MAMPU

Maju Perempuan Indonesia
untuk Penanggulangan Kemiskinan

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A REVIEW OF POLICY-ORIENTED RESEARCH ON MATERNAL MORTALITY IN INDONESIA

This research was carried out in collaboration with the Governments of Australia and Indonesia, but the analysis and findings in this paper represent the views of the author/s and do not necessarily represent the views of those Governments.

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A Review of Policy-Oriented Research on Maternal Mortality in Indonesia

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ABSTRACT

For over a decade, Indonesia has been aware of the challenges in reducing maternal mortality. The Government has carried out some actions to address the issues, but despite of the efforts, the number of Maternal Mortality Rate (MMR) in Indonesia has not decreased and remains above the MDGs target of 102 per 100.000 live births in 2015. This literature review aims to canvass the key policy oriented research to identify key knowledge gaps and priorities for future research. Based on a total of 62 publications that have undergone peer review, this review sought out issues concerning non-clinical aspects of maternal mortality undertaken between 2004 and 2014. The study identified knowledge and information gaps, such as credible measurement of MMR, unmet needs for family planning particularly among unmarried, the incidence, prevalence and impact of unsafe abortion, and adolescent reproductive health. The review recommends several research priorities: increasing scope of existing national surveys and data sets (e.g. expanding scope on DHS) to include data collection on the critical information gaps; support qualitative research that aims to better understand the experiences of maternal and reproductive health, including among young people, that can also explain the influences of culture, poverty, geography and religion; and develop and support a research agenda that generates more knowledge on the policy process and the political economy of maternal and reproductive health in Indonesia.

Keywords: maternal mortality, MDGs, policy process

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EXECUTIVE SUMMARY

The Empowering Women for Poverty Reduction Program (MAMPU) funded by Australian Aid is in the process of formulating a strategic research agenda. A preparatory step is a review of existing research on its thematic area of strengthening women's leadership for better maternal and reproductive health with a specific aim of addressing Indonesia's high maternal mortality. The objectives are to:

- Learn from existing research and identify knowledge gaps critical to improve policies around maternal and reproductive health in Indonesia.
- Specifically, the review report will inform the development of MAMPU's strategic research agenda and set-up of BAPPENAS thematic working group on maternal and reproductive health.

The review was framed by research questions on research *for* policy and research *of* policy. The review identified three broad areas of research: identification of key data sets to inform situational analysis and policy development; research into the underlying causes of high maternal mortality, including health systems and barriers to health that inform and are shaped by policy; and research into the policy making process in Indonesia specifically related to maternal and reproductive health. A total of 62 studies were included in the review.

MAIN FINDINGS

The main **data sets** that are available and used by national government in policy review and development include: Demographic Health Survey, SUSENAS, National Health (Household Surveys), Riskesdas, the Indonesia Family Life Survey and the Indonesian Population Census. There are also a number of sources of data on cause-specific mortality, including maternal, newborn and child mortality. Weaknesses and information gaps have been identified in the research reviewed here. The most critical gaps are credible measure of maternal mortality that includes cause and burden of maternal death; unmet need for contraceptives/ family planning amongst unmarried (men and women) and married, including on method choice; and incidence of abortion, method and abortion related mortality.

Research on the underlying causes of high maternal mortality and associated poor maternal and reproductive health services includes analysis of the health system and of specific health policies and programs (or lack thereof), such as safe motherhood, family planning, adolescent sexual reproductive health, abortion and cultural, social and economic determinants of health that affect access and uptake of health care.

Equity and Barriers to Health

Research on **equity and barriers to health** and health seeking behaviour has revealed the complex interrelationship between poverty, geography, culture and religion and maternal health and mortality. Qualitative research has illustrated how biomedical and epidemiological studies, whilst important, should be supplemented by research that aims to better understand from the perspectives of women, their families and caregivers, the experience of maternal health (or illness) and the traditions, beliefs and perceptions that affect their access to care. It also illuminates how entrenched systemic issues and health provider attitudes also affect access to and uptake of services critical to improving maternal health. There is generally limited research in this field, in particular on its application in policy.

Family planning

Family planning has been the subject of considerable research in Indonesia, given the success of the nationally sponsored program during the 1970-80s in rapidly increasing contraceptive prevalence rate and reducing fertility. More recently, attention and research has shifted towards efforts to revitalise the family planning program in the wake of decentralisation that saw a reduction in the investment in family planning at district level, resulting in stagnating contraceptive prevalence rates, and as a measure to support reduction in maternal mortality. Also of concern are the stagnant and unknown levels of unmet need, particularly amongst unmarried and on method choice, rates of unintended pregnancies amongst married and unmarried women, and the need to improve demand and equitable access to quality, affordable family planning services, including from the private sector. The most significant knowledge gap is data on the unmet need for contraception amongst unmarried men and women. There is also limited information and research on unmet need for contraceptive choice, which is of increasing concern given the bias in method mix towards shorter term acting methods. Implications and impact on family planning services uptake from the roll out of JKN will be an important area for research, particularly on increasing access and affordability to poor women and couples. There is also limited research on male involvement in family planning.

Adolescent sexual reproductive health

Adolescent sexual reproductive health is a field that is constrained by limited national and subnational data. Smaller scale surveys and qualitative studies have attempted to fill some of the gaps in national data sets. The research suggests young Indonesian men and women are sexually active, and that current laws restricting access to family planning to married couples and a lack of comprehensive sexual and reproductive health education are affecting young people's ability to practice safe sex and prevent unintended pregnancy. Whilst the age of marriage is gradually increasing, which is also increasing the age of first pregnancy, the family planning law still leaves young unmarried women vulnerable to unintended pregnancy and its related health and stigmatising status. Key knowledge gaps are on data on prevalence of premarital sex, and adolescent pregnancy, and the needs for reproductive health education and services for men and women in this age group. Qualitative and longitudinal studies are also needed to provide much needed insights into the experience of

adolescent sexual reproductive health, including adverse social and economic outcomes from unintended pregnancy.

Abortion

Research on the prevalence and characteristics of **abortion** in Indonesia is also limited and outdated. Research back in 2001 had estimated that 2 million abortions (1.2 million induced) took place in 2000. There appears to be no current research to update this estimate. The greatest research priority is to obtain up-to-date, national and sub-national data on the incidence of abortion and on maternal morbidity and mortality resulting from unsafe abortion in Indonesia. Knowledge gaps also cover women's experiences—the obstacles that limit their ability to use contraceptives effectively, the decision making process they undertake in the face of an unintended pregnancy, their attitudes toward abortion and the steps they take to terminate a pregnancy.

Health system

The review found that there is considerable research into the **health system** and knowledge of the policy constraints and weaknesses affecting ineffective health system performance are generally well known. This covers issues such as decentralisation, human resources for health, health financing, including insurance and role of the private sector in health care delivery. However, it is widely documented that data and information on private sector health care delivery needs significant refinement and is undermining effective policy implementation and service planning including for key maternal and reproductive health care services.

Policy process

Research **of policy process** relating to maternal health is comparatively underdeveloped in Indonesia. There is a growing body of research that aims to understand the socio-politico-religious influences in Indonesia particularly with respect to more sensitive domains such as abortion and adolescent sexual reproductive health. The research demonstrates how these domains are still contentious issues in the political and socio-religious sphere, and the lack of political consensus has also left policy vacuums or ambiguity, which has not necessarily supported advancement of maternal and reproductive health goals. The research however, also points to areas of significant political and policy progress in once traditionally conservative domains such as increasing access and coverage of family planning.

RECOMMENDATIONS

Recommendations from existing research relevant for MAMPU to take up are broadly:

1. Where possible, support or advocate for increasing scope of existing national surveys and data sets to include data collection on critical information gaps, such as unmet need for family planning among unmarried, abortion incidence, prevalence and impact, credible measures of maternal mortality;
2. Support qualitative research that aims to better understand the experiences of maternal and reproductive health, including among young people, that can also explain the influences of culture, poverty, geography and religion;
3. Develop and support a research agenda that generates more knowledge on the policy process and the political economy of maternal and reproductive health in Indonesia.

ACRONYMS

ANC	Antenatal Care
Balitbang	*Badan Penelitian dan Pengembangan* (Research and Development Agency)
BAPPENAS	*Badan Perencanaan Pembangunan Nasional* (Ministry of National Development Planning)
BKKBN	*Badan Kependudukan dan Keluarga Berencana Nasional* (National Population and Family Planning Board)
BPJS	*Badan Penyelenggara Jaminan Social* (National administrator of social security scheme)
BPS	*Badan Pusat Statistik* (Statistics Indonesia)
CPR	Contraceptive Prevalence Rate
CSO	Civil Society Organisation
DHS	Demographic Health Survey
GoI	Government of Indonesia
GTAS	Greater Jakarta Transition to Adulthood Survey
ICD-10	International Statistical Classification of Diseases and Related Health Problems 10th Revision
ICPD	International Conference on Population and Development
IDHS	Indonesia Demographic Health Survey
IFLS	Indonesia Family Life Survey
IMR	Infant Mortality Rate
IYARHS	Indonesia Young Adult Reproductive Health Survey

JKN	*Jaminan Kesehata Nasional* (National Health Insurance Scheme)
Jamkesmas	Jaminan Kesehatan Masyarakat (Health Insurance Scheme for the Population)
KAP	Knowledge Attitude Practice
MAMPU	Empowering Women for Poverty Reduction Program
MDG	Millennium Development Goal
MMR	Maternal Mortality Rate
MNCH	Maternal Newborn Child Health
MoH	Ministry of Health
MSS/SPM	Minimum Service Standards/Standar
NHHS	National Household Health Survey
NHS	National Health Survey
NSPK	*Norma, Standar, Prosedur, dan Kriteria* (Norms, Standards, Procedures, and Criteria)
ODI	Overseas Development Institute
PONED	Neonatal Emergency Service
PONEK	Neonatal Emergency Service Program
SKTIR	*Survei Khusus Tabungan dan Investasi Rumah Tangga* (Special Survey on Household Savings and Investments)
SPH-UQ	School of Public Health University of Queensland
SUSENAS	*Survei Sosial Ekonomi Nasional* (National Socio-Economic Survey)
TFR	Total Fertility Rate

UHC	Universal Health Care
UNFPA	United Nations Population Fund
WHO	World Health Organisation
WRI	Women's Research Institute

1 INTRODUCTION

The Empowering Women for Poverty Reduction Program (MAMPU) funded by Australian Aid is in the process of formulating a strategic research agenda. A preparatory step is a review of existing research on its thematic area of strengthening women's leadership for better maternal and reproductive health with a specific aim of addressing Indonesia's high rates of maternal mortality. The review is to determine what information is already available, whether there are recommendations from existing research relevant for MAMPU to take up, and identify the most crucial knowledge gaps from a policy perspective. The objectives of the research review are to:

- Learn from existing research and identify knowledge gaps critical to improve policies around maternal and reproductive health in Indonesia
- Specifically, the review report will inform the development of MAMPU's strategic research agenda and set-up of BAPPENAS thematic working group on maternal and reproductive health.

