practices of SBAs and TBAs	Participatory action that consisted of four phases: problem identification, planning, action and evaluation.  Participatory action research group (PRAG): midwives, primary healthcare coordinator, community health extension workers, medical officer, TBAs, women of childbearing age, older women, husbands, clergy, and community leaders.	- The perspectives of the community members on the causes of maternal mortality. - Women attitudes towards maternal mortality. - Women's maternal health practices. - Women's perspectives about factors which contribute to maternal deaths. - Women's perspectives on the prevention of maternal mortality.	The community can be an essential resource in the programme to improve maternal health status. They can be mobilised and empowered to identify, to plan, and to take action in partnership with SBAs to prevent maternal death.
20.	Hamal et al., 2018	Qualitative study	Exploring the existing social accountability mechanisms for maternal health, the influencing factors and	Policy advisors, health providers, health managers, civil society organisations (CSOs)/ non-government organisations (NGOs)/ women's groups, locally elected representatives,	- In-depth interviews - Focus group discussions	All social accountability models that are implemented in the district of Dahod and Panchmahal, Gujarat, India	Social accountability mechanisms for maternal health, the factors they address and how the results of these mechanisms are perceived.	There are two mechanisms of social accountability in Gujarat namely formal government structures and civil society structures. Both mechanisms appeared to influence the structural and intermediary factors of maternal health. They

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			how the results of the mechanisms are perceived.	and pregnant and new mothers.				had a positive influence on the increase of maternal health service uptake.
21.	Fabbri et al., 2019	Factorial, cluster-randomised controlled trial	To understand the effectiveness of report cards on the coverage of maternal and neonatal health care; and the potential mechanism by which the report cards might work.	Women of reproductive age (15 – 49 years)	<ul style="list-style-type: none"> <li>- Interview</li> <li>- Surveillance</li> <li>- Observation</li> </ul>	<p>Maternal health report cards</p> <p>A:</p> <ul style="list-style-type: none"> <li>- 44 clusters shared the cards with providers</li> <li>- 45 clusters shared the cards with community members</li> <li>- 45 clusters shared the cards with providers and community members</li> </ul> <p>B: 44 control clusters did not share the cards.</p>	Health-care utilisation, quality of care, and healthy behaviour.	<p>The intervention of report cards and community meetings did not show an effect on the improvement of coverage of maternal and neonatal health care.</p> <p>However, there was an increasing number of women who attended antenatal care visits in the control group.</p>
22.	Miltenburg et al., 2019	Mixed methods study	To presents the results of two years of implementing (2013–2015) community groups for maternal health care in Magu District, Tanzania.	Group participants: community group facilitators, community leaders, and group members who took part in community group activities (women)	Data was collected as an ongoing process from facilitator and meeting reports, through interviews with facilitators and local leaders and from focus group discussions with community	Community group intervention that adopted women's groups intervention carried out in India, Nepal, Bangladesh, and Malawi. The community groups consisted of male and female community members practicing participatory learning and action	<ul style="list-style-type: none"> <li>- Problem and strategies identification</li> <li>- Decision making process on problems and strategies</li> </ul>	<p>"The majority of groups prioritized problems related to the availability of and accessibility to health services. The most commonly actioned solution was the provision of health education to the community. Almost all groups (95%) experienced a positive impact on the community as results of their actions, including increased maternal health knowledge and positive behaviour changes among health care workers. Facilitators were positive about the community groups, stating that they were grateful for the gained knowledge on maternal</p>

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					group participants.			health, and positively regarded the involvement of men in community groups, which are traditionally women-only.”
23.	Swain et al., 2019	Quasi-experimental time series only one experimental design.	Evaluating community-based continues training on birth preparedness and complication readiness on pregnancy outcome.	Pregnant women aged 15-49 years with gestational age 24 weeks and less.  1080 participants were selected through a multistage cluster random sampling.	<ul style="list-style-type: none"> <li>- Survey using a pre-coded structured questionnaire.</li> <li>- Standardised birth preparedness assessment index</li> <li>- Baseline survey: in-depth interviews</li> </ul>	<p>Community-based continuous training.</p> <p>Note: There was limited explanation about the intervention.</p>	<p>Unfavourable outcomes: pregnancy ending with any of the condition like adverse maternal outcomes like such as PPH, prolonged/difficult labour, obstetric fistula, maternal death and adverse neonatal outcomes such as LBW baby and neonatal death.</p> <p>Favourable outcomes: pregnancy not associated with conditions like PPH, prolonged labour, obstructive fistula, maternal death, LBW baby and neonatal death.</p>	Supervised birth preparedness training, regular sensitisation and follow-up sessions were effective to promote positive behaviour on birth preparedness and complication readiness and that would improve maternal and neonatal health outcomes.
24.	Sevene et al, 2020	Cluster-randomised controlled trial	To reduce all-cause, maternal and perinatal mortality and major morbidity by 20% in intervention clusters.	<ul style="list-style-type: none"> <li>- Women of reproductive age</li> <li>- Pregnant women aged 12 – 49 years.</li> </ul>	<ul style="list-style-type: none"> <li>- Surveillance</li> <li>- Interview (verbal autopsy)</li> <li>- Observations</li> </ul>	<p>A:</p> <ul style="list-style-type: none"> <li>- Community-level interventions for pre-eclampsia (CLIP) package consisted of community engagement and CHW-led visits with eligible women in their homes or primary health centres (PHC), with a focus on the detection and management of pregnancy hypertension.</li> <li>- The community engagement sessions (meetings) were held with community leaders, women and their mothers, mothers-in-law, and husbands.</li> </ul>	<p>Primary outcome: a composite of all-cause maternal, fetal, and newborn mortality and major morbidity.</p> <p>Secondary outcomes: birth preparedness and complication readiness, delivery in facility able to provide EMOC, and proportion of institutional births.</p> <p>Other putcomes: knowledge and awareness about pre-eclampsia in pregnancy,</p>	<p>There was no effect of community-level interventions for pre-eclampsia in reducing maternal, fetal, and newborn mortality or major morbidity.</p> <p>However, there was a positive contact between women and CHW.</p>



No.	Study (Sorted by Publication Year)	Type of Research	Aim of Study	Participants	Data Collection	Model/ Intervention of Community participation approach	Outcomes/ Variables	Findings
						<ul style="list-style-type: none"> <li>- CHW was equipped with mobile health-guided clinical assessment for preeclampsia.</li> <li>- A community transport scheme.</li> <li>- Facility enhancement</li> </ul> <p>B: Women received routine ANC provided at PHCs by nurses and doctors; CHWs visits (CHWs did not receive training on CLIP package); facility enhancement.</p>	gestational age at birth, and mode of delivery.	
25.	Qureshi et al., 2020	Cluster-randomised controlled trial	To reduce all-cause, maternal and perinatal mortality and major morbidity through Lady Health Worker (LHW)-facilitated community engagement and early diagnosis, stabilisation, and referral of women with preeclampsia.	Married pregnant women aged between 15 – 49 years.	<ul style="list-style-type: none"> <li>- Surveillance</li> <li>- Interview (verbal autopsy)</li> <li>- Observations</li> </ul>	<p>A:</p> <ul style="list-style-type: none"> <li>- Community-level interventions for pre-eclampsia (CLIP) package consisted of community engagement and LHW (Lady Health Worker)-led visits with eligible women in their homes or primary health centres (PHC), with a focus on the detection and management of pregnancy hypertension.</li> <li>- The community engagement sessions (meetings) were held with community leaders, women and their mothers, mothers-in-law, and husbands.</li> <li>- CHW was equipped with mobile health-guided clinical assessment for preeclampsia.</li> <li>- A community transport scheme.</li> <li>- Facility enhancement</li> </ul> <p>B: Women received routine ANC provided at PHCs by nurses and doctors; CHWs visits (CHWs did not receive training on CLIP package); facility enhancement.</p>	<p>Primary outcome: a composite of all-cause maternal, fetal, and newborn mortality and major morbidity.</p> <p>Secondary outcomes: birth preparedness and complication readiness, delivery in facility able to provide EMOC, and proportion of institutional births.</p> <p>Other putcomes: knowledge and awareness about pre-eclampsia in pregnancy, gestational age at birth, and mode of delivery.</p>	<p>Similar to Mozambique trial, there was no effect of community-level interventions for pre-eclampsia in reducing maternal, fetal, and newborn mortality or major morbidity.</p> <p>However, there was a positive contact between women and LHW.</p>

### Appendix G: Summary of Critical Appraisal Skill Programme for C-RCTs

Study details (author, year)	Are the results of the trial valid?						What are the results?		Will the results help locally?			Comments	Overall rating (poor, good, excellent)
	Did the trial address a clearly focused issue?	Was the assignment of patients to treatments randomised?	Were all the patients who entered the trial properly accounted for at its conclusion?	Were patients, health workers and study personnel 'blind' to treatment?	Were the groups similar at the start of the trial?	Aside from the experimental intervention, were the groups treated equally?	How large was the treatment effect?	How precise was the estimate of the treatment effect?	Can the results be applied in your context? (or to the local population?)	Were all clinically important outcomes considered?	Are the benefits worth the harms and costs?		
Manandhar et al., 2004	√	√	√	X They did not mask the participants, facilitators, health workers, and study personnel because the nature of the community intervention	√	√	√	√	√	√	√	Overall, this is a strong detailed paper.  Limitation of C-RCT that susceptible to bias is acknowledge. They faced a baseline imbalance between the intervention and control arms in terms of literacy and poverty indicators.  This trial also reported about acceptance of women's groups intervention in the intervention arm that not reported by other four included trials.	Good

Study details (author, year)	Are the results of the trial valid?						What are the results?		Will the results help locally?		Are the benefits worth the harms and costs?	Comments	Overall rating (poor, good, excellent)
	Did the trial address a clearly focused issue?	Was the assignment of patients to treatments randomised?	Were all the patients who entered the trial properly accounted for at its conclusion?	Were patients, health workers and study personnel 'blind' to treatment?	Were the groups similar at the start of the trial?	Aside from the experimental intervention, were the groups treated equally?	How large was the treatment effect?	How precise was the estimate of the treatment effect?	Can the results be applied in your context? (or to the local population?)	Were all clinically important outcomes considered?			
												However, they reported additional outcome (maternal mortality) after they found that maternal mortality ratio (MMR) decreased in intervention arm during the study.  Reported strategy to minimise contamination.	
Tripathy et al., 2010	√	√	√	X They did not mask the participants, facilitators, health workers, and study personnel because the nature of the community intervention	√	√	√	√	√	√	√	The number of the overall births was inconsistently reported.  9686 births were analysed from 9770 births enrolled in the intervention arm and 9089 from 9260 births enrolled in the control. But they	Good

Study details (author, year)	Are the results of the trial valid?						What are the results?		Will the results help locally?		Are the benefits worth the harms and costs?	Comments	Overall rating (poor, good, excellent)
	Did the trial address a clearly focused issue?	Was the assignment of patients to treatments randomised?	Were all the patients who entered the trial properly accounted for at its conclusion?	Were patients, health workers and study personnel 'blind' to treatment?	Were the groups similar at the start of the trial?	Aside from the experimental intervention, were the groups treated equally?	How large was the treatment effect?	How precise was the estimate of the treatment effect?	Can the results be applied in your context? (or to the local population?)	Were all clinically important outcomes considered?			
												reported that the number of births that loss to follow-up was 86 in the intervention cluster and 173 in the control. Thus, it should be 9684 births analysed in the intervention group and 9087 in the control.	
Azad et al., 2010	√	√	?	X They did not mask the participants, facilitators, health workers, and study personnel because the nature of the community intervention	X They did not recognize a disadvantage group in the control arm before the recruitment and allocation. They excluded that group from the intention to treat analyses	√	√	√	√	√	√	The study had an issue in their intention-to-treat analysis since they did not recognise there was a group that had access issue and it was then excluded from the intention-to-treat analysis	Good
More et al., 2012	√	√	√	X They did not mask the participants,	√	√	√	√	√	√	√	The recruitment strategy was unclear as to whether the	Good