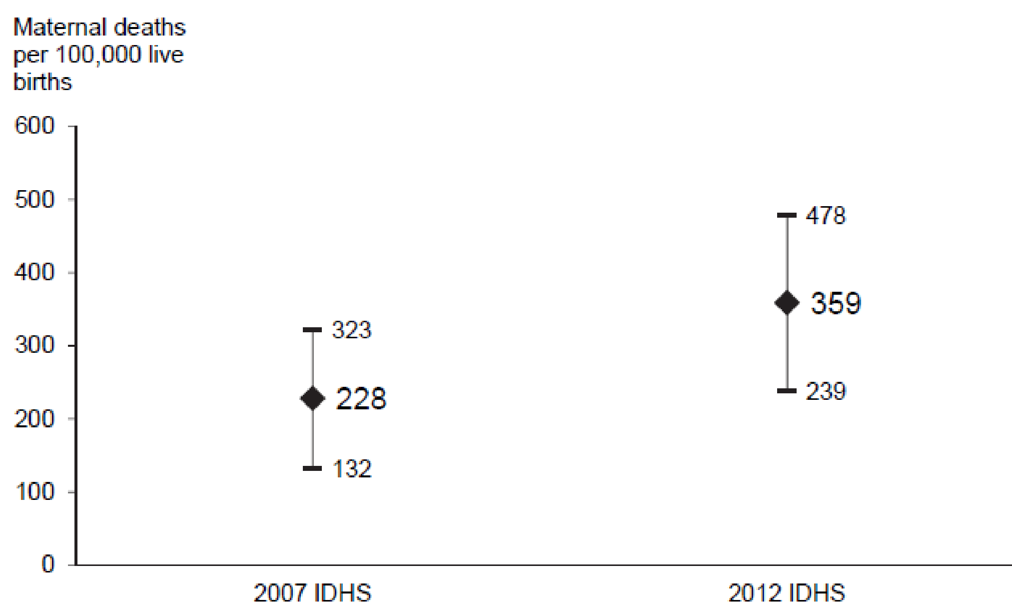
1.1 BACKGROUND ON MATERNAL MORTALITY IN INDONESIA

- Indonesia will not [didn't] meet its Millennium Development Goal (MDG) target of reducing Maternal Mortality Rate (MMR) to 102 by [in] 2015.
- The MMR in 2007 was estimated to be 2028 and in 2012 is estimated to be 359 (though this measure has wide confidence intervals)
- Government policies and programs to increase availability and use of midwives have not had anticipated impact, despite increase coverage of antenatal care and births at facilities
- Main causes of maternal death are pre-eclampsia / eclampsia related conditions and haemorrhage
- Lack of 24/7 access to high quality obstetric and neonatal care and links between community level care (Midwife and PONED), effective referral and PONEK

Despite the considerable strides made in improving maternal survival, Indonesia will not meet its Millennium Development Goal target of a maternal mortality ratio (MMR) of 102 by 2015. Using data from IDHS, Indonesia's MMR declined from 390 in 1991 to 228 in 2007 (confidence interval: 132-323) and most recently is estimated to have increased to around 359 (confidence interval: 239-478) (IDHS 2012). The data suggests a startling rise in the point prevalence, though, given the width of the confidence intervals, it is not certain that there actually was a significant rise. In contrast, joint WB-UN data gives different data with a MMR of 220 per 100,000 live births in 2010 and 190 per 100,000 live births in 2013. The lack of credible data on maternal mortality is further explained in section 3 below. With both sets of

data. it is clear that the MMR in Indonesia has not decreased as expected. and remains far above the MDGs target of 102 per 100,000 live births (GoI 2014).

Figure 1. Maternal Mortality Ratio (MMR) With Confidence Intervals For the Five Years Preceding the 2007 IDHS and the 2012 IDHS



Source: IDHS 2012

The 2010 census found pre-eclampsia/ eclampsia related conditions and haemorrhage the most common causes of maternal death with sizable variation by regions and provinces. Eclampsia and pre-eclampsia related deaths are higher in the more populated islands of Java and Sumatra and post-partum haemorrhage is more frequent in Eastern Indonesia. (Mize, et al., 2010).

Mize, et al. (2010) in the 2010 Indonesia Maternal Health Assessment carried out by World Bank, MoH and BAPPENAS highlight the key issues affecting Indonesia's capacity to reduce maternal mortality. Mize, et al. report that despite three decades of interventions, the current approach in Indonesia which emphasizes the use of a midwife for delivery and community-based interventions has not had the anticipated impact. Interventions by the skilled birth attendants in many cases are not in line with existing standards and prove to be ineffective in trying to address the emergence of complications. Antenatal care is important, but it is not where gains in decreased mortality will be obtained. The government has increased the number of midwives available but their deployment patterns are still uneven and many remote areas do not have access. In addition, there is a need to improve the effectiveness in midwives training, as well as the elevation on the competencies of managing birth complications in educational sector. Obstetricians are not widely available-of approximately 2,100 trained specialists. more than half practice on the island of Java. Health centres and hospitals, which are key elements of a referral system designed to address emergency complications, are also still not performing at an optimal level. When clients access the

system, they encounter barriers such as denial of service, demand for payment prior to service and inadequate treatment. Hospitals are not implementing standard policies that would address the leading causes of death, which are haemorrhage, infection and eclampsia.

A woman's economic status, her level of education and her age at first marriage are social determinants that can affect maternal health and the birth outcome. Wealth quintiles also determine what kind of health care is accessed by women. Nearly 70 percent of Indonesia's wealthiest women give birth with a health professional, compared to only 10 percent of the poorest quintile in two Serang and Pandeglang districts in West Java. Moreover, the remaining challenges in reducing maternal mortality in Indonesia are complicated by decentralisation and health systems constraints.

The following literature review aims to canvass the key policy oriented research undertaken in the field in the last decade to identify key knowledge gaps and priorities for future research.

2 METHODOLOGY

The research design for this task involved developing analytical framework and specific research questions around the two broad areas of study identified in the Scope of Work to be included in the review:

- Research for policy: research that informs the various stages of the policy process, before the formation of policy through to its implementation; and
- Research of policy: focusing on how problems are defined, agendas are set, how policy is formulated, decisions are made, implemented, evaluated and changed.

A simple analytical framework was developed to structure the review and develop specific research questions to support the research objectives.

	Key data sets to inform policy	Diagnostics/ Problem Analysis to inform policy	Political Economy Analysis
Research Question	What is the availability of information and research on the status of maternal mortality in Indonesia; what do we know on who, what, where and why?	What is known about the underlying causes of high maternal mortality and associated poor maternal and reproductive health?	What is known about the policy making process in relation to maternal health?
	What are the data sources? National surveys, health information systems? To what level is the information available? National, provincial, district, sub-district?	What evidence/ research is available to policy makers/ or has been carried out by policy makers on diagnosing / analysing the problem?	What are the lessons learned in relation to successfully advancing important policy reforms that support improved maternal health and reducing maternal mortality?
	What are the knowledge and information gaps? What are the recommendations from existing research for future research priorities?	What are the knowledge and information gaps? What are the recommendations from existing research for future research priorities?	What are the research / knowledge gaps that would support more informed/ strategic policy reform processes?

The criteria for selection of studies to be included in the review were agreed with MAMPU as follows:

a. Studies that have undergone peer review, either in academic journals or commissioned studies stating that they have undergone a review process, including donor reports, international and national organisations or foundations

b. Studies that were undertaken between 2004 and 2014

c. Studies concerning non-clinical aspects of maternal mortality, especially the relationship between maternal mortality and other policies on reproductive health

d. Studies that look at policy processes in Indonesia that may not specifically relate to maternal health, but offer value/ insight into components of the policy circle relevant to the research objectives

e. Reports written in either Bahasa Indonesia or English

Literature was gathered using online search tools including Popline, Google scholar, Medline, Google, specific search for grey literature from organisation's websites such as UNFPA, World Bank, WHO, specific search of Indonesian government websites, and the snowball method which traced identified literature from article/study reference lists. A total of 62 publications were chose for review. The full bibliography is provided at Annex 1.

A note on maternal death data

Much attention has been given to measuring the MDG target of reducing the MMR, but yet many countries, including Indonesia, do not have a complete civil registration system with good attribution of cause of death, which is necessary for the accurate measurement of maternal mortality. There have been significant challenges in measuring maternal deaths in Indonesia due to an absence of data. Indonesia uses the Demographic Health Survey to measure MMR and has done so since 1991, but these figures only represent the national aggregate level (with no sub-national information), and the number of deaths collected is very small, leading to a wide confidence interval, making correct interpretation difficult, as indicated in the graph from the 2012 IDHS above (GoI, 2014). Furthermore, in population-based surveys, respondents provide information on the pregnancy status of a reproductive-aged sibling at the time of death, but no further information is elicited on the cause of death. These surveys, therefore, usually provide measures of pregnancy-related deaths rather than maternal deaths

3 REVIEW OF DATA SETS TO INFORM SITUATIONAL ANALYSIS ON MATERNAL AND REPRODUCTIVE HEALTH

This section provides a brief overview of the key datasets that are used to inform national policies relating to maternal and reproductive health.

3.1 INDONESIA DEMOGRAPHIC HEALTH SURVEYS

The 2012 Indonesia Demographic and Health Survey (IDHS) is the seventh survey conducted in Indonesia under the auspices of the DHS program. Previous IDHS surveys are as follows: the 1987 National Indonesia Contraceptive Prevalence Survey (NICPS), the 1991 IDHS, the 1994 IDHS, the 1997 IDHS, the 2002-03 IDHS, and the 2007 IDHS. Since 2002-03, the survey has expanded to include a survey of currently married men age 15-54 and never-married women and men age 15-24, referred to as adolescents. Findings of the survey of adolescents are presented in a separate report. A departure from past DHS surveys in Indonesia, which covered ever-married women age 15-49, the 2012 IDHS included never-married women age 15-49. In addition to women age 15-49, the 2012 IDHS interviewed currently married men age 15-54 and never-married men age 15-24. It was conducted in all 33 provinces in Indonesia.

The 2012 IDHS was specifically designed to meet the following objectives:

- Provide data on fertility, family planning, maternal and child health, adult mortality (including maternal mortality), and awareness of AIDS/STIs to program managers, policymakers, and researchers to help them evaluate and improve existing programs;
- Measure trends in fertility and contraceptive prevalence rates, and analyse factors that affect such changes, such as marital status and patterns, residence, education, breastfeeding habits, and knowledge, use, and availability of contraception;
- Evaluate the achievement of goals previously set by national health programs, with special focus on maternal and child health;
- Assess married men's knowledge of utilization of health services for their family's health, as well as participation in the health care of their families;
- Participate in creating an international database that allows cross-country comparisons that can be used by the program managers, policymakers, and researchers in the areas of family planning, fertility, and health in general.

The 2012 IDHS sample was designed to produce estimates at the national, urban-rural, and provincial levels. The IDHS reports from 2002-03 are available at: http://dhsprogram.com/Where-We-Work/Country-Main.cfm?ctry_id=17&c=Indonesia&Country=Indonesia&cn=&r=4

3.2 SUSENAS

SUSENAS is a series of large-scale multi-purpose socioeconomic surveys initiated in 1963-1964. It is implemented by *Badan Pusat Statistik* (Statistics Indonesia) (BPS) annually. The instruments are formulated together within related sectors (e.g. health, family planning, public works, agriculture, labour, education, etc). Since 1993, SUSENAS surveys cover a nationally representative sample typically composed of 270.000 households. Each survey contains a core questionnaire which consists of a household roster listing the sex, age, marital status and educational attainment of all household members. The survey is supplemented by modules covering about 70,000 households that are rotated over time to collect additional information such as health care and nutrition, household income and expenditure and labour force experience (see NHS and Riskesdas below). The Under-5 mortality rate can be estimated from children ever born data.