Study details (author, year)	Are the results of the trial valid?						What are the results?		Will the results help locally?		Are the benefits worth the harms and costs?	Comments	Overall rating (poor, good, excellent)
	Did the trial address a clearly focused issue?	Was the assignment of patients to treatments randomised?	Were all the patients who entered the trial properly accounted for at its conclusion?	Were patients, health workers and study personnel 'blind' to treatment?	Were the groups similar at the start of the trial?	Aside from the experimental intervention, were the groups treated equally?	How large was the treatment effect?	How precise was the estimate of the treatment effect?	Can the results be applied in your context? (or to the local population?)	Were all clinically important outcomes considered?			
				facilitators, health workers, and study personnel because the nature of the community intervention								participant groups were 'open-cohorts', however that trial reported that all women were accepted to participate. That description is suggestive of a recruitment approach similar to the open cohort.	
Colbourn et al., 2013	√	√	√	X They did not mask the participants, facilitators, health workers, and study personnel because the nature of the community intervention	X There was one group in the intervention arm that excluded from the analysis since the researcher could not have data collected in it due to lack of community health workers as one of the facilitators.	√	√	√	√	√	√	The study reported that there was no treatment in the control arm.  The paper acknowledged the limitations of the study that may be susceptible to bias of the intention to treat principle. For example; cluster exclusion after the baseline and the minimum	Good

Study details (author, year)	Are the results of the trial valid?						What are the results?		Will the results help locally?		Are the benefits worth the harms and costs?	Comments	Overall rating (poor, good, excellent)
	Did the trial address a clearly focused issue?	Was the assignment of patients to treatments randomised?	Were all the patients who entered the trial properly accounted for at its conclusion?	Were patients, health workers and study personnel 'blind' to treatment?	Were the groups similar at the start of the trial?	Aside from the experimental intervention, were the groups treated equally?	How large was the treatment effect?	How precise was the estimate of the treatment effect?	Can the results be applied in your context? (or to the local population?)	Were all clinically important outcomes considered?			
					Several clusters were excluded after the baseline information indicated that there were no deliveries took place at the related health facilities.							contamination. However, the percentage of the contamination remained unclear. (unlike in Tripathy et al., 2016)  However, the paper was not clear regarding how they conduct the intention-to-treat analysis.	
Lewycka et al., 2013	√	√	√	X The study mentioned that they did not mask the allocation at participant level due to the nature of community intervention. Yet, they masked the allocation for data analysis.	√	√	√	√	√	√	√	It was unclear whether the study mask the allocation at the level of facilitators, health workers, and study personnel.	Good

Study details (author, year)	Are the results of the trial valid?						What are the results?		Will the results help locally?		Are the benefits worth the harms and costs?	Comments	Overall rating (poor, good, excellent)
	Did the trial address a clearly focused issue?	Was the assignment of patients to treatments randomised?	Were all the patients who entered the trial properly accounted for at its conclusion?	Were patients, health workers and study personnel 'blind' to treatment?	Were the groups similar at the start of the trial?	Aside from the experimental intervention, were the groups treated equally?	How large was the treatment effect?	How precise was the estimate of the treatment effect?	Can the results be applied in your context? (or to the local population?)	Were all clinically important outcomes considered?			
Fottrell et al., 2013	√	√	?	X The paper did not describe about the randomisation. They reported that they replicated the Bangladeshi trial (Azad et al., 2010).	X As this is a replicated trial from the Bangladeshi trial (Azad et al., 2010), recognize a disadvantage group in the control arm before the recruitment and allocation. They included the group in the trial but excluded that group from the intention to treat analyses	√	√	√	√	√	√	The study was conducted as the second trial of Bangladeshi trial (Azad et al, 2010) with the same methods but the coverage of women's groups was scaled-up.  The paper reported limited description on the study methods and refer to the previous trial (Azad et al., 2010) instead.	Good
Tripathy et al., 2016	√	√	√	? - Unclear for the participants. - The intervention team was not masked to the allocation. - The data collection team was	X One cluster in the intervention arm was excluded from the analysis due to law and order problems.	√	√	√	√	√	√	Clearly reported the percentage of contamination: low contamination (2%)	Good

Study details (author, year)	Are the results of the trial valid?						What are the results?		Will the results help locally?		Are the benefits worth the harms and costs?	Comments	Overall rating (poor, good, excellent)
	Did the trial address a clearly focused issue?	Was the assignment of patients to treatments randomised?	Were all the patients who entered the trial properly accounted for at its conclusion?	Were patients, health workers and study personnel 'blind' to treatment?	Were the groups similar at the start of the trial?	Aside from the experimental intervention, were the groups treated equally?	How large was the treatment effect?	How precise was the estimate of the treatment effect?	Can the results be applied in your context? (or to the local population?)	Were all clinically important outcomes considered?			
				masked to the allocation, either at the cluster or the individual level.									
Fabbri et al., 2019	√	√	?	? - The participants were not masked to the group allocation. - The fieldworkers who delivered the intervention and collected data were masked to the group allocations of the clusters.	√	? There was one cluster that was assigned to community group but did not receive treatment. It was because the facilitators did an error to conduct one feedback meeting with health provider whereas they should not do that.	X The intervention did not show any effect.	√	√	√	√	The findings showed there was no effect of the intervention. The study design seemed good, yet there were several problems during the trial such as there was one cluster of intervention group that was missed the intervention.  The study acknowledged their limitation in good manner. They discussed issue on the intervention coverage that may influence on the findings.	Good



Study details (author, year)	Are the results of the trial valid?						What are the results?		Will the results help locally?		Are the benefits worth the harms and costs?	Comments	Overall rating (poor, good, excellent)
	Did the trial address a clearly focused issue?	Was the assignment of patients to treatments randomised?	Were all the patients who entered the trial properly accounted for at its conclusion?	Were patients, health workers and study personnel 'blind' to treatment?	Were the groups similar at the start of the trial?	Aside from the experimental intervention, were the groups treated equally?	How large was the treatment effect?	How precise was the estimate of the treatment effect?	Can the results be applied in your context? (or to the local population?)	Were all clinically important outcomes considered?			
Sevene et al., 2020	√	√	√	?	X	√	√	√	√	√	<p>Both interventions and control cluster hospitals received facility enhancement to promote evidence-based care of pregnant women with hypertension. This may increase risk of contamination.</p> <p>However, the study stated that they masked the health providers from the intervention allocation so that may minimise the contamination.</p> <p>There was an issue of low coverage that may result in the non-effectiveness of the intervention.</p>	Good	

Study details (author, year)	Are the results of the trial valid?						What are the results?		Will the results help locally?		Are the benefits worth the harms and costs?	Comments	Overall rating (poor, good, excellent)
	Did the trial address a clearly focused issue?	Was the assignment of patients to treatments randomised?	Were all the patients who entered the trial properly accounted for at its conclusion?	Were patients, health workers and study personnel 'blind' to treatment?	Were the groups similar at the start of the trial?	Aside from the experimental intervention, were the groups treated equally?	How large was the treatment effect?	How precise was the estimate of the treatment effect?	Can the results be applied in your context? (or to the local population?)	Were all clinically important outcomes considered?			
												The community engagement intervention was unclear.	
Qurashi et al., 2020	√	√	√	? There is no explanation.	√	√	√	√	√	√	√	This is a good paper. Yet, there was very limited description on the randomisation. Additionally, there was a risk of contamination just like in Mozambique trial with the same study design.	Good

Adapted from: Critical Appraisal Skills Programme. 2018a. CASP Randomised Controlled Trial Checklist. [Online] Available from: <https://casp-uk.net/wp-content/uploads/2018/01/CASP-Randomised-Controlled-Trial-Checklist-2018.pdf>.

## Appendix H: Summary of CONSORT Assessment for assessing C-RCTs

√= provided; x= not provided; ?= unclear; N/R= not relevant; N/A= not applicable

Section/Topic	Item No	Checklist item for cluster designs	Manandhar et al., 2004	Tripathy et al., 2010	Azad et al., 2010	More et al., 2012	Fottrell et al., 2013	Lewycka et al., 2013	Colbourne et al., 2010	Tripathy et al., 2016
<b>Title and abstract</b>										
	1a	Identification as a cluster randomised trial in the title	√	√	√	√	√	√	√	√
	1b	Structured summary of trial design, methods, results, and conclusions (for specific guidance see CONSORT for abstracts) See table 2	√	√	√	√	√	√	√	√
<b>Introduction</b>										
<b>Background and objectives</b>	2a	Rationale for using a cluster design	√	x	√	√	x	x	√	√
	2b	Whether objectives pertain to the cluster level, the individual participant level or both	√	√	√	√	√	√	√	√
<b>Methods</b>										
<b>Trial design</b>	3a	Definition of cluster and description of how the design features apply to the clusters	√	√	√	√	√	x	x	x
	3b	Important changes to methods after trial commencement (such as eligibility criteria), with reasons	x	x	√	x	x	x	√	x
<b>Participants</b>	4a	Eligibility criteria for clusters	√	√	√	√	√	√	√	√
	4b	Settings and locations where the data were collected	√	√	√	√	√	√	√	√
<b>Interventions</b>	5	Whether interventions pertain to the cluster level, the individual participant level or both	√	√	√	√	√	√	√	√
<b>Outcomes</b>	6a	Whether outcome measures pertain to the cluster level, the individual participant level or both	√	√	√	√	√	√	√	√
	6b	Any changes to trial outcomes after the trial commenced, with reasons	√	x	√	x	x	x	x	x
<b>Sample size</b>	7a	Method of calculation, number of clusters(s) (and whether equal or unequal cluster sizes are assumed), cluster size, a coefficient of intra cluster correlation (ICC or <i>k</i> ), and an indication of its uncertainty	√	√	√	√	√	√	√	√
	7b	When applicable, explanation of any interim analyses and stopping guidelines	N/A	N/A	N/A	x	N/A	N/A	N/A	√
<b>Randomisation:</b>										



<b>Outcomes and estimation</b>	17a	Results at the individual or cluster level as applicable and a coefficient of intraclass correlation (ICC or k) for each primary outcome	√	√	√	Yes, but no ICC or k	x	√	√	√
	17b	For binary outcomes, presentation of both absolute and relative effect sizes is recommended	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
<b>Ancillary analyses</b>	18	Results of any other analyses performed, including subgroup analyses and adjusted analyses, distinguishing pre-specified from exploratory	√	√	√	√	√	√	x	√
<b>Harms</b>	19	All-important harms or unintended effects in each group (for specific guidance see CONSORT for harms)	√	√	√	√	√	x	x	x
<b>Discussion</b>										
<b>Limitations</b>	20	Trial limitations, addressing sources of potential bias, imprecision, and, if relevant, multiplicity of analyses	√	√	√	√	x	√	√	√
<b>Generalisability</b>	21	Generalisability to clusters and/or individual participants (as relevant)	x	√	√	?	x	?	x	?
<b>Interpretation</b>	22	Interpretation consistent with results, balancing benefits and harms, and considering other relevant evidence	√	√	√	√	√	√	√	√
<b>Other information</b>										
<b>Registration</b>	23	Registration number and name of trial registry	√	√	√	√	√	√	√	√
<b>Protocol</b>	24	Where the full trial protocol can be accessed, if available	x	x	x	√	√	√	x	√
<b>Funding</b>	25	Sources of funding and other support (such as supply of drugs), role of funders	√	√	√	√	√	√	√	√

Continue

Section/Topic	Item No	Checklist item for cluster designs	Fabbri et al., 2019	Sevene et al., 2020	Quras hi et al., 2020
<b>Title and abstract</b>					
	1a	Identification as a cluster randomised trial in the title	√	√	√
	1b	Structured summary of trial design, methods, results, and conclusions (for specific guidance see CONSORT for abstracts) See table 2	√	?	?
<b>Introduction</b>					
	2a	Rationale for using a cluster design	√	?	?

<b>Background and objectives</b>	2b	Whether objectives pertain to the cluster level, the individual participant level or both	√	?	√
<b>Methods</b>					
<b>Trial design</b>	3a	Definition of cluster and description of how the design features apply to the clusters	√	√	?
	3b	Important changes to methods after trial commencement (such as eligibility criteria), with reasons	N/A	N/A	N/A
<b>Participants</b>	4a	Eligibility criteria for clusters	√	√	√
	4b	Settings and locations where the data were collected	√	√	√
<b>Interventions</b>	5	Whether interventions pertain to the cluster level, the individual participant level or both	√	√	√
<b>Outcomes</b>	6a	Whether outcome measures pertain to the cluster level, the individual participant level or both	√	√	√
	6b	Any changes to trial outcomes after the trial commenced, with reasons	N/A	N/A	N/A
<b>Sample size</b>	7a	Method of calculation, number of clusters(s) (and whether equal or unequal cluster sizes are assumed), cluster size, a coefficient of intra cluster correlation (ICC or $k$ ), and an indication of its uncertainty	√	√	√
	7b	When applicable, explanation of any interim analyses and stopping guidelines	N/A	N/A	√
<b>Randomisation:</b>					
<b>Sequence generation</b>	8a	Method used to generate the random allocation sequence	√	√	?
	8b	Details of stratification or matching if used	√	N/A	√
<b>Allocation concealment mechanism</b>	9	Specification that allocation was based on clusters rather than individuals and whether allocation concealment (if any) was at the cluster level, the individual participant level or both	√	N/A	N/A
<b>Implementation</b>	10a	Who generated the random allocation sequence, who enrolled clusters, and who assigned clusters to interventions	√	√	√
	10b	Mechanism by which individual participants were included in clusters for the purposes of the trial (such as complete enumeration, random sampling)	√	?	√
	10c	From whom consent was sought (representatives of the cluster, or individual cluster members, or both), and	√	√	√

		whether consent was sought before or after randomisation			
<b>Blinding</b>	11a	If done, who was blinded after assignment to interventions (for example, participants, care providers, those assessing outcomes) and how	√	√	√
	11b	If relevant, description of the similarity of interventions	N/R	N/R	N/R
<b>Statistical methods</b>	12a	How clustering was taken into account	√	√	√
	12b	Methods for additional analyses, such as subgroup analyses and adjusted analyses	√	√	√
<b>Results</b>					
<b>Participant flow (a diagram is strongly recommended)</b>	13a	For each group, the numbers of clusters that were randomly assigned, received intended treatment, and were analysed for the primary outcome	√	√	√
	13b	For each group, losses and exclusions for both clusters and individual cluster members	√	√	√
<b>Recruitment</b>	14a	Dates defining the periods of recruitment and follow-up	√	√	√
	14b	Why the trial ended or was stopped	N/A	N/A	√
<b>Baseline data</b>	15	Baseline characteristics for the individual and cluster levels as applicable for each group	√	√	√
<b>Numbers analysed</b>	16	For each group, number of clusters included in each analysis	√	√	√
<b>Outcomes and estimation</b>	17a	Results at the individual or cluster level as applicable and a coefficient of intracluster correlation (ICC or k) for each primary outcome	√	√	√
	17b	For binary outcomes, presentation of both absolute and relative effect sizes is recommended	N/R	N/A	N/A
<b>Ancillary analyses</b>	18	Results of any other analyses performed, including subgroup analyses and adjusted analyses, distinguishing pre-specified from exploratory	N/A	√	√
<b>Harms</b>	19	All-important harms or unintended effects in each group (for specific guidance see CONSORT for harms)	?	√	√
<b>Discussion</b>					
<b>Limitations</b>	20	Trial limitations, addressing sources of potential bias, imprecision, and, if relevant, multiplicity of analyses	√	√	√
<b>Generalisability</b>	21	Generalisability to clusters and/or individual participants (as relevant)	N/R	N/R	√
<b>Interpretation</b>	22	Interpretation consistent with results, balancing benefits and harms, and considering other relevant evidence	√	√	√

Other information					
<b>Registration</b>	23	Registration number and name of trial registry	√	√	√
<b>Protocol</b>	24	Where the full trial protocol can be accessed, if available	?	√	√
<b>Funding</b>	25	Sources of funding and other support (such as supply of drugs), role of funders	√	√	√

**Table 2: Extension of CONSORT for abstracts to reports of cluster randomised trials**

Item	Checklist item for cluster trials	Manandhar et al., 2004	Tripathy et al., 2010	Azad et al., 2010	More et al., 2012	Fottrell et al., 2013	Lewycka et al., 2013	Colbourn et al., 2010	Tripathy et al., 2016
<b>Title</b>	Identification of study as cluster randomised	√	√	√	√	√	√	√	√
<b>Trial design</b>	Description of the trial design (e.g. parallel, cluster, xn-inferiority)	√	√	√	√	√	√	√	√
<b>Methods</b>									
<b>Participants</b>	Eligibility criteria for clusters	X	√	√	X	√	X	X	√
<b>Interventions</b>	Interventions intended for each group	√	√	√	√	√	√	√	√
<b>Objective</b>	Whether objective or hypothesis pertains to the cluster level, the individual participant level or both	√	√	√	√	√	?	√	√
<b>Outcome</b>	Whether the primary outcome pertains to the cluster level, the individual participant level or both	√	√	√	√	X	√	√	√
<b>Randomization</b>	How clusters were allocated to interventions	√	√	√	X	√	√	X	√
<b>Blinding (masking)</b>	Whether or not participants, care givers, and those assessing the outcomes were blinded to group assignment	X	X	√	X	X	X	X	X
<b>Results</b>									
<b>Numbers randomized</b>	Number of clusters randomized to each group	√	√	√	√	√	√	√	X
<b>Recruitment</b>									
<b>Numbers analysed</b>	Number of clusters analysed in each group	X	X	X	X	X	X	√	X
<b>Outcome</b>	Results at the cluster or individual participant level as applicable for each primary outcome	√	√	√	√	√	√	√	√
<b>Harms</b>	Important adverse events or side effects	X	X	X	?	X	N/A	X	X



<b>Conclusions</b>	General interpretation of the results	√	√	√	√	√	?	√	√
<b>Trial registration</b>	Registration number and name of trial register	√	√	√	√	√	X	X	X
<b>Funding</b>	Source of funding	X	√	√	√	X	√	X	√

Item	Checklist item for cluster trials	Fabbri et al., 2019	Sevene et al., 2020	Qurashi et al., 2020
<b>Title</b>	Identification of study as cluster randomised	√	√	√
<b>Trial design</b>	Description of the trial design (e.g. parallel, cluster, xn-inferiority)	√	√	√
<b>Methods</b>				
<b>Participants</b>	Eligibility criteria for clusters	?	?	X
<b>Interventions</b>	Interventions intended for each group	√	√	√
<b>Objective</b>	Whether objective or hypothesis pertains to the cluster level, the individual participant level or both	√	?	√
<b>Outcome</b>	Whether the primary outcome pertains to the cluster level, the individual participant level or both	√	?	√
<b>Randomization</b>	How clusters were allocated to interventions	√	X	?
<b>Blinding (masking)</b>	Whether or not participants, care givers, and those assessing the outcomes were blinded to group assignment	X	X	X
<b>Results</b>				
<b>Numbers randomized</b>	Number of clusters randomized to each group	√	?	?
<b>Recruitment</b>				
<b>Numbers analysed</b>	Number of clusters analysed in each group	?	√	√
<b>Outcome</b>	Results at the cluster or individual participant level as applicable for each primary outcome	√	√	√
<b>Harms</b>	Important adverse events or side effects	X	X	X
<b>Conclusions</b>	General interpretation of the results	√	√	√
<b>Trial registration</b>	Registration number and name of trial register	√	√	√
<b>Funding</b>	Source of funding	√	√	√

Adapted from: Campbell MK, Piaggio G, Elbourne DR, Altman DG; for the CONSORT Group. Consort 2010 statement: extension to cluster randomised trials. BMJ. 2012 Sep 4;345:e5661. PMID: 22951546

## Appendix I: Summary of CASP tool for Qualitative Studies

Study details (author, year)	Are the results valid?						What are the results?			Will the results help locally?	Comment	Overall rating (poor, good, excellent)
	Was there a clear statement of the aims of the research?	Is a qualitative methodology appropriate?	Was the research design appropriate to address the aims of the research?	Was the recruitment strategy appropriate to the aims of the research?	Was the data collected in a way that addressed the research issue?	Has the relationship between researcher and participants been adequately considered?	Have ethical issues been taken into consideration?	Was the data analysis sufficiently rigorous?	Is there a clear statement of findings?	How valuable is the research?		
Ahluwalia et al., 2003	√	√	√	?	√	?	?	√	√	√	The evaluation of the intervention was short after the implementation. There was no explanation on the study limitation. Yet, the multiple data collection strategy has strengthened the study.	Good
Skinner et al., 2009	√	√	√	√	√	?	?	?	√	√	<p>The midwives and village volunteers received incentives to join the focus group discussion which may affect the participation. But there was no explanation related to this issue.</p> <p>The study evaluated the programme in a short time frame.</p> <p>There was outcome change during the evaluation because they did not anticipate the second stage of evaluation. It is mentioned that their initial funding only allowed</p>	Good

Study details (author, year)	Are the results valid?						What are the results?			Will the results help locally?	Comment	Overall rating (poor, good, excellent)
	Was there a clear statement of the aims of the research?	Is a qualitative methodology appropriate?	Was the research design appropriate to address the aims of the research?	Was the recruitment strategy appropriate to the aims of the research?	Was the data collected in a way that addressed the research issue?	Has the relationship between researcher and participants been adequately considered?	Have ethical issues been taken into consideration?	Was the data analysis sufficiently rigorous?	Is there a clear statement of findings?	How valuable is the research?		
											for a six-month time period (first stage of evaluation).	
Morrison et al., 2010	√	√	√	√	√	√	√	?	√	√	This is a good paper, although there was limited explanation on the data analysis. The study evaluated women's groups initiative in Nepal (Manandhar et al., 2004) that was conducted in 2004 by the same research group. Given the six-year time frame, the study seems to be able to see the sustainability of the programme too.	Good
Esienumoh et al., 2017	√	√	√	√	√	?	√	√	√	√	It is stated that the study formed a participatory action research group (PARG). This group acted as the facilitators of the programme as well as 'coresearchers'. The group members were selected from various sectors. Yet, there was no explanation about the background of the members.	

Study details (author, year)	Are the results valid?						What are the results?			Will the results help locally?	Comment	Overall rating (poor, good, excellent)
	Was there a clear statement of the aims of the research?	Is a qualitative methodology appropriate?	Was the research design appropriate to address the aims of the research?	Was the recruitment strategy appropriate to the aims of the research?	Was the data collected in a way that addressed the research issue?	Has the relationship between researcher and participants been adequately considered?	Have ethical issues been taken into consideration?	Was the data analysis sufficiently rigorous?	Is there a clear statement of findings?	How valuable is the research?		
											<p>It is also mentioned that PARG who decided to carry out the interviews, focus groups, and observation to collect data. But it was not clear about the role of the researcher in the decision.</p> <p>It seems there is typo on the percentage of age of the participants on the Table 2 pg. e1604.</p> <p>The study only evaluated two out of four phases of the programme. It is stated that the other evaluation of two phases were reported elsewhere. But they did not refer to any article.</p>	
Hamal et al., 2018	√	√	√	√	√	?	√	√	√	√	The study is clearly explained. Yet, the participant recruitment was purposively selected by consultation with a civil society organisation that develop the intervention. This may increase the bias. However, the study has	Good

Study details (author, year)	Are the results valid?						What are the results?			Will the results help locally?	Comment	Overall rating (poor, good, excellent)
	Was there a clear statement of the aims of the research?	Is a qualitative methodology appropriate?	Was the research design appropriate to address the aims of the research?	Was the recruitment strategy appropriate to the aims of the research?	Was the data collected in a way that addressed the research issue?	Has the relationship between researcher and participants been adequately considered?	Have ethical issues been taken into consideration?	Was the data analysis sufficiently rigorous?	Is there a clear statement of findings?	How valuable is the research?		
											acknowledged this issue as their limitation.	