3.3 NATIONAL (HOUSEHOLD) HEALTH SURVEYS 1980-2004

The National Institute of Health Research and Development implemented the National Household Health Survey (NHHS) in 1980, 1986, 1992, 1995 and the National Health Survey (NHS) 2001 and 2004 using samples of the SUSENAS module (68,000 households). Mortality surveys (using the verbal autopsy method) were conducted in 1986, 1992, 1995 and 2001 as follow up visits to households where deaths had occurred in the last 12 months as identified by SUSENAS interviewers.

3.4 RISKESDAS 2013

Riskesdas 2013 was a nationwide community-based cross-sectional survey covering 258,366 households and 987.205 respondents in all 33 provinces (440 districts and cities). The samples are the same as the core samples of SUSENAS. Hence, both data sets were merged and analysed. With the merged dataset almost all variables can be classified by province, city/district, age group, sex, education level, and quintile level of household expenditures. The objectives were to provide baseline data on nutritional status, access and utilisation of health care services, environmental sanitation, food consumption, prevalence of common diseases and injuries, responsiveness of health services, Knowledge Attitude Practice (KAP) on healthy behaviour, disabilities, mental health, immunisation, child health, anthropometric measurement, blood pressure measurement, dental and vision examination, and causes of death based on ICD-10. Data was collected on 900 variables. In addition, blood samples (n=36,357) were collected from people living in the cities. Samples of kitchen salt from households in 30 districts identify as goitre endemic areas and samples of urine of school children were also examined for iodine. Identified limitations (non-random error) include the formation of new districts. Riskesdas can provide comparable health indicators at the district/ city, provincial and national level. Health databases (community-based data, not facility based) at the district/ city level are used for planning and evaluation. Reports (mostly written in Bahasa with one English version) available at: http://www.litbang.depkes.go.id/sites/download/rkd2013/Laporan_riskesdas_2013_final.pdf

3.5 INDONESIA FAMILY LIFE SURVEY

The Indonesia Family Life Survey (IFLS) is designed to provide data for studying behaviours and outcomes. The survey contains a wealth of information collected at the individual and

household levels, including multiple indicators of economic and non-economic well-being: consumption, income, assets, education, migration, labour market outcomes, marriage, fertility, contraceptive use, health status, use of health care and health insurance, relationships among co-resident and non-resident family members, processes underlying household decision-making, transfers among family members and participation in community activities. In addition to individual—and household—level information, the IFLS provides detailed information from the communities in which IFLS households are located and from the facilities that serve residents of those communities. These data cover aspects of the physical and social environment, infrastructure, employment opportunities, food prices, access to health and educational facilities, and the quality and prices of services available at those facilities. By linking data from IFLS households to data from their communities, users can address many important questions regarding the impact of policies on the lives of the respondents, as well as document the effects of social, economic, and environmental change on the population.

The last survey was conducted in 2007/08. The surveys are available through the World Bank at http://microdata.worldbank.org/index.php/catalog/1044/study-description

The Indonesia Family Life Survey East was conducted in 2012 and is based on the original IFLS but only covers the eastern provinces of Nusa Tenggara Timur, Kalimantan Timur, Sulawesi Tenggara, Maluku, Maluku Utara, Papua Barat and Papua. The report is available http://www.tnp2k.go.id/

3.6 POPULATION CENSUS

The Population Census aims to gather characteristics of the Indonesian population such as gender, age, marital status, educational attainment, migration, occupation, religion, etc. As regulated by national law, the census is taken every ten years (years ending in zero). They were conducted in 1961, 1971, 1980, 1990, 2000 and 2010. The next Population Census will be carried out in 2020.

3.7 DATA ON CAUSE SPECIFIC MORTALITY, INCLUDING MATERNAL, NEWBORN AND CHILD MORTALITY

There are several sources of data on cause-specific mortality, including maternal, newborn and child mortality:

a) Mortality Study of Survei Khusus Tabungan Dan Investasi Rumah tangga (SKTIR) /SUSENAS (2001) and NHSNHS 2001. The SKTIR is a special survey on savings and household investments, latest available for 1997;

b) Baseline Health Research/SUSENAS (Riskesdas 2007);

c) Indonesia Mortality Registration System Strengthening Project – SPH UQ + AusAID + WHO 2006 – 2008; and

d) Tuberculosis Mortality Surveillance System (2006 – 2008; WHO assisted).

Sub-national (province, district, and city) level mortality analysis depends on:

a) Mortality registration (local area monitoring);

b) Maternal-Perinatal Hospital Reporting Recording System; and

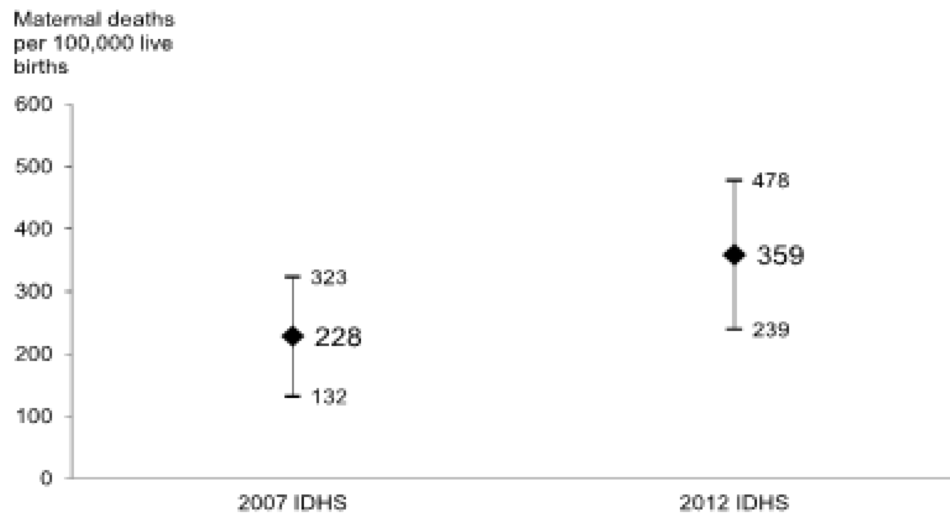
c) MNCH Surveillance Audit.

3.8 KNOWLEDGE AND INFORMATION GAPS

A number of authors (Trisnantoro, et al., 2009; Gray, 2013) have identified the limitations and gaps in information in current survey mechanisms and data from health information systems that are critical to for informing status, situational analysis policy development. The key information gaps are as followed:

- Credible measure of maternal mortality that includes cause and burden of maternal death
- Unmet need for contraceptives/ family planning amongst unmarried (men and women) and married, including on method choice
- Incidence of abortion, method, abortion related mortality
- Prevalence of pre-marital sex
- Iron deficient anaemia in pregnancy
- District level specific data
- Various data on adolescent reproductive health, including young adolescents (10-14 years old)

Figure 2. Maternal mortality ration (MMR) with confidence intervals for the five years preceding the 2007 IDHS and the 2012 IDHS



Source IDHS 2012

4 RESEARCH AND DIAGNOSTICS/ PROBLEM ANALYSIS TO INFORM POLICY

This section provides an overview of the body of research available on the underlying causes of high maternal mortality and associated poor maternal and reproductive health services. It identifies the research and analysis available to policy makers that has been undertaken by independent researchers/ academics, national institutes and international organisations/ donors and associated projects. It includes analysis of the health system and of specific health policies and programs (or lack thereof), such as safe motherhood, family planning, adolescent sexual reproductive health, abortion and social and cultural determinants of health that affect access and update of health care.

4.1 GOVERNMENT STRATEGIES AND PROGRAMS TO ADDRESS MATERNAL MORTALITY

The government's current policies for reducing maternal mortality are contained in the 'Healthy Indonesia 2010', 'Minimum Service Standards' and 'Making Pregnancy Safer' programs. A brief overview of these policies and programs is provided at Annex 2.

There have been numerous studies and research into the effectiveness of Indonesia's key strategies and programs to address maternal mortality, largely focusing on clinical quality of care across the life cycle, different methods for measuring and evaluating safe motherhood programs, and identifying remaining barriers to accessing essential antenatal and obstetric/ midwife care. Other related factors concerning weaknesses in the health system are identified in section 4.5 below. Literature focusing on the quality and coverage of these specific interventions will not be canvassed in this report given the focus on policy oriented research. However, the following observations on implementation of these programs help put the policy oriented research in broader context of the challenges remaining in reducing maternal mortality.

Mize et al. in the World Bank 2010 Maternal Health Assessment report that while the Indonesian government's strategies are in-line with international best practices and evidence-based approaches, it is their implementation and monitoring that falls short. A gap analysis would indicate the following:

- treatment protocols and standard of care in hospitals are sub-par and a direct contribution to facility-based mortality, particularly in the case of treatment of emergency complications;
- trends and patterns evident in maternal death audits at the district level are not then used to inform revised strategies and address the root causes of maternal death at district levels; and
- the referral hierarchy is not need-based (for example: a woman with excessive bleeding is referred to Puskesmas according to the existing procedure, while the

sources needed for care are only available in the hospital, hence the woman supposed to be delivered directly to the hospital).

4.2 BARRIERS TO HEALTH AND EQUITY: POVERTY, CULTURE, RELIGION, GEOGRAPHY

Development of effective policy responses to reduce maternal mortality and improve reproductive health must be informed by an understanding of the barriers to seeking and accessing health care services. In Indonesia, barriers to health care are often characterised by poverty, geography, culture and education.

Several studies have identified poverty as a significant contributor to poor access and uptake of maternal health care (Belton, et al., 2014; Titaley, et al., 2009; Titaley, et al., 2010; Utomo, et al., 2011). The Indonesian Demographic Health Survey disaggregates much of the data presented by wealth quintiles, which indicates that poverty remains a significant barrier to accessing services, and is closely interrelated with education levels, rural and urban divides and geographical remoteness. B. Utomo, et al. (2011) argue that despite the expansion in the Indonesian health care system and improvements in the health of Indonesian people, the rich-poor gap in health status and access to services remains an issue. Government's attempts to address these gaps are still undermined by what B. Utomo, et al. describe as key factors at institutional and policy levels: the high cost of electing formal governance leaders; The needs of redefining leadership roles in the health sector and of health care system capacity improvement, especially in planning and budgeting; lack of health inequity indicators; and the leakage and limited coverage of programs for the poor.

Titaley, et al. (2009) identified a series of factors associated with non-utilisation of postnatal care services in Indonesia. The prevalence of non-attendance at postnatal care services was consistently higher in rural areas than in urban areas. Maternal factors associated with lack of postnatal care included low household wealth index, low education levels, lack of knowledge of pregnancy-related complications or where distance from health services was a problem. Infants of high birth rank and those reported to be smaller than average were less likely to receive postnatal care. Other indicators of access to healthcare services which were associated with non-utilisation of postnatal care services included few antenatal care checks, use of untrained birth attendants and births outside healthcare facilities.