Adapted from: Critical Appraisal Skills Programme. 2018b. CASP Qualitative Checklist. [Online] Available from: <https://casp-uk.net/wp-content/uploads/2018/01/CASP-Qualitative-Checklist-2018.pdf>

### Appendix J: Summary of AXIS critical appraisal tool

	Question	Swain et al., 2019	Sharma et al., 2016	Wangalwa et al., 2012	Ogwang et al., 2012	Sood et al., 2004
<b>Introduction</b>						
1.	Were the aims/objectives of the study clear?	√	√	√	√	√
<b>Methods</b>						
2.	Was the study design appropriate for the stated aim(s)?	√	√	√	√	√
3.	Was the sample size justified?	√	√ Total sampling	√	√	√
4.	Was the target/reference population clearly defined? (Is it clear who the research was about?)	√	√	√	√	√
5.	Was the sample frame taken from an appropriate population base so that it closely represented the target/reference population under investigation?	√	√	√	√	√
6.	Was the selection process likely to select subjects/participants that were representative of the target /reference population under investigation?	√	√	√	√	√
7.	Were measures undertaken to address and categorise non-responders?	x	x	x	√ Given the non-response rate was 10%, the study had an adequate response rate.	x
8.	Were the risk factor and outcome variables measured appropriate to the aims of the study?	√	?	?	√	?
9.	Were the risk factor and outcome variables measured correctly using instruments/measurements that had been trialled, piloted, or published previously?	√	?	?	√	?

	<b>Question</b>	Swain et al., 2019	Sharma et al., 2016	Wangalwa et al., 2012	Ogwang et al., 2012	Sood et al., 2004
10.	Is it clear what was used to determine statistical significance and/or precision estimates? (e.g., p-values, confidence intervals)	√ Confidence interval	√	√ p-value	√	√
11.	Were the methods (including statistical methods) sufficiently described to enable them to be repeated?	√	√	√	√	√
<b>Results</b>						
12.	Were the basic data adequately described?	√	√	√	√	√
13.	Does the response rate raise concerns about non-response bias?	x	√ The number of participants that completed the survey were different between the first, second and third survey.	x	x	√ It was reported there was missing responses. Pg. 8
14.	If appropriate, was information about non-responders described?	N/A	x The number of participants that completed the survey were different between the first, second and third survey. Yet there was no explanation how the study addressed this issue.	N/A	N/A	x There was no explanation how the missing responses were addressed.
15.	Were the results internally consistent?	√	√	√	√	√
16.	Were the results presented for all the analysis described in the methods?	√	√	√	√	√
<b>Discussion</b>						

	<b>Question</b>	Swain et al., 2019	Sharma et al., 2016	Wangalwa et al., 2012	Ogwang et al., 2012	Sood et al., 2004
17.	Were the authors' discussions and conclusions justified by the results?	√	√	√	√	? There was no clear discussion section. Yet the conclusion provided a good explanation.
18.	Were the limitations of the study discussed?	x	√	√	x	√
<b>Other</b>						
19.	Were there any funding sources or conflicts of interest that may affect the authors' interpretation of the results?	x	x	x	x	x
20.	Was ethical approval or consent of participants attained?	√	√	√	√	x

Adapted from: Downes, M.J., Brennan, M.L., Williams, H.C. and Dean, R.S. 2016. Development of a critical appraisal tool to assess the quality of cross-sectional studies (AXIS). *BMJ Open*. **6**(12), pe011458.



## Appendix K: MMAT (Mixed Methods Appraisal Tool)

√ = Yes; x = No; ? = Can't tell


Category of study designs	Methodological quality criteria	Responses			
		Fachry et al., 2009	Rath et al., 2010	Rosato et al., 2012	Miltenburg et al., 2019
Screening questions (for all types)	S1. Are there clear research questions?	? There were no clear research questions, probably because it was an evaluation report of the implementation of a CPM. Yet, they stated the aim of the study	√	√	√
	S2. Do the collected data allow to address the research questions?	√	√	√	√
	<i>Further appraisal may not be feasible or appropriate when the answer is 'No' or 'Can't tell' to one or both screening questions.</i>				
1. Qualitative	1.1. Is the qualitative approach appropriate to answer the research question?	√	√	√	√
	1.2. Are the qualitative data collection methods adequate to address the research question?	√	√	√	√
	1.3. Are the findings adequately derived from the data?	√	√	√	√
	1.4. Is the interpretation of results sufficiently substantiated by data?	√	√	√	√
	1.5. Is there coherence between qualitative data sources, collection, analysis and interpretation?	√	√	√ The study does not mention a specific qualitative analysis method. It seems that they	√

				did thematic analysis. However, they provide a clear stage of the qualitative analysis.	
2. Quantitative randomized controlled trials	2.1. Is randomization appropriately performed?				
	2.2. Are the groups comparable at baseline?				
	2.3. Are there complete outcome data?				
	2.4. Are outcome assessors blinded to the intervention provided?				
	2.5. Did the participants adhere to the assigned intervention?				
3. Quantitative non-randomized	3.1. Are the participants representative of the target population?				
	3.2. Are measurements appropriate regarding both the outcome and intervention (or exposure)?				
	3.3. Are there complete outcome data?				
	3.4. Are the confounders accounted for in the design and analysis?				
	3.5. During the study period, is the intervention administered (or exposure occurred) as intended?				
4. Quantitative descriptive	4.1. Is the sampling strategy relevant to address the research question?	√	√	√	√
	4.2. Is the sample representative of the target population?	√	√	√	√
	4.3. Are the measurements appropriate?	√	√	√	√
	4.4. Is the risk of nonresponse bias low?	√	√	√	√
	4.5. Is the statistical analysis appropriate to answer the research question?	√	√	√	√
5. Mixed methods	5.1. Is there an adequate rationale for using a mixed methods design to address the research question?	√	√		√
	5.2. Are the different components of the study effectively integrated to answer the research question?	√	√		√


	5.3. Are the outputs of the integration of qualitative and quantitative components adequately interpreted?	? The study integrates both the qualitative and quantitative findings and interprets them in a good manner. Yet, the discussion is limited	? The study integrates both the qualitative and quantitative findings and interprets them in a good manner. Yet, the discussion is limited		√
	5.4. Are divergences and inconsistencies between quantitative and qualitative results adequately addressed?	√	√	√ The study mentioned that there was finding that show the intervention groups were not successfully implemented the strategies. They then identified what was the possible reason. (pg. 183)	√
	5.5. Do the different components of the study adhere to the quality criteria of each tradition of the methods involved?	√	√		√

Adapted from: Hong, Q.N., Fàbregues, S., Bartlett, G., Boardman, F., Cargo, M., Dagenais, P., Gagnon, M.-P., Griffiths, F., Nicolau, B., O’Cathain, A., Rousseau, M.-C., Vedel, I. and Pluye, P. 2018. The Mixed Methods Appraisal Tool (MMAT) version 2018 for information professionals and researchers. *Education for Information*. **34**, pp.285-291.

## Appendix L: General Information Leaflet/poster




**budi**  
Beasiswa Unggulan Dosen Indonesia



UNIVERSITY OF LEEDS





**Community Participation for Maternal Health through *Desa Siaga* in Sukoharjo District, Central Java, Indonesia:  
A Qualitative Case Study Design**

**Are you pregnant? or Just delivered a baby?  
Do you have neighbour who is pregnant?**



**I am Vinami Yulian, a nursing lecturer at Muhammadiyah University of Surakarta who is undertaking a PhD degree at University of Leeds, United Kingdom. I am conducting a research to explore the role of community participation for maternal health through *desa siaga* in Sukoharjo District. I am hoping to gain your experiences and perspectives related to *desa siaga* programme in preparing pregnant women for birth. If you are interested to take part in this study, for further information please contact me on 082225836914 or by e-mail [hcvy@leeds.ac.uk](mailto:hcvy@leeds.ac.uk). Thank you very much.**

This study is funded by Beasiswa Unggulan Dosen Indonesia (BUDI), please visit [www.budi.ristekdikti.go.id](http://www.budi.ristekdikti.go.id) for more information.

← v4\_08/01/2018





## Appendix M: Participant Information Leaflet (PIL)



UNIVERSITY OF LEEDS  
School of Healthcare

### Community Participation for Maternal Health in Sukoharjo District, Central Java, Indonesia: A Qualitative Case Study Design

#### Information Leaflet for Pregnant Women

Researcher name : Vinami Yulian  
 Contact number : 082225836914  
 Researcher supervisor name : Prof. Linda McGowan and Dr. Tomasina Stacey

You are invited to take part in the above named of study. Before you decide whether or not to take part, you should read the information provided below carefully and, if you wish, discuss it with your family. You have two-day timeframe to ask questions about the study and reflect in order to decide to take part in the study, do not feel rushed and do not feel under pressure to make a quick decision.

You should clearly understand the risks and benefits of taking part in this study, so you can make a decision that is right for you.

You do not have to take part in this research and a decision not to take part will not affect your maternal care in healthcare centre and in your community.

You can change your mind about taking part in the study any time you like. Even if the study has started, you can still withdraw without giving us a reason, and it will not affect your maternal care in healthcare centre and in your community. However, if you would like to withdraw after the interview/observation, you must do this within one week of the interview/ observation.

#### Information to consider:

##### **What is the purpose of this study?**

The purpose of this study is to study community participation approach through *desa siaga* (alert village) in preparing pregnant women for birth in Sukoharjo District, Central Java, Indonesia.

##### **Why have I been invited to participate?**

You have been invited to participate in this study because you are pregnant and preparing for the birth.

##### **What will be involved if I take part in this study?**

You will be invited to one-to-one in-depth interview which will last approximately one hour in a private room at *kelurahan* (local government office) or at your home if you prefer to do so. The interview will be audio-recorded, and I may take some notes. I will see your KAP (pledge card), P4K sticker (*Program Perencanaan Persalinan dan Pencegahan*

*Komplikasi* or birth preparedness and complication readiness programme sticker), and your medical records.

### **Are there any advantages or risks from taking part?**

There might be no direct advantages to you for taking part in taking part in this study. However, your insights will give us in-depth understanding about the issues around community participation that are essential to improve maternal health outcomes. It is anticipated that this study may not cause any harms and I hope that you will enjoy participating in this study. However, if there are topics or issues that might be sensitive, embarrassing or upsetting come up during the interviews, you may:

- Ask me to have a break.
- Ask immediate support from me.
- If you feel able to carry on, I will resume the interview. In opposite, if you feel unable to carry on then the interview will be stop.
- Contact the midwives or other healthcare professionals. Or I can help you, with your consent, to contact your midwife or other healthcare professionals to help you or give further advice/ support.
- If you consent, I will make follow up by phone or home visit. If you keep experiencing distress following the interviews, please contact or see midwives or other healthcare professionals.

### **Will the information obtained in this study be confidential?**

All information obtained from you will be kept strictly confidential. Your name will be removed from the interview transcription and will be given an individual code to identify all the data, which means only the lead researcher may have access to the audio interview, observation checklist, fieldnotes, and transcripts for the purpose of verification of transcription and analysis. The record of your interview will be deleted after transcription and the transcript held in a personal protected secure network of the University of Leeds for a period of five years, after which, it will be securely and irreversibly deleted from the device on which it is stored.

### **What happens next if I agree to take part?**

If you think that you might be interested to take part in the study, you can contact me through phone, short message service, or WhatsApp application (the same mobile number I use for this). I will then contact you to confirm whether you agree to take part and arrange an interview. You can ask me questions when I contact you. I will ask you to complete a consent form when we meet for the interview and we can discuss your consent at this time.

### **What will happen to the result 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. Nevertheless, these quotes will not be associated with your name. The study findings will be used in the development of my PhD thesis and will also be published in scientific journals and be presented at conferences. If you wish, I will let you know when the work will be published.

### **Who is organising and funding the research?**

The work is part of my PhD degree at University of Leeds, United Kingdom, funded by *Beasiswa Unggulan Dosen Indonesia* (BUDI).

**Who has reviewed this study?**

Ethical approval has been granted by the School of Healthcare Research Ethics Committee, University of Leeds, United Kingdom (*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:**

Vinami Yulian

Nursing Lecturer at Muhammadiyah University of Surakarta, PhD Student at University of Leeds, LS2 9UT, Leeds, UK, Tel: 082225836914.

**Who you should approach if you have any problems or are unhappy with the study:**

You may wish to speak to me or my supervisors:

- Professor Linda McGowan, Professor of Applied Health Research, University of Leeds, United Kingdom, Tel: +44 (0) 113 343 1339 or e-mail: [l.mcgowan@leeds.ac.uk](mailto:l.mcgowan@leeds.ac.uk).
- Dr. Tomasina Stacey, Lecturer in Maternal Care, University of Leeds, United Kingdom, Tel: +44 113 3431252 or e-mail: [t.Stacey@leeds.ac.uk](mailto:t.Stacey@leeds.ac.uk).

***Thank you for taking the time to read this information leaflet (version 3 updated 20/02/2018)***

## Appendix N: Informed Consent



UNIVERSITY OF LEEDS  
School of Healthcare

Community Participation for Maternal Health in Sukoharjo District, Central Java,  
Indonesia:

### A Qualitative Case Study Design Informed Consent Form for Pregnant Women

Please confirm  
agreement to the  
statements by  
putting your  
initials in the box  
below

I confirm that I have read and understood the participant information leaflet  
(*version 3*).

I have had the opportunity to ask questions and discuss this study.

I have received satisfactory answers to all of my questions.

I have received enough information about the study.

I understand that I am free to withdraw from the study:

1. At any time prior to the completion of the interview
2. Within one week after the interview
3. Without having to give a reason for withdrawing
4. That if I withdraw, any data recorded will be destroyed

I understand that my interview will be audio recorded.

I give permission for the lead researcher to access my KAP (pledge card), P4K  
sticker (*Program Perencanaan Persalinan dan Pencegahan Komplikasi* or birth  
preparedness and complication readiness programme sticker), and my medical  
records.

I understand that any information I provide, including personal details, will be kept  
confidential, stored securely and only accessed by the lead researcher.

I understand that any information I give may be included in published documents,  
but all information will be anonymised.

I agree to take part in this study.

Participant's name	
Participant's signature	
Date	
Researcher's name	
Researcher's signature	
Date	

***Thank you for agreeing to take part in this study***

*To be signed and dated in the presence of the participant. Two copies of this consent form should be completed: one copy to be retained by the participant and one copy to be retained by the researcher.*





**UNIVERSITY OF LEEDS**  
School of Healthcare

**Community Participation for Maternal Health in Sukoharjo District, Central Java,  
Indonesia:  
A Qualitative Case Study Design**

**Informed Consent Form for Antenatal Class Observation (for Pregnant Women)**

**Please confirm  
agreement to the  
statements by  
putting your  
initials in the box  
below**

I confirm that I have read and understood the participant information leaflet  
(*version 3*).

I have had the opportunity to ask questions and discuss this study.

I have received satisfactory answers to all of my questions.

I have received enough information about the study.

I understand that I am free to withdraw from the study:

1. At any time prior to the completion of the observation
2. Within one week after the observation
3. Without having to give a reason for withdrawing
4. That if I withdraw, any data recorded will be destroyed

I understand that any information I provide, including personal details, will be  
kept confidential, stored securely and only accessed by the lead researcher.

I understand that any information I give may be included in published  
documents, but all information will be anonymised.

I agree to take part in this study.

Participant's name	
Participant's signature	
Date	
Researcher's name	
Researcher's signature	
Date	

***Thank you for agreeing to take part in this study***

*To be signed and dated in the presence of the participant. Two copies of this consent form  
should be completed: one copy to be retained by the participant and one copy to be retained  
by the researcher.*



**UNIVERSITY OF LEEDS**  
School of Healthcare

**Community Participation for Maternal Health in Sukoharjo District, Central Java,  
Indonesia:  
A Qualitative Case Study Design**

**Informed Consent Form for Publishing Photographs**

**Please confirm  
agreement to the  
statements by  
putting your  
initials in the box  
below**

I have received enough information about the study.

I have had the opportunity to ask questions and discuss this study.

I have received satisfactory answers to all of my questions.

I consent for my photographs to be used in this study publications, including journals, books, social media, and electronic publications.

I understand that my image may be seen by members of the general public, in addition to scientists and researchers that regularly use these publications in their professional education.

Although these photographs will be used without identifying information such as my name, I understand that it is possible that someone recognize me.

I also agree for my image to be shown for teaching purposes.


Participant's name	
Participant's signature	
Date	
Researcher's name	
Researcher's signature	
Date	

***Thank you for agreeing to take part in this study***

*To be signed and dated in the presence of the participant. Two copies of this consent form should be completed: one copy to be retained by the participant and one copy to be retained by the researcher.*

## Appendix O: Interview schedule

### In-Depth Interview Schedule Pregnant Women

#### Standardised introduction

- Welcome/greeting/thank you
- Introduce myself, show the student card, explain it is a PhD research project, length of interview (approximately 1 hour) and that the interview will be audio recorded.
- Emphasise anonymity and confidentiality.
- If I ask them to repeat or clarify anything, not their fault – for the recording and my own understanding.
- If feel uncomfortable at any point can pause or cease interview and withdraw self and data.
- Any question?
- Happy to proceed?

#### Opening

- May I ask some questions related to your demographics data such as age, education, and occupation? (Refer to demographics sheet)

#### Main questions (These questions are such as guidance, ask more questions based on participant's responses)

1. Topic: Pregnant women's understanding of Desa SIAGA in preparing them for birth.
  - a. *Have you ever heard about Desa SIAGA?*  
**IF NO: Probing**
    - *Do you have P4K sticker?*
    - *What do you know about P4K sticker?*
    - *Do you have pledge card?*
    - *What do you know about pledge card?*
    - *Do you go to antenatal care?*
    - *Where do you go to antenatal care?*
    - *Who accompany you to go to antenatal care?*
    - *Who give you information related to pregnancy?*
    - *What kind of information did you get when you meet health professionals in the healthcare centre?*
    - *Where do you plan to give birth?*
      - *Then ask why do you choose it?*
    - *Who will be your birth attendant?*
    - *Have you planned what kind of transportation will you use to reach healthcare centre to give birth?*
    - *Do you already have blood donor?*
    - *I am sorry, may I know how will you pay service fees when you give birth?*

**\*All those things are part of Desa SIAGA programme. So, I would like to hear more from you about that.**

- *Can you tell me how did you feel when you get that support?*

- *Can you tell me about your experience when receiving that support?*  
*Probing: can you tell me a little bit more of what happened?*  
 Go to question no. 2, 3 and 4.
  - b. *Can you tell me how do you know about Desa SIAGA?*
  - c. *Can you tell me what do you know about Desa SIAGA?*
  - d. *Can you tell me what do you know about Desa SIAGA in preparing pregnant women for birth?*
2. Topic: Pregnant women's experiences of Desa SIAGA in preparing pregnant women for birth.
- a. *Can you tell me about your experience with Desa SIAGA?*  
*If doesn't know about Desa SIAGA: can you tell me about your experience with your neighbours, midwife, cadre, and local government in preparing you for birth?*  
*Probing:*
    - *Can you talk more about what happened?*
    - *How did you find it?*
  - b. *Do you think that a pregnant woman need preparation for birth?*
  - c. *In your opinion, what can a pregnant woman do to prepare for birth?*
3. Topic: The factors that might facilitate or act as barriers to pregnant women accepting programme delivered by Desa SIAGA.
- d. *Can you tell me about factors that might facilitate you in accepting programme delivered by Desa SIAGA?*  
*If doesn't know about Desa SIAGA: can you tell me about factors that might facilitate you in accepting help from your neighbours, cadre, midwife, and local government?*
  - e. *Can you tell me factors that might prevent you in accepting programme delivered by Desa SIAGA?*  
*If doesn't know about Desa SIAGA: can you tell me about factors that might prevent you in accepting help from your neighbours, cadre, midwife, and local government?*  
*Probing: so, what do you like?*
4. Topic: Pregnant women's expectation towards Desa SIAGA in preparing them for birth
- a. *Can you tell me about your expectation towards Desa SIAGA?*  
*If doesn't know about Desa SIAGA: can you tell me about your expectation towards your neighbours, cadre, midwife, and local government?*
  - b. *What do you want about Desa SIAGA in preparing you for birth?*  
*If doesn't know about Desa SIAGA: can you tell me about what do you want from your neighbours, cadre, midwife, and local government in preparing you for birth?*

#### **End of interview**

- Is there anything else you would like to tell me about?
- Do you have any questions you would like to ask before we end this interview?

- Remind about anonymity and confidentiality.
- Remind about that they can withdraw the data one week after interview.
- Thank you for taking part and taking their time
- Greeting.

## In-Depth Interview Schedule Health workers (midwives and cadres)

### Standardised introduction

- Welcome/greeting/thank you
- Introduce myself, show the student card, explain it is a PhD research project, length of interview (approximately 1 hour) and that the interview will be audio recorded.
- Emphasise anonymity and confidentiality, however midwives might be identified as they have unique role in Desa SIAGA.
- If I ask them to repeat or clarify anything, not their fault – for the recording and my own understanding.
- If feel uncomfortable at any point can pause or cease interview and withdraw self and data.
- Any question?
- Happy to proceed?

### Opening

- May I ask some questions related to your demographics data such as age, education, and occupation? (Refer to demographics sheet)

### Main questions (These questions are such as guidance, ask more questions based on participant's responses on the topics)

1. Topic: Health workers' understanding of their role in *Desa SIAGA* in preparing pregnant women for birth.
  - a. *Can you tell me what your understanding of the purpose of Desa Siaga to be?*
  - b. *Can you tell me about your understanding of your role in Desa SIAGA in preparing pregnant women for birth?*
  - c. *Can you tell me about how is your view of your responsibility?*
  - d. *Do you get training related to Desa SIAGA?*  
**If Yes:** *What kind of training?*  
**If No:** *what kind of training do you expect to have?*
  - e. *What you actually do in Desa SIAGA?*  
*Probing: could you please give me example of it?*
  
2. Topic: Health workers' experiences of *Desa SIAGA* in preparing pregnant women for birth.  
*Can you tell me about your experience of Desa SIAGA in preparing pregnant women for birth?*  
*Probing:*
  - *Can you talk more about what happened?*
  - *How did you feel about it?*
  
3. Topic: The factors that might facilitate or act as barriers to health workers to provide services in *Desa SIAGA* in preparing pregnant women for birth.

- a. *Can you tell me the factors might facilitate you to provide services in Desa SIAGA in preparing pregnant women for birth?*
- b. *Can you tell me the factors that prevent you to provide services in Desa SIAGA in preparing pregnant women for birth?*

**End of interview**

- Is there anything else you would like to tell me about?
- Do you have any questions you would like to ask before we end this interview?
- Remind about anonymity and confidentiality.
- Remind about that they can withdraw the data one week after interview.
- Thank you for taking part and taking their time
- Greeting.

### In-Depth Interview Schedule

#### Village government (head of neighbourhood, head of hamlet, head of village)

##### Standardised introduction

- Welcome/greeting/thank you
- Introduce myself, show the student card, explain it is a PhD research project, length of interview (approximately 1 hour) and that the interview will be audio recorded.
- Emphasise anonymity and confidentiality.
- If I ask them to repeat or clarify anything, not their fault – for the recording and my own understanding.
- If feel uncomfortable at any point can pause or cease interview and withdraw self and data.
- Any question?
- Happy to proceed?

##### Opening

- May I ask some questions related to your demographics data such as age, education, and occupation? (Refer to demographics sheet)

##### Main questions (These questions are such as guidance, ask more questions based on participant's responses on the topics)

1. Topic: Local government's understanding of their role in *Desa SIAGA* in preparing pregnant women for birth.
  - a. *Can you tell me what your understanding of the purpose of Desa SIAGA to be?*
  - b. *How Desa SIAGA was launched to your citizens?*
  - c. *When Desa SIAGA was launched to your citizens?*
  - d. *Can you tell me about your understanding of your role in Desa SIAGA in preparing pregnant women for birth?*
  - e. *Can you tell me about how is your view of your responsibility?*
  - f. *Do you get trainings related to Desa SIAGA?*  
**If Yes:** *What kind of trainings?*
  - g. *What you actually do in Desa SIAGA?*
  
2. Topic: Local government's experiences of *Desa SIAGA* in preparing pregnant women for birth.  
*Can you tell me about your experience of Desa SIAGA in preparing pregnant women for birth?*  
*Probing:*
  - *Can you tell me more about what happened?*
  - *How did you feel about it?*
  
3. Topic: The factors that might facilitate or act as barriers to local government to provide services in *Desa SIAGA* in preparing pregnant women for birth.
  - a. *Can you tell me the factors might facilitate you to provide services in Desa SIAGA in preparing pregnant women for birth?*



*b. Can you tell me the factors that prevent you to provide services in Desa SIAGA in preparing pregnant women for birth?*

4. In your opinion, how does Desa SIAGA work in preparing pregnant women for birth?
5. Do you make policy related to Desa SIAGA other than the policy from national government?