A number of qualitative studies have sought to better understand the complex interrelationship of poverty, culture and other social determinants of health access and experience. Belton, et al. (2014) in an ethnographic study of maternal deaths in eastern Indonesia revealed how multiple social and geographical factors interacted to influence the outcome of the births, including seasonal barriers to transport, entrenched social mores which acted against the best interests of some pregnant women, and a sense of powerlessness to be able to change one's destiny. An ethnographic study was conducted by interviewing eleven families who reported on cases of maternal deaths in one sub-district of Indonesia, as well as assessing the geographical and cultural context of the villages. The study found that most women had attended antenatal care and so were engaged with the health care system. However, in all but one case, the realisation that emergency care was needed was delayed: a delay that may have been avoided had a skilled birth attendant been present. The unmarried women were disengaged from the health care system, as they had not attended antenatal care and no midwife was called.

Titaley, et al. (2010) conducted a study on why some women still prefer traditional birth attendants. The study involved twenty focus group discussions and 165 in-depth interviews involving a total of 295 participants representing mothers, fathers, health care providers, traditional birth attendants and community leaders in six villages of West Java. The use of traditional birth attendants and home delivery were preferable for some community members in spite of the availability of a village midwife in the village. Some major factors for the use of both traditional birth attendants and home delivery were the economic and pragmatic reasons, since delivery costs with a midwife or at health care facility were perceived unaffordable. This was aggravated by the low economic status of the community members in addition to the embarrassment and misunderstanding of the Jamkesmas scheme. Trust and tradition that traditional birth attendants engendered; they shared the same culture and were long-serving members of the community were also cited as major reasons. The services of trained birth attendants during childbirth or an institutional delivery were perceived important by some community members only during obstetric complications. Furthermore, difficult access to health care personnel and facilities was amongst the major reasons for preferring traditional birth attendants and home delivery, as was their convenience, enabling mothers to be closer to home for other household responsibilities. The study concluded that roles of village midwives and traditional birth attendants were perceived vital, particularly in rural areas where health care services were sub-optimal.

The cultural and social factors behind preference for use of traditional midwives also surfaced in a study conducted by Agus, et al. (2012) in West Java. Whilst a small study, the research did reveal how women's beliefs grounded in religion and tradition permeated the village culture making it difficult to counter their long held health practices with practices based on recent advances in health care. Use of Traditional Birth Attendant (TBA) in this village was still dominant and women believed that following traditional beliefs led to a healthy pregnancy therefore, they also followed all relatives' suggestions. Emerging from the focus group discussions were four main themes regarding their pregnancy and traditional beliefs: 1) pregnancy was a normal cycle in women's life (pregnancy is a natural phenomenon, not a sickness; no recognition of danger signs during pregnancy and death of baby or mother during pregnancy was brought about by God's will); 2) women followed the traditional beliefs (positive motivation to follow the traditional beliefs and fear of not following the traditional beliefs); 3) relying on TBA called paraji rather than midwife (parajis are kind, tolerant and patient and have more experience than midwives; more accessibility than midwives and encouragement of natural birth) and 4) midwives are more secure than paraji; (they use a medical standard of care).

D'Ambruoso, et al. (2010) examined access to care in obstetric emergencies from the perspectives of service users. The final caregivers of 104 women who died during pregnancy or childbirth were interviewed in two rural districts in Indonesia using an adapted verbal autopsy. Qualitative analysis revealed social and economic barriers to access and barriers that arose from the health system itself. Health insurance for the poor was highly problematic. For providers, incomplete reimbursements, and low public pay, acted as disincentives to treat the poor. For users, the schemes were poorly socialized and understood, complicated to use and led to lower quality care. Services, staff, transport, equipment and supplies were also generally unavailable or unaffordable. The multiple barriers to access conferred a cumulative disadvantage that culminated in exclusion. This was reflected in expressions of powerlessness and fatalism regarding the deaths. The analysis suggests that conceiving of access as a

structurally determined, complex and dynamic process, and as a reciprocally maintained phenomenon of disadvantaged groups, may provide useful explanatory concepts for health planning. Health planning from this perspective may help to avoid perpetuating exclusion on social and economic grounds, by health systems and services, and help foster a sense of control at the micro-level, among peoples' feelings and behaviours regarding their health. Verbal autopsy surveys provide an opportunity to routinely collect information on the exclusory mechanisms of health systems, important information for equitable health planning.

Andajani-Sutjahjo & Mandersonb (2004) sought to understand and explain how the failure of the health system to protect women's rights to care, for themselves and their babies results in women experiencing unnecessary guilt, self-isolation and self-punishment. Their paper is based on a data from a longitudinal study of motherhood and emotional well-being of women in Indonesia; 488 women were interviewed in late pregnancy, and 290 at six weeks post-partum. This paper reports on in-depth interviews with four women who reported a stillbirth and six who reported a neonatal or infant death. They were asked about their understanding of why their baby had died and the information, care and support given to them. Women's accounts of loss and grief provide invaluable insights into their struggles and distress. When women do not have a clear understanding of the danger signs in pregnancy, they have no way of knowing the urgency for medical attention. Thus, early prevention may become impossible. Even those who are diagnosed as having high-risk pregnancies may be unaware of their condition and the additional measures available to assist them in achieving positive maternal outcomes. Moreover, when women do not adequately understand the health condition of their babies, they cannot make appropriate decisions regarding care. When they are not offered support or comfort, they may have greater difficulty reconciling to their loss, dealing with their grief and regaining confidence. The results suggest the need to examine how women are treated in other country settings where neonatal mortality rates are high. The study also raises questions about our understanding of social support for women who have experienced the loss of a baby. Proximity, social connection and connectedness (e.g. friends or neighbours) do not necessarily guarantee access to social support. Friends, neighbours and other social networks, as this study illustrates, can be a source of distress instead.

Knowledge and Information Gaps

The existing literature points to a need to develop greater understanding and knowledge of the cultural and social factors that are key determinants in access to and experience of health care for women in Indonesia. Without this understanding, policies will not necessarily succeed in generating the necessary demand for health care, nor meet their needs when women do access health services.

Importantly, using qualitative studies supplement and can also provide more relevant and recent analysis of maternal death and its causes, rather than relying on quantitative epidemiological and biomedical studies on prevalence and causes, critical information that can be used in improving policies and planning.

Current knowledge gaps are in the understanding the complexities of local culture and greater knowledge of how beliefs and practices of women influence their health seeking behaviours and affect access to services, and also understanding how services can perpetuate

exclusion from health services. Evidence of the application of this knowledge and understanding to policy development is also limited.

4.3 FAMILY PLANNING

There is a significant amount of literature documenting and analysing the success of Indonesia's national family planning program in the 1970s and 1980s in terms of reducing fertility levels and establishing comprehensive coverage of family planning services across the country down to the village level through the efforts of the National Family Planning Board, BKKBN. Some studies include Hull (2007, 2005).

More recently, attention and research has shifted towards efforts to revitalise the family planning program in the wake of decentralisation that saw a reduction in the investment in family planning at district level, resulting in stagnating contraceptive prevalence rates, and as a measure to support reduction in maternal mortality. Also of concern are the stagnant and unknown levels of unmet need, particularly amongst unmarried and on method choice, rates of unintended pregnancies amongst married and unmarried women, and the need to improve demand and equitable access to quality, affordable family planning services, including from the private sector.

The following provides an overview of the key literature and research available on these issues.

4.3.1 CURRENT TRENDS

Presently, national Total Fertility Rate (TFR) trends indicate that the two child family has essentially become the norm, and there is no demographic justification for the continuation of an aggressive promotion of fertility reduction (Hull & Mosely 2007). It seems clear that married women have a desire to control their fertility as manifest in the fact that half of currently married women want no more children, and of those who do intend to have more, half want to delay the next birth for at least two years. This means that three quarters of women have an immediate need for safe and effective contraception.

Indonesia's contraceptive prevalence rate (CPR) amongst married women has stagnated within the past 10 years (58% of married women using modern methods); this falls short of MDG target of 65% CPR for modern methods by 2015. There is provincial variation, with some provinces having significantly lower CPR, such as Papua, with just 22% CPR (BPS, et al., 2013).

Total unmet need for contraceptives was 11% in 2012; this falls short of the MDG target of reducing unmet need by 5 percentage points from its 13% level in 2007. Total unmet need rises with age, peaking at 16% among married women age 45-49; total unmet need increases directly with number of children to a level of 21% among married women with 5 or more children. Papua and West Papua have higher levels of unmet need – double the national average at 24% and 21% respectively (UNFPA & BKKBN 2014). There are persistent regional disparities in contraceptive availability with many poor provinces and districts lagging behind their richer counterparts, and isolated regions suffering from shortages of staff and materials for family planning services.

Male involvement was promoted as part of family planning programs since 1994; however, coverage usage of male methods of contraception remains low despite more couples reporting making joint decisions on family planning.

4.3.2 DECENTRALISATION

Decentralisation in the early 2000s led to significant variations in the delivery of the family planning programme across the country. The central authority of BKKBN continued to set policies, but the application of policies became dependent on district and local level authorities. The quantity and quality of contraceptive services differed depending on local level commitments to family planning, policies and budget, and this has resulted in less emphasis on family planning in many districts/municipalities. Yet, the family planning program still has considerable momentum based on BKKBN service statistics since 2000 collected from the districts/municipalities indicating that contraceptives continue to be distributed at the usual levels, often because of the loyalty and strong training endowments of the former BKKBN staff at the district level. Decentralization, however, does impact on the political instruments and operational strategies available to the central government agencies to revitalize the family planning program when these departments and agencies no longer have line authority, staff or budgets to direct field operations (Hull & Mosely 2007).

4.3.3 UNIVERSAL ACCESS

UNFPA and BKKBN (2014) in their report on progress towards achieving the ICPD Program of Action have raised a number concerns, especially in regards to universal access and a rights based approach to family planning policy and services. Most evidently, the current law does not allow the provision of family planning services for unmarried individuals and measurements of unmet need often exclude unmarried women. The report states that the lack of political will, especially at the district level and opposition from powerful conservative groups has led to a lack of family planning services for unmarried individuals and adolescents, limiting sexual and reproductive rights to population groups with high unmet need. It can be assumed that the unmet need among unmarried sexually active individuals is significantly higher in Indonesia due to lack of access to contraception. High rates of unintended pregnancy among both married and unmarried women manifested by: the reported high number of induced abortions among both groups and the fact that one in six mothers report that their last birth was not wanted at the time it occurred (Hull & Mosely 2007).

Research on contraceptive prevalence and unmet need has mainly relied on interpretation and analysis of the Demographic Health Survey. There is however some studies that have sought to better understand the need for contraception. Withers, et al. (2012) carried out a longitudinal study in rural Bali, Indonesia, and sought to identify the predictors of birth avoidance among 665 married women of reproductive age who reported the intention to stop childbearing. The authors found that almost 30% of women who wanted no more children had a subsequent birth during the 4-year study period. Women at highest risk for an unwanted birth were younger, had fewer children, and did not use a long-term contraceptive method. The study indicated that the ability to meet intentions to stop childbearing depended on women's motivation (family size), fecundity (proxied by age), and their use of long-term contraceptive methods. The results suggest that to reduce unwanted births among rural women, family planning providers should recommend long-term methods to younger women with smaller family sizes who express clear intentions to stop childbearing.

4.3.4 METHOD MIX AND THE PRIVATE SECTOR

The contraceptive method mix in Indonesia has been the focus of several studies and increasingly acknowledged as an area in need of policy and program responses.

Prevalence rate of long acting methods and permanent methods is low and has recently steadily declined or stagnated. Low prevalence of long acting or permanent methods has implications on cost and accessibility and increase risk of contraceptive failure or discontinued use, leading to unwanted pregnancies. A number of factors have been identified as contributors to this trend. UNFPA and BKBBN report that family planning services provided through the national health insurance for the poor were skewed towards short-term methods, linked to the income generated for providers from repeated visits from clients. Hull & Mosely (2007) suggest that narrowing of the contraceptive method mix to temporary hormonal methods (primarily injectables) was due to major declines in government promotion including procurement of longer acting implants and IUDs and the failure of the program to support and extend surgical sterilization for people wishing to have a permanent end to childbearing. Furthermore, the success of the Blue Circle and Gold Circle Campaigns since the 1980s to shift services from public to private providers (principally village midwives in the rural areas), resulting in a private provider driven program that primarily promotes the use of injections and pills for income generation irrespective of clients' needs (Hull & Mosely 2007).

Weaver, et al. (2013) study 'Effect of Village Midwife Program on Contraceptive Prevalence and Method Choice in Indonesia' provides further evidence on the shift in method mix towards shorter term methods. The study used longitudinal data from the Indonesia Family Life Survey to examine the Village Midwife Program's effect on contraceptive practice given one of its goals was to increase access to and use of family planning services and broaden the mix of available contraceptive methods. The authors found that the program did not affect overall contraceptive prevalence but did affect method choice. Over time, for women using contraceptives, midwives were associated with increased odds of injectable contraceptive use and decreased odds of oral contraceptive and implant use. Although the Indonesian government had hoped that the Village Midwife Program would channel women into using longer-lasting methods, the women's "switching behaviour" indicates that the program succeeded in providing additional outlets for and promoting the use of injectable contraceptives.

Sutherland, et al. (2011) also looked into changing patterns of contraceptive use and method mix following the introduction of injectables into the family planning services. The authors reviewed Demographic and Health Survey data from 13 countries, including Indonesia. The study found that injectable use rose among spacers (married women who reported wanting more children, but not in the next two years); as well as among limiters (those who reported wanting no more children) of all ages, particularly those younger than 35. In general, the increase in injectable use was partially offset by declines in use of other methods, especially long-acting or permanent methods. The study concluded that family planning programs could face higher costs and women could experience more unintended pregnancies if limiters use injectables for long periods, rather than changing to longer acting and permanent methods, which provide greater contraceptive efficacy at lower cost, when they are sure they want no more children. This finding is particularly relevant to Indonesia given that injectables are the most widely used method (32%) and more than 7 out of 10 family

planning users obtain their method from a private sector provider, and 9 in 10 report paying for their method (BPS, et al., 2013).

The private sector has and will continue to play a prominent role in family planning service provision in Indonesia. Whilst some studies suggest that expansion in private sector contraceptive supply is not associated with increased socio-economic inequality in the modern contraceptive prevalence rate (Agha & Do 2008), others suggest that policies and practices have led to the diversion of government contraceptive commodities into the growing private market, potentially reducing access by the poor (Hull & Mosely 2007). There has also been interest in the creation of social franchises for family planning as a means to increase access to comprehensive reproductive health services. In a study of 45 clinical social franchises in 27 countries, including Indonesia, Ravindran and Fonn (2011) suggest that these franchises have not widened the range of reproductive health services, but have mainly focused on contraceptive services, and to a lesser extent, maternal health care and abortion. In many instances, coverage had not been extended to new areas. Measures taken to ensure sustainability ran counter to the objective of access for low-income groups. In almost two-thirds of the franchises, the full cost of all services had to be paid out of pocket and was unaffordable for low- income women. While standards and protocols for quality assurance were in place in all franchises, evidence on adherence to these was limited. Ravindran and Fonn argue the contribution of social franchises to universal access to reproductive health services appears to be uncertain. Continued investment in them for the provision of reproductive health services does not appear to be justified until and unless further evidence of their value is forthcoming. It should be noted however that the practice of social franchises for family planning and or reproductive health in Indonesia is fairly limited so these findings should be read with caution.

It should also be noted, that since 2007, the Government of Indonesia (GoI) started to revitalize the family planning programme by allocating more resources to strengthen services through capacity building of health personnel, improving the supply chain and logistics management, and improving the family planning clinics. In addition, there are also efforts to improve the demand for family planning through advocacy, behaviour change communication, and community mobilization at the grassroots level. BKKBN has begun implementation of the *KB Kencana* programme to revitalize family planning, starting in North Sumatra, West Kalimantan, West Java and East Nusa Tenggara. The programme will scale up a comprehensive approach to innovative strategies at the national and district levels. *KB Kencana* is high on the government's policy agenda and represents a major step forward in the nationally coordinated effort to revitalize family planning. Indonesia is also a high profile signatory to the FP2020 summit and its progress on commitments is being tracked and reported on through this international platform.

4.3.5 MALE INVOLVEMENT

There appears to be little research into male involvement in family planning in Indonesia. Currently only 2.5% of men report using condoms for contraception and only 0.3% of men are sterilised (BPS, et al., 2013). Male condoms only represent less than 2% of contraceptive use amongst married women and male sterilisation also very low at 0.1%. Hull (2009) argues that had there been more emphasis on male methods, particularly during the 1990s, it would be possible that Indonesia would have achieved rates of contraceptive prevalence about 60%. Instead, Hull argues, the bureaucracy faltered and leaders in the community and the

family planning program became remarkably conservative about the idea of promoting male methods. Increasingly they questioned the efficacy of condoms and acceptability of vasectomy, opting to ignore clear evidence that ordinary Indonesian men and women were quite interested in trying male methods. Hull suggests that once a few leaders expressed concern about the morality or efficacy of male methods, others followed and unfounded ideas about primordial male fears of castration and pinhole leaks in vulcanised rubber took hold. As a result, Indonesia in a time of HIV saw the steady decline in condom use for family planning and that the relative inexpensive male sterilisation has yet to reach even on their number of female sterilisation.

Knowledge and Information Gaps

The most significant gap in knowledge and data is the lack of data on unmet need for contraception amongst unmarried women and men. This has a significant impact upon all level of governments' capability to develop appropriate policies and plan and deliver services that meet the needs of the population to time, limit and space pregnancy and childbirth. There is also limited information and research on unmet need for contraceptive choice, which is of increasing concern given bias the in [in the] method mix towards shorter term acting methods.

Implications and impact on family planning services uptake from the roll out of JKN will be an important area for research, particularly on increasing access and affordability to poor women and couples.

Research on effective models of private sector partnerships, such as social franchises, or integrated planning of public and private service provision that could inform national and provincial policies on stewardship of private sector is also limited.

There is limited research into male involvement in family planning be that as receptors of contraception (vasectomy and condoms), as supporters of women's reproductive health and rights, or their knowledge, attitudes and behaviours in relation to sexual health and how this may interrelate with women's sexual and reproductive health, including maternal health.

It is noted that a number of new initiatives have recently started that aim to increase the uptake of long acting methods of contraception, such as Advance Family Planning Project and the Improved Contraceptive Method Mix Project and upcoming Bill and Melinda Gates Foundation and BKBBN project on behaviour change communication for family planning. These projects are likely to produce research and evidence for policy purposes.

4.4 ADOLESCENT SEXUAL AND REPRODUCTIVE HEALTH

Dr. Iwu Dwisetyani Utomo and Dr. Ariane Utomo (2013) undertook a literature review on adolescent pregnancy for UNFPA as a supplement to its World Population Day publication in 2013. The review provides a good summary of the quantitative and qualitative research that has been undertaken on adolescent sexual reproductive health in Indonesia. Below is a summary of key findings.

International studies have established that adolescent pregnancy brings many disadvantages to the girl's health, mental and psychological wellbeing, economic and career opportunities, poverty and future life prospects (Gray, et al., 2013). The health consequences

of teenage pregnancy is very high as it can lead to many health risks, physiologic risks, obstetric fistula, and if the young women is from a poor background then the pregnant young women can experienced pregnancy nutritional depletion (Chandra- Mouli, Camacho, and Michaud 2013). Adolescent pregnancy is also a human rights issue and a significant barrier to achieving development goals.

The quantitative surveys on adolescent pregnancy in Indonesia suggest that although age at marriage is rising, and teenage marriage is declining, unmarried young men and women are engaging in sexual relationships that leave them at a higher risk of unwanted pregnancies. Utomo and McDonald (2009) argued that although extended schooling had led to a significant decline in rates of early marriage among Indonesian women in the 1990s, more young people are now sexually active outside of marriage. Nursal (2008) suggests that in Padang, West Sumatera, 16.6% of senior students engaged in unsafe sexual behaviour. In West Papua, 38% of senior high school students had pre-marital sex. Among sexually-active female students, 32% have been pregnant and most resorted to induced abortion to end the pregnancy (Diarsvitri, Utomo, Neeman, and Oktavian, 2011). A survey of 4.500 teenagers across 12 cities conducted by the Child Protection Commission (KPA) in 2010 reported that 63% had had sex, and 21% had had abortion (cited in Kusumaningsih, 2010). The Indonesian Planned Parenthood Association in Central Java suggests that in a month about 8-10 teenagers on average come for consultation concerning unwanted pregnancies (cited in Kusumaningsih, 2010).

The 2003 and 2007 IYARHS (Indonesian Young Adults Reproductive Health Survey) conducted among unmarried respondents aged 15-24 years old indicated that 1% of females and 5% of males (2003) and 1% of females and 6% of males (2007) reported that they engaged in premarital sex. In 2012, the percentage was similar for females but significantly increased for males (4.5% for males aged 15-19 and 14.6% for males aged 20-24) (Central Bureau of Statistics, et al., 2004; 2008; Statistics Indonesia 2013a and 2013b). The 2010 Greater Jakarta Transition to Adulthood Survey (GTAS) showed that in Jakarta, Bekasi and Tangerang, 11% of never married respondents had had sex. There is a significant difference between males (16%) and females (5%).

The 2010 GTAS results show that among single, sexually active respondents, 34% used contraception with the majority using condoms (32%) at the time of first intercourse. The 2012 IDHS preliminary report revealed that among married girls aged 15-19 years old, only 47% were using any modern method of contraception, lower than those aged 20-24 year-old (59%). The most common modern contraception used by married girls aged 15-19 and 20-24 was the pill (8.8%; 10.9%) and injectables (37.3%; 42.7%) (Statistics Indonesia, et al., 2013: 12). These figures do not account for those who were single and sexually active but did not use any type of contraception.