**End of interview**

- Is there anything else you would like to tell me about?
- Do you have any questions you would like to ask before we end this interview?
- Remind about anonymity and confidentiality.
- Remind about that they can withdraw the data one week after interview.
- Thank you for taking part and taking their time
- Greeting.

## In-Depth Interview Schedule

### Nearest neighbours of pregnant women

#### Standardised introduction

- Welcome/greeting/thank you
- Introduce myself, show the student card, explain it is a PhD research project, length of interview (approximately 1 hour) and that the interview will be audio recorded.
- Emphasise anonymity and confidentiality.
- If I ask them to repeat or clarify anything, not their fault – for the recording and my own understanding.
- If feel uncomfortable at any point can pause or cease interview and withdraw self and data.
- Any question?
- Happy to proceed?

#### Opening

- May I ask some questions related to your demographics data such as age, education, and occupation? (Refer to demographics sheet)

#### Main questions (These questions are such as guidance, ask more questions based on participant's responses on the topics)

1. Topic: Nearest neighbours' understanding of their role in Desa SIAGA in preparing pregnant women for birth.
  - a. *Have you ever heard about Desa SIAGA?*  
**IF NO:**
    - *Have you ever seen P4K sticker on your neighbour's house who is pregnant?*
    - *What kind of support do you give for your neighbour who is pregnant?*

***\*All those things are part of desa siaga programme. So, I would like to hear more from you about that.***

    - *Can you tell me about how is your view of your responsibility in supporting your neighbour who is pregnant in preparing them for birth?*
    - *What kind of aid do you offer to your neighbour who is pregnant when she is seeking help?*

*Go to question no. 2 and 3.*
  - b. *Can you tell me how do you know about Desa SIAGA?*
  - c. *Can you tell me about your understanding about your role in Desa SIAGA in preparing pregnant women for birth?*
2. Topic: Nearest neighbours' experiences of Desa SIAGA in preparing pregnant women for birth.
 

*Can you tell me about your experience when you give aid for your neighbour who is pregnant?*

*Probing:*

  - *Can you tell me a little bit more of what happened?*

- *Can you tell me what you actually do in supporting your neighbour who is pregnant?*
  - *How did you feel?*
3. Topic: The factors that might facilitate or act as barriers to nearest neighbours to provide aid in *Desa SIAGA* in preparing pregnant women for birth.
- a. *Can you tell me the factors might facilitate you as neighbours of pregnant women to provide aid in Desa SIAGA in preparing pregnant women for birth?*
  - b. *Can you tell me the factors that prevent you as neighbours of pregnant women to provide aid in Desa SIAGA in preparing pregnant women for birth?*

**End of interview**

- Is there anything else you would like to tell me about?
- Do you have any questions you would like to ask before we end this interview?
- Remind about anonymity and confidentiality.
- Remind about that they can withdraw the data one week after interview.
- Thank you for taking part and taking their time
- Greeting.

## In-Depth Interview Schedule Religious leaders

### Standardised introduction

- Welcome/greeting/thank you
- Introduce myself, show the student card, explain it is a PhD research project, length of interview (approximately 1 hour) and that the interview will be audio recorded.
- Emphasise anonymity and confidentiality, however midwives might be identified as they have unique role in Desa SIAGA.
- If I ask them to repeat or clarify anything, not their fault – for the recording and my own understanding.
- If feel uncomfortable at any point can pause or cease interview and withdraw self and data.
- Any question?
- Happy to proceed?

### Opening

- May I ask some questions related to your demographics data such as age, education, and occupation? (Refer to demographics sheet)

### Main questions (These questions are such as guidance, ask more questions based on participant's responses)

1. Topic: Religious leaders' understanding of their role in *Desa SIAGA* in preparing pregnant women for birth.
  - a. *Can you tell me what your understanding of the purpose of Desa Siaga to be?*
  - b. *Can you tell me about your understanding of your role in Desa SIAGA in preparing pregnant women for birth?*
  - c. *Can you tell me about how is your view of your responsibility?*
  - d. *What you actually do in Desa Siaga?*  
*Probing: could you please give me example of it?*
  
2. Topic: DASIAT member's experiences of *Desa SIAGA* in preparing pregnant women for birth.  
*Can you tell me about your experience of Desa SIAGA in preparing pregnant women for birth?*  
*Probing:*
  - *Can you tell me more about what happened?*
  - *How did you find it?*
  
3. Topic: The factors that might facilitate or act as barriers to religious leaders to provide aid in *Desa SIAGA* in preparing pregnant women for birth.
  - a. *Can you tell me about factors that might facilitate you to provide aid in Desa SIAGA in preparing pregnant women for birth?*
  - b. *Can you tell me about factors that prevent for you to provide aid in Desa SIAGA in preparing pregnant women for birth?*

**End of interview**

- Is there anything else you would like to tell me about?
- Do you have any questions you would like to ask before we end this interview?
- Remind about anonymity and confidentiality.
- Remind about that they can withdraw the data one week after interview.
- Thank you for taking part and taking their time
- Greeting.

## In-Depth Interview Schedule DASIAT member in Sendang case

### Standardised introduction

- Welcome/greeting/thank you
- Introduce myself, show the student card, explain it is a PhD research project, length of interview (approximately 1 hour) and that the interview will be audio recorded.
- Emphasise anonymity and confidentiality.
- If I ask them to repeat or clarify anything, not their fault – for the recording and my own understanding.
- If feel uncomfortable at any point can pause or cease interview and withdraw self and data.
- Any question?
- Happy to proceed?

### Opening

- May I ask some questions related to your demographics data such as age, education, and occupation? (Refer to demographics sheet)

### Main questions (These questions are such as guidance, ask more questions based on participant's responses)

1. Topic: DASIAT member's understanding of their role in *Desa SIAGA* in preparing pregnant women for birth.
  - a. *Can you tell me what your understanding of the purpose of Desa SIAGA to be?*
  - b. *Can you tell me about your understanding of your role in Desa SIAGA in preparing pregnant women for birth?*
  - c. *Can you tell me about how is your view of your responsibility?*
  - d. *Do you get trainings related to Desa SIAGA?*  
**If Yes:** *What kind of trainings?*
  - e. *What you actually do in Desa SIAGA?*  
*Probing: could you please give me example of it?*
  
2. Topic: DASIAT member's experiences of *Desa SIAGA* in preparing pregnant women for birth.  
*Can you tell me about your experience of Desa SIAGA in preparing pregnant women for birth?*  
*Probing:*
  - *Can you tell me more about what happened?*
  - *How did you find it?*
  
3. Topic: The factors that might facilitate or act as barriers to DASIAT member's' to provide aid in *Desa SIAGA* in preparing pregnant women for birth.
  - a. *Can you tell me about factors that might facilitate to you as DASIAT member to provide aid in Desa SIAGA in preparing pregnant women for birth?*

- b. *Can you tell me about factors that prevent you as a member of DASIAT to provide aid in Desa SIAGA in pregnant women for birth?*

**End of interview**

- Is there anything else you would like to tell me about?
- Do you have any questions you would like to ask before we end this interview?
- Remind about anonymity and confidentiality.
- Remind about that they can withdraw the data one week after interview.
- Thank you for taking part and taking their time
- Greeting.

## Appendix P: Descriptive question matrix for observation

(After Spradley, 1980)

**Participant: Antenatal Class/ Neighborhood Meeting/ Hamlet Meeting/ DASIAT meeting in Sendang case**

**Setting: .....**

Dimensions (are interrelated)	What the observer might focus on	Observer notes
SPACE	Description all of the spaces in which the phenomenon is occurring: what kinds of location, physical structures and spatial ordering are evident?	
OBJECT	Identification of the objects, how these are utilised within the spaces which form part of the observations?	
ACT	Description related to what kinds of 'acts' are occurring on a regular, routine and infrequent basis. How are these linked to overall activity, and how are objects used, in particular spaces at different times by different actors?	
ACTIVITY	Identification of the range of activities occurring at different times, what kinds of activities are taking place and what is their goal or goals?	
EVENT	Identification of single or multiple events, and whether they are related. How are different spaces are organised to facilitate events, do particular events occur at particular times are during particular time periods?	
TIME	Description which may include: what acts, and activities occur at specific times and how these are related to the use of objects, in particular spaces? Closely related questions include whether different or the same actors are involved	
ACTOR	Identification of individual actors, questioning and describing: where are they located in particular spaces, how do they use objects, and are their activities related to particular goals?	
GOAL	Description of the apparent purpose of events, and activities; do these changes over time, is there a sequence to the activities?	
FEELING	Identification of different feeling states, which may occur in relation to different acts and activities. Do these differ between actors?	



## Appendix Q: Ethical approval from School of Healthcare Research Ethics Committee (SHREC) University of Leeds

Faculty of Medicine and Health

Research Office

University of Leeds  
Worsley Building  
Clarendon Way  
Leeds LS2 9NL  
United Kingdom

☎ +44 (0) 113 343 31642

09 March 2018

Mrs. Vinami Yulian  
PhD Student  
School of Healthcare  
Faculty of Medicine and Health  
PGR Suite, Baines Wing  
University of Leeds  
LEEDS LS2 9JT

Dear Vinami

**Ref no: HREC17-017**

**Title: Community Participation for Maternal Health in Sukoharjo District, Central Java, Indonesia: A Qualitative Case Study Design**

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:

<i>Document Received</i>	<i>Version</i>	<i>Date Submitted</i>
V Yulian_Ethical_Review_Form_Version 3	3.0	21/02/2018
V Yulian_Annex 1_Observation Tool_Version 1	1.0	10/01/2018
V Yulian_Annex 2_Interview Topic Guide_Version 1	1.0	10/01/2018
V Yulian_Annex 3_General Information Leaflet_Poster_Version 1	1.0	10/01/2018
V Yulian_Annex 4_Participant Information Leaflet_Version 3	3.0	21/02/2018
V Yulian_Annex 5_Informed Consent Form_Version 3	3.0	21/02/2018
V Yulian_Annex 6_Diagram of Participant Recruitment Strategy_Version 1	1.0	10/01/2018
V Yulian_Fieldwork_Assessment_Form_Version 1	1.0	19/01/2018
V Yulian_General Information Leaflet_PIL_Consent in Indonesian Language_Version 1	1.0	19/01/2018
V Yulian_Lone_Working_RA_Version 1	1.0	19/01/2018
V Yulian_Research Protocol_Version 1	1.0	19/01/2018

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](mailto: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, risk assessments 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.

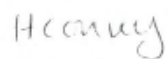
It is our policy to remind everyone that it is your responsibility to comply with Health and Safety, Data Protection and any other legal and/or professional guidelines there may be.



UNIVERSITY OF LEEDS

The committee wishes you every success with your project.

Yours sincerely

A handwritten signature in cursive script that reads "H Convey".

**Helen Convey**  
Chair, School of Healthcare Research Ethics Committee

## Appendix R: Approval letter from The Government of Sukoharjo Regency



**PEMERINTAH KABUPATEN SUKOHARJO**  
**DINAS PENANAMAN MODAL DAN PELAYANAN TERPADU SATU PINTU**  
 Jalan Kyai Mawardi No. 1 Sukoharjo, Telp./ Faks. (0271) 590244  
 Website: www.dpmpptsp.sukoharjokab.go.id | Email: dpmpptsp@sukoharjokab.go.id

**SURAT IZIN PENELITIAN BARU**

**NOMOR: 503/PEN/071/III/2018**

**TENTANG**

**PARTISIPASI KOMUNITAS UNTUK KESEHATAN IBU HAMIL DI SUKOHARJO, JAWA TENGAH, INDONESIA  
 : SEBUAH PENELITIAN STUDI KASUS**

- Dasar :
1. Undang-Undang Nomor 13 Tahun 1950 tentang Pembentukan Daerah-Daerah Kabupaten dalam Lingkungan Propinsi Jawa Tengah;
  2. Undang-Undang Nomor 18 Tahun 2002 tentang Sistem Nasional Penelitian, Pengembangan dan Penerapan Ilmu Pengetahuan dan Teknologi;
  3. Undang-Undang Nomor 23 Tahun 2014 tentang Pemerintahan Daerah sebagaimana telah diubah beberapa kali terakhir dengan Undang-Undang Nomor 9 Tahun 2015 tentang Perubahan Kedua Atas Undang-Undang Nomor 23 Tahun 2014 tentang Pemerintahan Daerah;
  4. Peraturan Daerah Kabupaten Sukoharjo Nomor 8 Tahun 2010 tentang Penyelenggaraan Pendidikan;
  5. Peraturan Bupati Nomor 32 Tahun 2017 tentang Pendelegasian Sebagian Kewenangan di Bidang Perizinan dan Non Perizinan kepada Kepala Dinas Penanaman Modal dan Pelayanan Terpadu Satu Pintu Kabupaten Sukoharjo;
  6. Surat Permohonan Pelaksanaan Penelitian dari UMS. Nomor : 426.3/C.8-III/FIK/II/2018. Tanggal 24 Februari 2018.