Low levels of reproductive health knowledge and unsafe sexual behaviour are predisposing factors behind adolescent pregnancies, induced abortion, STIs and HIV/AIDS. The 2010 GTAS revealed that respondents with higher education felt that they had enough knowledge about contraception and safe sex at the time of first intercourse. The determinants of having enough perceived knowledge about contraception were very similar to the determinants of having enough perceived knowledge about safe sex. The main predictors of having enough knowledge about each topic at the time of first intercourse were the respondent's current level of highest education and their age at first intercourse. The 2003, 2007 IYARHS and 2012 IDHS studies indicate that knowledge of family planning among unmarried young people

(15-24) is high (more than 91.1% in 2003; 92.8% in 2007 and 93.3% in 2012), and higher among unmarried females compared to unmarried males. Older unmarried women and men (20-24) are more likely to know about family planning compared to their younger counterparts (15-19).

In 2007, 50 percent of unmarried respondents aged 15-24 stated that family planning should be made available for this age group. The majority of unmarried young people aged 15-24 wanted family planning services made available in the forms of family planning information (80.2%-87.9%) or counselling (72.3%-80%) (Central Bureau of Statistics, et al., 2004; 2008).

The National Law Concerning Population and Family Development (No. 52 of 2009) only allowing married couples to access family planning services is has a significant impact on the prevention of pregnancy among unmarried adolescent in Indonesia. The qualitative and micro studies of adolescent pregnancies in Indonesia show some of the consequences that arise as a result of adolescent pregnancy. Social and religious stigma regarding premarital pregnancy in Indonesia leads to health and psychological burden for young women. The negative consequences of adolescent pregnancy follow through to the stigmatisation and socio-economic adversities for babies born to teenage mothers.

In a study of 147 Year 11 students from an unnamed high school in 2010, 9 percent of the respondents had had sex, and 1.9 percent had dropped out due to premarital pregnancy in the previous year (Kusumaningsih, 2010). Data collected from testing the urine of brides-to-be in the Cilimus district of West Java indicated that 41 out of 428 couples were pregnant (Heriana, Hermansyah, & Solihati, 2010). In one of the villages in the district, 11 out of 20 brides-to-be were pregnant; out of those 11, 7 were still students. A case-control analysis between pregnant adolescents and the comparable control group suggests that there is a significant relationship between reproductive health knowledge and family environment, and the incidence of premarital pregnancy. A study in Manado by Ginting and Wantania (2012) also highlighted the low level of reproductive health, pregnancy and child health knowledge among pregnant teenage mothers (aged 16-19) because the most common source of information for their respondents was the mass media.

In a study of 8 teenage mothers and their families, seven families whose adolescent daughters fell pregnant attempted to do the 'ideal' thing to 'save face' by holding a wedding celebration. Having an unwanted adolescent pregnancy in the family is ultimately stressful and places a strain on the families' physical and psychological well-being, financial situations and social relations (Widyoningsih, 2011).

Utomo & Utomo (2013) also highlight how the increasing visibilities, complexities, and social repercussions of adolescent pregnancy have been reflected in recent Indonesian media coverage. Reports about girls being murdered for becoming pregnant and dying as a result of unsafe abortion shows the extreme risks that arise from the stigmatisation of adolescent pregnancy in the community. Utomo and Utomo (2013) argue that the available statistical estimates and academic research that captures the scale and underlying factors of the adolescent pregnancy in Indonesian communities currently serves as a solid base to formulate sound policies and programmes for adolescent reproductive health to uphold their rights. However, they point out that there continues to be limited policy response to the issues arising from adolescent pregnancy in terms of both proactive measures to prevent teen pregnancy and also support services to assist young women who face unwanted pregnancy.

Knowledge and Information Gaps

In addition to the poor data availability, researchers are calling for more qualitative studies on adolescent sexual reproductive health. Utomo and Utomo (2012b) suggests that future research on the correlates and effects of adolescent pregnancy on both the young mothers and their children in Indonesia will benefit from analyses based on longitudinal datasets. Furthermore, as opposed to relying on estimates from large surveys, Budi Utomo (2001) suggests that micro quantitative and qualitative studies on young people will generate more reliable estimates and the much needed insights on the prevalence of premarital sex, abortion, and adolescent pregnancy, and the needs for reproductive health education and services for men and women in this age group.

UNFPA (2014) identified that there needs to be greater collection and dissemination of age disaggregated data from all sectors of the adolescent and youth population, including information on behaviours, risk-taking, accessing services and knowledge.

4.5 ABORTION

Mize, et al. in the World Bank Indonesia Maternal Health Assessment (2010) reported that complications arising from abortion are another major contributory factor in maternal deaths. Researchers in Indonesia have suggested that unmet need in family planning contributes to unwanted pregnancy which, in turn, contributes to continuing utilization of abortion services. Because the legal conditions for abortion are restrictive, there are many unsafe abortions which cause maternal deaths.

As noted in the GoI 2014 Health Sector Review, the incidence and prevalence of abortion in Indonesia is unclear given the lack of reliable data, and estimates are based on assumptions with a wide range of uncertainty. Most reports and documents refer back to a now dated survey conducted by Budi Utomo, et al. (2001) titled, "Incidence and Social-Psychological Aspects of Abortion in Indonesia: A Community-Based Survey in 10 Major Cities and 6 Districts, Year 2000". This study estimated that 2 million abortions per year occurred in Indonesia. Women who had an abortion were aged 20 or older (92%) and abortion incidence was higher at the district level (60%) than in the city (30%). Of the respondents, one-third in the cities and half in the districts who had had an abortion did so during their first pregnancy; of these, the majority were still single. Of patients admitted to hospitals in Yogyakarta City due to abortion related problems, 4.6% were single or only in a religious marriage relationship with her husband (*nikah siri*).

The same survey found that about 24 percent of abortions are performed by TBAs and that this ranges from 15 percent in cities to 84 percent in rural areas. They also found that 66 percent of women having abortions reported an induction abortion, giving an estimated 1.3 million induced abortions annually. This same study found that one-third of abortion clients were unmarried and 50 percent had never used contraception, confirming the need for family planning programs.

Hull and Hartanto (2009) estimated that young women below the age of 19 years of age account for 10% of abortion at a service delivery point and unmarried women account for 33%. The percentage of women below 19 years of age that undertake unsafe abortions is expected to be higher and especially more common in rural areas (Sedgh & Ball, 2008).

Young women experiencing unwanted pregnancy would first try to self-abort by taking overdoses of Cytotec tablets (a stomach-ulcer medication), menstrual regulation drugs, herbal concoction (*jamu*) or young pineapple juice, which is thought to have abortive effects. If those attempts are not successful, they would go to a traditional healer or traditional birth attendant, who often use forced stomach massage to effect an abortion (Utomo & McDonald, 2009).

The 1995 Indonesia Household Health Survey found that 11% of maternal deaths were due to complications following abortion (Widyantoro & Lestari, 2004). It is reasonable to assume that a higher proportion of maternal deaths among single women are caused by unsafe abortion.

Sedgh and Ball (2008) in the often cited Guttmacher Institute policy brief Abortion in Indonesia argue that it is clear that large numbers of Indonesian women experience unintended pregnancies and that many of them seek to avoid unwanted childbearing by resorting to abortion. However, the exact incidence of these events and the severity of the consequences of unsafe abortion are unknown.

Sedgh and Ball cite a survey conducted by Andari, et al. in 2005 that helps illustrate how religion helps shape public opinion on issues such as abortion. They survey of 105 Muslim, Catholic and other Christian religious leaders in Yogyakarta illuminates the stances on abortion of Indonesia's main religious groups. While not nationally representative, the study indicates the presence of multiple views on abortion, some of which are less conservative than the national policy. The majority of religious leaders (82%) agreed that abortion is acceptable if a woman's life is in danger. Many reasoned that a woman's life is more important than the foetus's, because she is needed to look after the children and family she already has. Muslim leaders, while primarily conservative, tended to have a more tolerant stance on abortion than their Christian counterparts. For instance, while most leaders did not agree that abortion was justified if the pregnancy would interfere with a woman's schooling or affect her psychological health, a higher proportion of Muslim than Christian leaders supported abortion on these grounds. No Christian leaders supported terminating pregnancies following contraceptive failure, but some Islamic leaders considered this acceptable. Among Muslim leaders, views differed according to sect: Followers of Imam Hanafi considered abortion acceptable for up to 120 days after conception, while followers of Syafi'i believed that abortion must only take place within 40 days of conception.

The World Bank Maternal Health Assessment (2010) suggests that legal status of abortion remains ambiguous, even with the passage of the new Health Law in 2009. The legislation regulates safe abortion for cases of rape, danger to a mother's life or because of serious genetic malformations but interpretations regarding medical emergency options remains vague. In addition to professional counselling, a husband's permission is needed. The new Health Law, according to this assessment, is thus not particularly conducive towards furthering maternal health objectives generally, and specifically disregards the needs of single women.

There has been scant research on attitudes and experiences of abortion in Indonesia. Utomo and Utomo (2013) in their literature review on adolescent reproductive health cite two studies (outside the publication year range for this review) that seek to capture attitudes and experiences.

Knowledge and Information Gaps

Sedgh and Ball (2008) put forward a compelling list of knowledge and gaps on abortion in Indonesia:

The greatest research priority is to obtain up-to-date, national data on the incidence of abortion and on maternal morbidity and mortality resulting from unsafe abortion in Indonesia. Subnational estimates of these events are also essential, in light of the recent decentralization of many government functions.

In addition, in-depth research on women's experiences—the obstacles that limit their ability to use contraceptives effectively, the decision making process they undertake in the face of an unintended pregnancy, their attitudes toward abortion and the steps they take to terminate a pregnancy—would help leaders understand and respond to the problems women face in their efforts to control their fertility.

Assessments of the costs of unsafe abortion—both monetary and social—to women, their families, health care systems and the government are also essential to understanding unsafe abortion's impact on society.

Furthermore, policymakers in Indonesia would benefit from comparing Indonesia to other Muslim countries with regard to abortion incidence, rates of complications and maternal mortality resulting from abortion, and policies and programs intended to reduce unsafe abortion.

4.6 HEALTH SYSTEMS DIAGNOSTICS

Significant research and analysis has been carried out on the Indonesian health system and how it can be strengthened to further reduce maternal mortality and improve population health more broadly. This covers a broad range of areas including the impact of decentralisation, human resources for health, health financing, including health insurance reforms, quality and coverage of clinical care and the role of private sector providers.

4.6.1 DECENTRALISATION

As part of its mapping report in 2009, the University of Queensland's Investment Case study on Indonesia presented an overview of the literature that analysed the health system constraints. To avoid duplication of effort, the key findings of this review are presented here and more recent studies are included where relevant.

There have been many studies and reports on the issue of decentralisation in Indonesia and its impact on health service provision, including MNCH (Word Bank, 2010; Lieberman, 2005; Heywood, et al., 2008 & 2009; UNICEF 2010). The World Bank has undertaken numerous studies on the Indonesian health system and the effects of decentralisation, particularly the diminished capacity of local governments to deliver health services. On the health financing side, limited opportunities for local governments exist to allocate resources according to the population needs; weaknesses in the Public Financial Management, including perverse incentives to hire additional; and a complex and unreliable flow of funds from the centre to local governments have been highlighted (World Bank, 2008; Rokx, 2009).

Lieberman, et al. (2005) describe how decentralisation should provide the opportunity for local ownership of the planning, financing and delivery of health services in Indonesia but highlight problems with poor implementation and the intergovernmental fiscal transfer system. It identified the problem of late disbursement of central funds and unspent resources at local government level. In addition, ownership of planning and budgeting at local level has been questioned. A study by Heywood and Harahap in 2009 examined the public expenditure on health services in 15 districts in Java, and found districts had discretion for managing less than one third of this expenditure, with major decisions still made at central government level. Even after decentralisation 90% of funds for regional budgets, including health, still come from the central government.

Friedman, et al. (2009) in a World Bank supported report identify that one of the major problems with decentralisation in Indonesia is that of implementing policy, including MNCH. Key issues are opaque, fragmented and overlapping responsibilities within districts and between districts and provinces, which has caused confusion and paralysis. Policy implementation is entirely left to the districts. However, the skills set of local district staff is not in line with the new responsibilities under decentralisation. Notwithstanding the challenges of decentralisation, Friedman, et al. noted that given the heterogeneity observed in Indonesia, locally-driven solutions are required.

The World Bank notes that the reasons for the disparity in performance are poorly understood (2008). The positive deviants in Indonesia provide useful lessons on what strategies can be effective on the ground and what contextual factors affect district performance. The lessons from the best-performing districts are yet to be understood. They should provide useful guidance for improving performance in districts lagging behind.

UNICEF published a comprehensive Situational Analysis in 2010 titled, "Working Towards Progress with Equity Under Decentralisation: The Situation of Children and Women in Indonesia 2000-2010" prepared by the Center for Population and Policy Studies, Gajah Mada University (PSKK-UGM). This report provides a detailed analysis of the policy process, particularly in regard to child protection and programs and policies relating to children at the district level. Whilst child focused, it provides an important analysis of the impact of decentralisation and the challenges districts face in implementation, and also their capacity to formulate, budget for and implement the range of measure they are now responsible for under decentralisation. It also identifies data and knowledge gaps, particularly at district level, that impedes upon effective policy and programming at sub-national levels.

The most recent Health Sector Review (GoI, 2014) undertaken by the GoI identifies the challenges of the current health system and remaining challenges in continuing decentralisation reform. In relation to institutional capacity, it identified the remaining challenges:

- Unclear distribution of functions on health matters from central to sub national government followed by unclear MSS (SPM) and NSPK. The unclear boundary between central and local responsibilities creates overlap in implementation and financing of health among MoH, PHO and DHO. MoH/central level provides funds for the provision of some main health duties and functions of the district level government, which means that district governments do not take responsibility and accountability for these.

- Weak coordination between tiers of government and between MoH, BPJS, and other related ministries and agencies.

Knowledge and Information Gaps

Problems and weaknesses in the current health system are seemingly well covered in current research and analysis. What is often limited is information and research on what is actually working and why at district level, with regards to policy implementation and local planning, budgeting and effective services delivery for maternal and reproductive health.

4.6.2 HUMAN RESOURCES FOR HEALTH

Research and studies on the health workforce in Indonesia have also highlighted the challenges posed by decentralisation.

Heywood and Harahap (2008) in their study of human resources for health in 15 districts in Java in 2008, identified the impact of decentralisation, and found that it (a) reduced the scope of districts to make decisions on health staff, which account for as much as 40% of district expenditure on health; (b) led to overlapping and conflicting goals for human resource management at various levels; (c) created the need for local governments to have command over their skill mix and allocation of human resources, while the central government regained control over human resources; and (d) deteriorated the Health Human Resources Information system, which makes it difficult to conduct strategic workforce planning based on evidence.

The World Bank has undertaken extensive reviews on the status of Indonesia's health workforce. In 2009 it released *Indonesia's Doctors, midwives and nurses: current stock, increasing needs and future challenges and options*. This review suggested that some of the main constraints related to human resources are the shortage and inequitable distribution of doctors and specialists; the poor quality of tertiary education and the lack of strategic policy development and planning for the workforce. The World Bank (2009) estimates that Indonesia has 18 doctors per 100,000 population. This ratio improves to 25 doctors per 100,000 if medical doctor registration data is used. By any measure, these ratios are low when compared to those in Asia. The 2009 World Bank report also found substantial geographical inequities in the distribution of doctors. For example, while urban areas in Java and Bali have 18.5 doctors per 100,000 population; this ratio stands at 6.6 in remote areas. Indonesia has relatively more nurses than other countries in Asia.

The World Bank 2010 Report, *Indonesia's Maternal Health Assessment* provides a thorough overview of the status of village midwives in Indonesia and the village midwife program's *Bidan di Desa* position as a policy and service delivery centrepiece in efforts to reduce maternal mortality. This program was conceived as an additional one year of midwifery training for people who had a nursing school education *(Sekolah Perawat Kejuruan or* SPK*)*. It was expected that the BDD program would sufficiently improve the quality and quantity of antenatal, obstetric, postnatal care and contraceptive services in the village. Half-way through the program, training was increased to three years of midwifery training after

completing high school. This innovative program to provide midwives to every village in Indonesia was viewed as a way to increase access to skilled care. It was intended to sharply reduce maternal mortality. In light of the fact that MMR is still high in Indonesia, the report makes the following observations:

The current approach in Indonesia which emphasizes the use of a midwife for delivery and community-based interventions has not had the anticipated impact. The government has increased the number of midwives available but their deployment patterns are still uneven and many remote areas do not have access. In addition, the training of many midwives is seriously below standard and new graduates are coming into the market without the requisite skills to safely manage birth complications. Obstetricians are not widely available–of approximately 2,100 trained specialists, more than half practice on the island of Java. Issues of retention and incentives, service delivery being compromised by increasing administrative tasks and the increasing trend of dual practice (working in public and private practice) are affecting accessibility, quality and coverage.

The World Bank released an update of its health workforce review, titled *The Production, Distribution and Performance of Physicians, Nurses and Midwives in Indonesia: An Update (2014)*. This report draws attention to the remaining weaknesses and problems in the distribution, retention and quality of health workers, and the added challenges and demands that the national health insurance program will bring. Indonesia launched the national health insurance program—*Jaminan Kesehatan Nasional* (JKN)—on January 1, 2014, and aims to achieve universal health coverage (UHC) by 2019. Achieving UHC means not only increasing the number of people covered but also expanding the benefits package and ensuring financial protection. Although the JKN benefits package is comprehensive, a key challenge related to the capacity to deliver the promised services is ensuring the availability, distribution, and quality of human resources for health. Of Indonesia's 33 provinces, 29 do not have the WHO recommended ratio of 1 physician per 1,000 population, although Indonesia regularly produces 6,000 to 7,000 new physicians annually. The shortage of nurses in hospitals and health centers (*puskesmas*) is noticeable despite the large number of graduates. The government's health worker contract policy (PTT [*Pegawai Tidak Tetap*]) was the main policy lever to improve the distribution of physicians and midwives; it offered a shorter contract and higher monetary benefits for rural and remote postings.

Nevertheless, evolution of the policy over more than two decades of implementation indicates that the outcome has not been totally satisfactory and that distribution problems remain. Physician maldistribution has been particularly affected by the number and concentration of hospitals in urban areas, as well as by government's policy of allowing dual practice. Aside from HRH production and distribution figures, key information on the quality of Indonesian physicians, nurses, and midwives is limited. The latest data from the 2007 Indonesia Family Life Survey (IFLS) vignettes, which measured diagnostic and treatment ability, showed low average scores across these three integral health worker categories. Indonesia is addressing the quality issue by improving the quality assurance system of health professional education through school accreditation and graduate certification and by strengthening health professional registration and recertification systems. With these issues in mind, if Indonesia is to attain UHC by 2019, significant and concerted effort to improve the availability, distribution, and quality of human resources for health is required.

Knowledge and Information Gaps

This field is seemingly well covered by researchers, World Bank and other donor programs such as Australia Indonesia Partnership for Health Systems (AIPHSS).

4.6.3 HEALTH FINANCING FOCUSING ON INSURANCE

Health financing including coverage of health insurance forms an important part of government policy to increase uptake of maternal health services and facility based delivery. The GoI has implemented a number of different health insurance programs over the last two decades with the aim of increasing coverage of poor and near poor and increasing access to services. These programs have now been merged into the National Health Insurance Program, JKN. A number of studies have been conducted on previous policies and commentators have also raised a number of concerns in the rollout of JKN and its potential impact on provision and uptake of maternal health care. A summary of the most recent studies is provided below.

The World Bank released '*A Study on the Implementation of Jampersal Policy in Indonesia*' in 2014. The report briefly outlines the *Jampersal* program that was only launched in 2011, a nationwide program to accelerate the reduction of maternal and newborn deaths. The program was financed by central government revenues and provided free and comprehensive maternal and neonatal care with an emphasis on promoting institutional deliveries. *Jampersal* providers were public and enlisted private facilities at the primary and secondary levels. In 2013, the World Bank and the Center for Family Welfare, University of Indonesia conducted a qualitative and quantitative study to assess the implementation and impact of the program in Garut District and Depok Municipality in West Java Province. The study found that *Jampersal* utilization was highest among women who were least educated, poor, and resided in rural areas. Utilization was also high among women with delivery complications. The study showed *Jampersal* only had an impact where institutional delivery coverage was still low such as in Garut District. In this district, women were 2.4 times more likely to have institutional deliveries after *Jampersal*. The finding suggests implementation of *Jampersal* policy may have to be adjusted according to the utilization pattern for efficiency and effectiveness.

In 2011, the government passed a ground-breaking follow-up law that defined the administrative and implementation arrangements—the *Badan Penyelenggara Jaminan Sosial* or BPJS Law—which stipulated that several existing contributory and non-contributory social health insurance schemes would be merged to provide streamlined uniform benefits under a single-payer umbrella beginning in 2014. Following institutionalization of the single-payer insurance administrator (BPJS *Kesehatan*) in 2014, the government plans to incrementally extend coverage to the entire population by 2019.

In light of the 2014 single-payer reforms and introduction of JKN, Indonesia will dismantle *Jampersal*. This will leave a period between 2014 and 2019 during which those who are not covered under JKN will no longer have access to universal maternal health coverage as they did over the period 2011-2013. As JKN will be one of the largest health coverage schemes in the world, implemented within an ambitious timescale, the World Bank says it would be surprising if there are no implementation problems during the transition period. The World Bank recommends that the central government should consider keeping *Jampersal* active

at least until 2019, by which time everyone is expected to have coverage under JKN, given that Jampersal helped increase institutional deliveries and voluntary participation in JKN remains low.

A number of other reports (World Bank, 2010) review previous government health insurance schemes, and identify issues around eligibility and identification and targeting of poor and near poor, administrative problems with enrolment and information provided to client on out of pocket expenses and expenses paid for by insurance and the need for local governments to supplement schemes to support scale up of coverage and improve quality.