**MENGIZINKAN:**

Kepada :  
 Nama : VINAMI YULIAN, S.Kep., Ns., M.Sc Nursing  
 Pekerjaan : Dosen FIK UMS. NIDN : 0626078603  
 Alamat : Jl. Gremet No. 19 RT.001/RW.011, Kel. Manahan, Kec. Banjarsari, Surakarta.  
 Penanggung Jawab : Dr. Mutalazimah, SKM, M.Kes  
 Selaku : Dekan  
 Alamat : UMS Jl. A. Yani Tromol Pos I Pabelan Kartasura  
 Untuk : Permohonan Izin Pengambilan Data  
 Obyek Lokasi : 1. Desa [REDACTED]  
 2. Desa [REDACTED]

Surat Izin Penelitian ini berlaku dari 08 Maret 2018 s.d 07 Juni 2018.

Dengan ketentuan-ketentuan, sebagai berikut:

1. Sebelum pelaksanaan kegiatan, terlebih dahulu melapor kepada Pejabat setempat/ lembaga swasta yang akan dijadikan obyek lokasi untuk mendapatkan petunjuk seperlunya;
2. Penelitian/ survei tidak disalahgunakan untuk tujuan tertentu yang dapat mengganggu kestabilan keamanan masyarakat/ pemerintah;
3. Surat izin ini dapat dicabut dan dinyatakan tidak berlaku jika pemegang surat ini tidak menaati/ mengindahkan peraturan yang berlaku/ pertimbangan lain.
4. Setelah penelitian/ survei selesai, supaya menyerahkan copy hasilnya kepada Badan Perencanaan, Penelitian dan Pengembangan Daerah Kabupaten Sukoharjo.

Ditetapkan di Sukoharjo  
 pada tanggal 08 Maret 2018

KEPALA DINAS PM DAN PTSP  
 KABUPATEN SUKOHARJO



AGUSTINUS SETIYONO, S.Sos, MH

**TEMBUSAN:** Keputusan ini disampaikan Kepada Yth:

- 1 Kepala BAPPELBANGDA Kabupaten Sukoharjo
- 2 Kepala Kesbangpol Kabupaten Sukoharjo
- 3 Camat Baki Kabupaten Sukoharjo



**PEMERINTAH KABUPATEN SUKOHARJO**  
**DINAS PENANAMAN MODAL DAN PELAYANAN TERPADU SATU PINTU**

Jalan Kyai Mawardi No. 1 Sukoharjo, Telp./ Faks. (0271) 590244  
 Website: www.dpmptsp.sukoharjokab.go.id | Email: dpmptsp@sukoharjokab.go.id

**SURAT IZIN PENELITIAN BARU**

**NOMOR: 503/PEN/071/III/2018**

**TENTANG**

**PARTISIPASI KOMUNITAS UNTUK KESEHATAN IBU HAMIL DI SUKOHARJO, JAWA TENGAH, INDONESIA  
 : SEBUAH PENELITIAN STUDI KASUS**

- Dasar :
1. Undang-Undang Nomor 13 Tahun 1950 tentang Pembentukan Daerah-Daerah Kabupaten dalam Lingkungan Propinsi Jawa Tengah;
  2. Undang-Undang Nomor 18 Tahun 2002 tentang Sistem Nasional Penelitian, Pengembangan dan Penerapan Ilmu Pengetahuan dan Teknologi;
  3. Undang-Undang Nomor 23 Tahun 2014 tentang Pemerintahan Daerah sebagaimana telah diubah beberapa kali terakhir dengan Undang-Undang Nomor 9 Tahun 2015 tentang Perubahan Kedua Atas Undang-Undang Nomor 23 Tahun 2014 tentang Pemerintahan Daerah;
  4. Peraturan Daerah Kabupaten Sukoharjo Nomor 8 Tahun 2010 tentang Penyelenggaraan Pendidikan;
  5. Peraturan Bupati Nomor 32 Tahun 2017 tentang Pendelegasian Sebagian Kewenangan di Bidang Perizinan dan Non Perizinan kepada Kepala Dinas Penanaman Modal dan Pelayanan Terpadu Satu Pintu Kabupaten Sukoharjo;
  6. Surat Permohonan Pelaksanaan Penelitian dari UMS. Nomor : 426.3/C.8-III/FIK/II/2018. Tanggal 24 Februari 2018.

**MENGIZINKAN:**

Kepada :  
 Nama : VINAMI YULIAN, S.Kep., Ns., M.Sc Nursing  
 Pekerjaan : Dosen FIK UMS. NIDN : 0626078603  
 Alamat : Jl. Gremet No. 19 RT.001/RW.011, Kel. Manahan, Kec. Banjarsari, Surakarta.  
 Penanggung Jawab : Dr. Mutalazimah, SKM, M.Kes  
 Selaku : Dekan  
 Alamat : UMS Jl. A. Yani Tromol Pos I Pabelan Kartasura  
 Untuk : Permohonan Izin Pengambilan Data  
 Obyek Lokasi : 1. Desa [REDACTED]  
 2. Desa [REDACTED]

Surat Izin Penelitian ini berlaku dari 08 Juni 2018 s.d 30 September 2018.

Dengan ketentuan-ketentuan, sebagai berikut:

1. Sebelum pelaksanaan kegiatan, terlebih dahulu melapor kepada Pejabat setempat/ lembaga swasta yang akan dijadikan obyek lokasi untuk mendapatkan petunjuk seperlunya;
2. Penelitian/ survei tidak disalahgunakan untuk tujuan tertentu yang dapat mengganggu kestabilan keamanan masyarakat/ pemerintah;
3. Surat izin ini dapat dicabut dan dinyatakan tidak berlaku jika pemegang surat ini tidak menaati/ mengindahkan peraturan yang berlaku/ pertimbangan lain.
4. Setelah penelitian/ survei selesai, supaya menyerahkan copy hasilnya kepada Badan Perencanaan, Penelitian dan Pengembangan Daerah Kabupaten Sukoharjo.

Ditetapkan di Sukoharjo  
 pada tanggal 28 Mei 2018

KEPALA DINAS PM DAN PTSP  
 KABUPATEN SUKOHARJO

AGUSTINUS SETIYONO, S.Sos, MH

**TEMBUSAN:** Keputusan ini disampaikan Kepada Yth:

- 1 Kepala BAPPELWANGDA Kabupaten Sukoharjo
- 2 Kepala Kesbangpol Kabupaten Sukoharjo
- 3 Camat Baki Kabupaten Sukoharjo

## Appendix S: Distress Protocol

This protocol was adapted from:

Haigh, C. and Witham, G. 2013. Distress protocol for qualitative data collection. *Archives of Psychiatric Nursing*, **23**(5), pp.343-350.

Procedures for dealing with topics or issues that might be sensitive, embarrassing or upsetting may come up during the interviews with women:

1. If the women indicate that they are experiencing and showing signs of anxiety or emotional distress, the researcher will stop the interview.
2. The researcher will offer the women to have a break and offer immediate support.
3. Assess the women's mental state, ask:
  - Tell me how you are feeling right now?
  - What thoughts are you having?
  - Are you able to go on with your day?
  - Do you feel safe right now?
4. If the women feel able to carry on, the researcher will resume the interview. In opposite, if the women feel unable to carry on then the interview will be stop.
5. The researcher will encourage the women to contact the midwives or other healthcare professionals. Or, the researcher will offer, with participant's consent, to contact their midwives or other healthcare professionals to help them or give further advice/ support.
6. If the women consent, follow up by phone or home visit. If the women keep experiencing distress following the interviews, encourage them to contact or see midwives or other healthcare professionals.

## Appendix T: Ethics amendment

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**Subject:** HREC 17-017 amendment July 2018 favourable opinion  
**Date:** Tuesday, 10 July 2018 at 13:54:53 British Summer Time  
**From:** Jennifer Blaikie on behalf of Medicine and Health Univ Ethics Review  
**To:** Vinami Yulian  
**CC:** Linda McGowan, Tomasina Stacey  
**Attachments:** image001.jpg, image002.jpg

Dear Vinami,

Your amendment has now been approved by SHREC. Rachel will send you a formal letter confirming this when she returns to work.

Please notify the committee if you intend to make any further amendments to the information in your ethics application as submitted at date of this approval as all changes must receive ethical approval prior to implementation. The amendment form is available at <http://ris.leeds.ac.uk/EthicsAmendment>.

Please note: You are expected to keep a record of all your approved documentation and other documents relating to the study, including any risk assessments. This should be kept in your study file, which should be readily available for audit purposes. You will be given a two week notice period if your project is to be audited. There is a checklist listing examples of documents to be kept which is available at <http://ris.leeds.ac.uk/EthicsAudits>.

We welcome feedback on your experience of the ethical review process and suggestions for improvement. Please email any comments to [ResearchEthics@leeds.ac.uk](mailto:ResearchEthics@leeds.ac.uk).

Best wishes,  
Jennifer

---

Jennifer Blaikie | Senior Research Ethics Administrator | The Secretariat | University of Leeds | Leeds | LS2 9JT | 0113 34 34873 | [j.m.blaikie@leeds.ac.uk](mailto:j.m.blaikie@leeds.ac.uk) | [www.leeds.ac.uk/ethics](http://www.leeds.ac.uk/ethics) | [@UoLResEthics](https://twitter.com/UoLResEthics)

### **Appendix U: Details of discrepancies between P4K sticker and pledge card of one participant**

When the P4K sticker own by Rina was crossed-checked with Rina's pledge card the place of delivery was different. In the pledge card it was stated that the birthplace was in community health centre instead of midwife's house (a). Besides that, the name of the community health centre was not Nampan Community Health Centre. Whereas Rina's house was under Nampan Community Health Centre working area. In section (a) it should be also written the name of the birth attendant, but only the place of birth was recorded. The section (b) about 'who will provide the transportation' was written as motorbike instead of the name of the responsible person; there was no telephone number on it. Moreover, the same lack of detail was noted on her P4K sticker, the blood donor and its telephone number were also not being written on this pledge card (c).

The signature section of Rina's husband and Rina herself were blank. The midwife who signed the pledge card was not the village midwife of Meranti Village (f). Apart from that, section (a), (b) and (c) have more than one point that need to be filled up. It suggested that there must be alternative option in terms of who is the birth attendant, who will transport the woman to health facility, and who will be blood donor. However, the answers were incomplete.

**Appendix V: Translated version of meeting notes example from DASIAT****Alert Youth in Health****(DASIAT)**

District Nampan Sukoharjo Regency

Secretariat office: Nampan Community Health Centre

**Meeting notes**

Day/ date : Saturday, 01 October 2016

Time : 10.00 West Indonesian Time

Place : DASIAT office at Nampan Community Health Centre

Agenda : DASIAT monthly meeting, discussion of the programme for monitoring pregnant women and high risk pregnant women; eradication mosquito nests (PSN).

The meeting was attended by DASIAT and the head of Nampan Community Health Centre.

Meeting notes:

1. Opening
2. Speech from the head of Nampan Community Health Centre: DASIAT activities in monitoring pregnant women was excellent. Currently, there was a number of women with high-risk pregnancy within the community. The presence of DASIAT in the village can help to monitor and to guard the pregnant women. DASIAT can provide health education. Besides that, the involvement of DASIAT in PSN was eminent too. In rainy season, there was a massive dengue fever case. PSN is the best way to eradicate mosquitos.
3. The discussion of the main agenda was led by DASIAT president.
  - From the meeting, it is agreed that DASIAT need to make coordination with village midwives in Sendang Village (at the present concentrate on one village only) to collect data towards pregnant women from them. The data focus on one sub-village first.
  - With regards to PSN, DASIAT should make coordination with health cadres in the village and conduct PSN together.
4. Closing.



## Appendix W: Several approaches of synthesis

No.	Approaches	Description	Advantages	Disadvantages
1.	Case-oriented approach (Yin, 1984)	Yin (1984) proposed this approach as a replication strategy: <i>“A theoretical framework is used to study one case in depth, and then successive cases are examined to see whether the pattern found matches that in previous cases.”</i> (Miles and Huberman, 1994, p. 174)	<ul style="list-style-type: none"> <li>- This approach examines the cases in-depth</li> <li>- It focuses on the uniqueness of the cases</li> <li>- Can be used also to explore cases where the pattern is presumed on a theoretical basis to be weaker or absent</li> </ul>	<ul style="list-style-type: none"> <li>- Unclear step on how to conduct the synthesis</li> </ul>
2.	Qualitative Comparative Analysis (QCA) (Ragin, 1984)	To analyse the data, QCA involves three elements namely; assigning stringent of the data, dichotomous categorisations to qualitative data and utilizing Boolean algebra and logical inference to find commonalities among different cases with the same outcomes (Ragin, 1999)	<ul style="list-style-type: none"> <li>- Can be used to analyse large data sets that are gathered through various data collection methods such as interviews, observations, surveys, and documents</li> <li>- Can be used to find relationships among a set of factors related to common outcomes</li> <li>- Helps to synthesize multiple case studies that employ massive cases and have various data sources which can be difficult to be analysed by a traditional method</li> </ul>	<ul style="list-style-type: none"> <li>- Since QCA transform qualitative data into quantitative data and use Boolean algebra, then it may reduce the in-depth understanding towards the nuance and complexity that typically emerge from qualitative data analysis</li> </ul>
3.	Cross-case display approach (Miles and Huberman, 1994)	Cross-case display approach consists of three stages including data reduction, data display, and conclusion drawing and verification. However, these processes are iterative. Data reduction involves five stages: (i) selecting; (ii) focusing; (iii) simplifying; (iv) abstracting; and (v) transforming	<ul style="list-style-type: none"> <li>- Highly systematic method</li> <li>- Allows inclusion of various evidence types</li> <li>- Can be used to build a theory</li> </ul>	<ul style="list-style-type: none"> <li>- Difficult to digest for a novice researcher</li> <li>- Can be seen as unnecessarily and inappropriately interpretive processes (Cruzes et al., 2015)</li> </ul>

		the results. In data display, there is a number of ways to develop organized data and analyse them such as through network diagrams linking constructs, process diagrams, cognitive maps, matrix, tabulation, or graph building. At the final flow, a researcher is required to draw conclusion(s) using a matrix by finding similarities, differences, patterns, explanations, possible configurations, causal flows, or propositions (Miles and Huberman, 1994).		
4.	DIVE approach (Bush-Mecenas and Marsh, 2018)	In analyzing the data across cases, this approach utilises a table based on case-ordered meta-matrix displays with cases as rows and theoretical and empirically driven constructs as columns. In addition, to understand the theoretical propositions and to find patterns among variables this approach overlays empirical cases on theoretically informed conceptual diagrams. DIVE approach consists of four stages of analysis namely: describe, integrate, visualize, and expand (Bush-Mecenas and Marsh, 2018).	<ul style="list-style-type: none"> <li>- Combining traditional qualitative methods (Coding, interpretation, cross-case comparison, and memoing) with matrix and displays</li> <li>- Can be used to synthesis a large number of complex multiple case data to find patterns and emerging themes</li> <li>- Transparent</li> </ul>	<ul style="list-style-type: none"> <li>- Only focuses on case-ordered strategy</li> <li>- It is not widely used yet</li> </ul>
5.	Narrative synthesis (Popay et al., 2006)	Refers to a method 'to synthesizing findings from multiple studies that relies primarily on the use of words and text to summaries and explain the findings of the synthesis' (Popay et al., 2006).	<ul style="list-style-type: none"> <li>- Can cope with large evidence base, comprising various evidence types</li> <li>- Its flexibility</li> <li>- Can be used to build a theory</li> </ul>	<ul style="list-style-type: none"> <li>- Lack of transparency</li> <li>- Many variants</li> <li>- Lack of procedures/ standards</li> </ul>

				- There is possibility that it depends on prejudices of the reviewer
6.	Meta-ethnography (Noblit and Hare, 1988)	<p>The aim is to create novel interpretations and conceptual innovation of the phenomenon being studied.</p> <p>There are three different strategies of synthesis are used in meta-ethnography:</p> <ul style="list-style-type: none"> <li>- Reciprocal translational analysis (RTA): it is a translation process of concepts from individual studies into one another, thereby evolving overarching concepts or metaphors. It is usually transforming data into maps.</li> <li>- Refutational synthesis: exploring and explaining contradictions among individual studies</li> <li>- Lines-of-argument (LOA) synthesis: a process of building up a picture of the whole from studies of its parts</li> </ul>	<ul style="list-style-type: none"> <li>- Offers clear 7 steps to conduct the synthesis: starting meta-synthesis, consideration of relevant studies, reading the studies and deciding how they put together, translating the studies into one another, synthesizing translations, and expressing the synthesis</li> <li>- Widely used in healthcare research</li> <li>- The most commonly used qualitative synthesis approach</li> </ul>	<ul style="list-style-type: none"> <li>- Theoretical sampling is encouraged to be developed on the second step of synthesis, yet there is a lack of guidance on how to operationalise theoretical sampling at the search stage (Atkin et al., 2008)</li> <li>- Unclear guidance to approach reciprocal translation and the order in which to compare studies</li> <li>- The RTA strategy may not suit to synthesis small number of qualitative studies since it seems only summarizing data that already presented on the primary studies.</li> </ul>
7.	Grounded theory	Grounded theory (Glaser and Strauss, 1967) as a method for primary research has emerged as an approach of synthesis. An example of works that use grounded theory on their synthesis: Kearney (2001).	<ul style="list-style-type: none"> <li>- Can be used to synthesis primary studies that use grounded theory</li> <li>- Widely applied</li> <li>- Helps to develop a theory</li> </ul>	- Basically, to be used to synthesis primary studies that use grounded theory as the methods. It cannot be used to synthesis multi-methods of primary research.

8.	Thematic synthesis (Thomas and Harden, 2008)	This method aims to identifying, analyzing, and reporting patterns (themes) within data set.	<ul style="list-style-type: none"> <li>- Flexible procedures</li> <li>- It copes with various evidence types</li> <li>- Can be used to build a theory</li> <li>- Can be use within studies that use diverse theoretical frameworks</li> </ul>	<ul style="list-style-type: none"> <li>- Lack of transparency</li> <li>- Largely descriptive</li> <li>- Data-driven basis to groupings</li> </ul>
9.	Meta-study (Paterson et al., 2001)	Meta-study is “a research approach involving analysis of the theory, methods, and findings of qualitative research and the synthesis of these insight into new ways of thinking about phenomena” (Paterson et al., 2001 p2).	<ul style="list-style-type: none"> <li>- Explicit steps</li> <li>- Intended to synthesis qualitative studies in health sciences</li> <li>- This method does not intend to generate grand theories, yet highly applicable in conducting a critical interpretation about a particular phenomenon and in developing and refining a midrange theory of that phenomenon</li> <li>- Can help practitioners to understand findings from qualitative research hence provide effect to their practice</li> </ul>	<ul style="list-style-type: none"> <li>- This approach does not intend to generate grand theories</li> <li>- The approach decontextualizes data from the original construction</li> <li>- The quality depends on the ability of the primary researcher of the primary study in conducting the research design and illuminate the findings</li> </ul>
10.	Meta-narrative (Greenhalgh et al., 2005)	Aims to synthesis research to answer a complex policy-making questions	<ul style="list-style-type: none"> <li>- Could be used to synthesis diverse disciplinary research</li> <li>- Clear steps</li> </ul>	<ul style="list-style-type: none"> <li>- The approach has not been tasted properly</li> </ul>
11.	Framework synthesis	<p>Framework synthesis is developed originally from framework analysis (Pope et al., 2000; Ritchie and Spencer, 1993; Miles and Huberman, 1984). Some works which adapt framework analysis on the synthesis are Brunton et al (2006) and Oliver et al (2008).</p> <p>The approach is deductive since the reviewer is required to develop a framework in the beginning of the synthesis.</p>	<ul style="list-style-type: none"> <li>- Highly systematic approach</li> <li>- The chart of the framework may help to find pattern and the relationship of the findings</li> </ul>	<ul style="list-style-type: none"> <li>- The approach does not suit to synthesis studies that intend to find ‘themes’ from the ground-up</li> <li>- Needs additional analysis if there is additional data that does not fit to the priori framework</li> </ul>

## Appendix X: Dissemination plan

### Dissemination to date

During the study, the researcher attended several conferences (international and within the UK), seminars, and showcase. The attendances were not only aimed to deliver the information about the study, but also to gain research knowledge, presentation skills, experiences, and networking. The list of the dissemination of the study are as follows:

#### Conferences:

1. Yulian, V., Stacey, T., McGowan, L. 2018. Community Participation for Maternal Health in Sukoharjo Regency, Central Java, Indonesia: A Qualitative Case Study Design. In: *Postgraduate Research Conference, Faculty of Medicine and Health, University of Leeds*.
2. Yulian, V., Stacey, T., McGowan, L. 2019. Village midwives' and stakeholders' experience of community participation programme for safe birth in Indonesia: a qualitative case study design. In: *The 19<sup>th</sup> Congress of the International Society of Psychosomatic Obstetrics and Gynaecology (ISPOG), The Hague, Netherlands*.
3. Yulian, V., Stacey, T., McGowan, L. 2019. Women's experience of community participation programme for birth in Indonesia. In: *Postgraduate Research Conference, Faculty of Medicine and Health, University of Leeds*. Awarded as the best oral presentation.

#### Showcase:

Yulian, V., Stacey, T., McGowan, L. 2019. 'Alert Village': a strategy to improve maternal health outcomes in Indonesia. In: *Leeds Doctoral Showcase, University of Leeds*.

#### Seminars:

Yulian, V., Stacey, T., McGowan, L. 2020. Village midwives' and stakeholders' experience of community participation programme for safe birth in Indonesia: a qualitative case study design. In: *International Day of the Midwife, School of Healthcare, University of Leeds [Online]*. The audience in the seminar came from various elements, including key speakers from several universities in the UK, practitioners, academics and students from the School of Healthcare, University of Leeds, and master students of Midwifery Programme, Aisyiyah University of Yogyakarta, Indonesia.

The study was also presented in the Maternal, Child and Family Health research group in the School of Healthcare, University of Leeds, in the first year of the study. This research group was very supportive in order to gain research knowledge, experiences

and networking. In addition, in 2018, the study was delivered in a mini seminar for Midwifery Master Student from Aisyiyah University of Yogyakarta who visited School of Healthcare, University of Leeds.

### **Other media**

The researcher also had a chance to broadcast the study on a local radio, *Mentari FM*, in Surakarta, Indonesia, during the data collection in 2018. Despite of the growing use of internet-based social media, the listeners of the radio broadcasting was still high. Several listeners, who were mostly elderly, responded to the broadcast through phone calls.

### **Plan for dissemination**

#### **Future conference:**

A part of this study will be presented in the ICM Triennial Conference in Bali, Indonesia which will be held online in weekly conference in May 2021. The abstract has been accepted as a poster presentation.

#### **Future publication:**

<b>Publication</b>	<b>Target journals</b>
Community participation models for maternal and neonatal health: A scoping review	BMJ Global Health BMC Pregnancy and Childbirth BMC Women's Health Midwifery
Desa SIAGA as a community participation model in Indonesian context: Findings from a case study design	
Facilitators and barriers in the delivery and implementation a community participation model in Indonesian context: do they work?	