The 2010 World Bank Maternal Health Assessment also provides some information on regional health insurance plans that are in place in addition to the national schemes. These are designed to provide subsidized services to the near poor who might not qualify for *Jamkesmas* or to provide coverage for the poor who have not enrolled in *Jamkesmas*. Different pilot programs have tried to address utilization in other ways. One pilot program that operated in ten districts in East and Central Java provinces, focused on stabilizing the incomes of midwives (performance-based contracting) coupled with demand creation (issuing of coupon books) that have had promising results but which have not been institutionalized at the national level. Other programs, such as the pilot capitation program in Tabanan, Bali (JPK-*Gakin*) had more mixed results. In that program, the heads of the *puskesmas* were pleased they no longer had to do the administration for the program, including deciding who qualified as poor. One study found, however, that "although the JPK-Gakin scheme does secure the *right* of the poor to get medical treatment at the hospital, it cannot secure the *actualization* of it" (Arifianto, et al., 2005).

The World Bank reports that these pilot projects and continued reform of insurance mechanisms indicate that Indonesia has yet to find the appropriate formula where cost is not a barrier to access, while at the same time allowing for fair compensation to providers.

Knowledge and Information Gaps

This field is seemingly well covered by researchers, World Bank and other donor programs such as AIPHSS.

4.6.4 QUALITY OF CARE

There have been a number of studies that investigate the issues of poor quality of care, and the lack of availability of emergency obstetric services that are vital to saving lives. These studies are not the priority focus of this review, but it is important to mention that the combination of policies that relate to health systems ultimately impact upon the quality of care provided at health facilities and the community.

4.6.5 ROLE OF THE PRIVATE SECTOR

The private sector's role in the Indonesian health care system has grown dramatically over the past 15 years. Significant attention has been given to the role of the private sector in

family planning services, and its impact on contraceptive method mix, accessibility and affordability. These studies were identified in section 4.3 above.

As the GoI 2014 Health Sector Review reports, Indonesia has a vibrant private sector in both primary and secondary care. Little data is available but it is estimated to be the major provider of secondary care in urban areas. The 2010 Susesnas estimates that 60% of outpatient visits and 43% of inpatient visits are at private facilities. There is however scare data on the service availability and readiness or compliance with minimum service standards.

In 2009, USAID sponsored a study into the role of private sector health providers. The report titled, *Private sector health care in Indonesia* (Chee, et al., 2009), found that there is an overall wide acceptance among Indonesian consumers to use private sector providers for a range of health services and products – even among the poorest socioeconomic groups. Out-of-pocket spending accounts for more than a third of all health spending. Over the long term, demand is increasing for private sector services and products, although this trend has reversed since 2004, primarily due to the implementation of government funded insurance for the poor, which only allows use of public facilities for primary care. There is a trend away from seeking care in outpatient facilities toward self-medication using private drug sellers – with 45 percent of Indonesians self-treating their last illness episode. Women are increasingly giving birth in a facility—and more than two-thirds of institutional deliveries take place in private facilities across income groups.

The report makes the important observation that reducing maternal mortality will not be achieved without fully engaging the private sector. Despite increases in the number of deliveries attended by a health professional (from 66% in 2002-2003 to 73% in 2007) and the number of deliveries taking place in a health facility (40% to 46%) (IDHS, 2008), the MMR remains high. Only 9.7% of deliveries take place in public facilities – all other deliveries are in private facilities, or at home assisted by a private midwife or TBA).

The Abt Associates report identifies one of the key issues around private sector involvement in health care delivery: the lack of coordination and integration of private providers and services into central public health programs or local service planning. There is little coordination between district health officials and central public health programs, or between the district health officials and private providers. While district health offices have greater authority over health services within their districts, they do not always have the capacity and resources to provide effective planning and oversight. District officials generally are not get used to effectively interacting with private providers, and mostly focus on their role as licensor. In some districts, independent organizations are also active in reviewing service quality and consumer protection. While these groups are relatively nascent, and would benefit from external technical assistance, they are potentially effective models for external oversight of public and private providers. Improving capacity of district and provincial health officials to engage with private providers and consumers is critical to improving health services.

Sciortino, et al. (2010) undertook a case study of Muhammadiyah's Islamic charitable health services in the islands of Java and Sumatra, Indonesia, to assess the impact of privatisation of health care on this socially-oriented service provider, especially in terms of access for the poor and on its maternal and child health and contraceptive services. The case study found that in order to survive and thrive amidst private and public competitors, Muhammadiyah's primary care units, mostly consisting of maternal and child health centres and maternity clinics, when not closed altogether, have been directed toward providing curative hospital services, and more expensive and sometimes unnecessary treatment. A shift in the patient

population away from the poor has also occurred, as market pressures transform this charitable enterprise into a commercial one, prejudicing reproductive health care and reducing access for those most in need. The report recommends that an improved stewardship role by government is needed to regulate the private sector, along with serious thinking about the future of primary and preventive care and health promotion, including for comprehensive reproductive health care. The neglect of these core primary care elements in Indonesia may worsen as privatization proceeds and profit considerations become more pressing with increased competition.

Sciortino, et al. (2010) also look specifically at the increasing rate of caesarean section and the interrelationship with private practice. The report notes that caesarean section is increasingly recommended in Muhammadiyah facilities as in the rest of the country and the region. Sciortino, et al. (2010) refer to a recent audit of Indonesia and three other Southeast Asian countries found that overall caesarean rates were 27%, whereas complications requiring caesarean section are estimated by WHO at 5–15% of deliveries. The audit noted that women were generally not fully informed about the increased risk of maternal morbidity in developing countries following elective caesarean section without medical indications. To reduce these risks, as *The Lancet*'s study of nine Asian countries suggests, caesarean section should be performed only for medical indications. Still, financial considerations are driving these deliveries up because of higher profit margins from the intervention itself, the drugs provided and the longer stay of mother and baby after delivery. The higher fee for an obstetrician (instead of a midwife) also contributes.

Knowledge and Information Gaps

Data on service readiness, quality and availability of private provider health services is generally lacking in Indonesia (Health Sector Review 2014). This has implications for policy making and efforts to strengthen quality of care, health planning and budgeting at local level, including for maternal and reproductive health care services. This data and information gap is being gradually addressed through a forthcoming Public Expenditure Tracking Survey which will explore the dynamics arising from interactions between public and private providers, in the context of the newly merged JKN health insurance scheme (as reported by the World Bank, September 2014).

Information on quality of services provided by private providers and evidence on successful integration of health services at district level is limited, as is information and knowledge on successful public –private partnerships for health.

5 RESEARCH ON THE POLICY PROCESS

This section provides an overview of the research that has been carried out into the policy and political process in relation to maternal and reproductive health and health more broadly in Indonesia.

In an internationally focused opinion piece in *The Lancet*, Buse, et al. (2008) suggest that to call for political will, promote policy dialogue, or identify policies that have worked in the past is not enough to bring about evidence-based sexual and reproductive health policy. The authors argue that without strategic management of the political terrain, the strength of the evidence might not necessarily result in the implementation of evidence-based policy. Therefore, interest groups that aim to improve sexual and reproductive health should adopt a more deliberate and systematic approach to gathering political intelligence and making use of it to inform strategies and tactics to get neglected issues onto the policy agenda and to ensure that evidence-based policies are formulated and implemented. The following studies contribute to the body of knowledge covering this political terrain in Indonesia.

Shiffman (2007) conducted a series of case studies on what causes government to give priority to **safe motherhood**, given that national political systems are burdened with thousands of issues to sort through each year. Shiffman says that in marked contrast to our extensive knowledge about the medical interventions necessary to prevent maternal death, we know little about the political interventions necessary to increase the likelihood that national leaders pay meaningful attention to the issue. On Indonesia, Shiffman presents a case study of the emergence, waning and re-generation of political priority for safe motherhood in Indonesia over the decade 1987–1997, to highlight how four key factors interacted to raise safe motherhood from near obscurity in the country to national-level prominence. These four factors included the existence of clear indicators showing that a problem exists; the presence of effective political entrepreneurs to push the cause; the organization of attention-generating focusing events that promote widespread concern for the issue; and the availability of politically palatable policy alternatives that enable national leaders to understand that the problem is surmountable. Moreover, successful policy communities understood the distinct characteristics of their political environments and used an intuitive understanding of agenda-setting mechanisms to develop political strategies appropriate to the national context.

Shiffman (2004) has also studied the political management of Indonesia's **family planning** program through the Suharto era, which provides some important insights particularly in light of Indonesia's recent efforts to revitalise the family planning program. Shiffman reveals that BKKBN political management strategies contributed to the agency's effectiveness, and highlights two crucial dimensions of the experience. First, a culture of political orchestration developed at all rungs of the agency, as BKKBN officials sought political support at the national, provincial, district and village levels. Even the role of fieldworkers evolved from simple family planning motivation to the political management of localities in service of the program. Second, the BKKBN took advantage of political opportunity in ways many other agencies did not. Shiffman identified three factors that he suggests may have contributed to BKKBN's strategic political orientation. First, the BKKBN had limited resources and therefore

had strong incentives to rely on political manoeuvring to build capacity. Second, its longest standing chairman, Haryono Suyono, himself had a strong political orientation and seems to have inculcated the same mentality among his subordinates. Thus, BKKBN was in in his era considered having a strong political domination and influence which impacts on the acts carried out by the officials throughout the programs. Third, the BKKBN, unlike many developing world family planning agencies and ministries of health, avoided the passive biomedical and service delivery orientation that is characteristic of many bureaucracies with medical missions. It was staffed with medically minded personnel *and* politically minded bureaucrats, giving it both service competence and political capacity.

Abortion law reform in Indonesia has also been the subject of policy analysis, though from notably few authors. Surjadjaja and Mayhew (2011) present the complex and intricate landscape of abortion law and recent attempts at reforming the legal status of abortion within the Health Law. The authors point to the lack of consensus on the contribution that unsafe abortion makes to Indonesia's maternal mortality and on how to use policy and legal instruments to address a critical health issue that must also placate the various political and religious positions on abortion. In advancing abortion law reform that seeks to protect women's health and advance women's rights, the authors argue that the challenge lies in mustering the political consensus and support without compromising it. The challenges faced by such a lobby can be summarised as follows:

1. Although it is agreed that Indonesia's MMR and unsafe abortion numbers are too high, there is no consensus that abortion is the core problem.
2. Although it is agreed that the health law needs reform, the reasons vary.
3. Because of these different views on the problem and solutions, there is no strong political will.

Surjadjaja and Mayhew say that stakeholders can accept that too many women are dying and that there are too many clandestine abortions, and recommend that in bringing together supporters and opponents of abortion reform to the negotiating table, advocates must frame the issue appropriately. For example, getting across the understanding that most women seeking abortions are married will assault the first challenge – abortion is a consequence of immoral behaviour. With the health of women as an acknowledged priority, and abortion practice destigmatised, Surjadjaja and Mayhew argue the political will may be achieved.

Surjadjaja and Mayhew (2008) built this analysis upon a case study on the abortion law reform in Indonesia. The case study shows how the moves to legalise abortion have been supported or constrained according to the balance of political and religious powers operating in a macro-political context defined increasingly by a polarised Islamic authoritarian - Western-liberal agenda. The authors describe how policy analysis theories and stakeholder mapping tools are useful for predicting the likelihood of policy change and informing the strategic approaches for achieving such change. They argue that continuing political debts have played an important role in the policy development of successive presidents and allowed religious parties to wield considerable influence. The issue of reproductive health constituted a battlefield where these two ideologies met and the debate on the health law amendment became a contest.

In this context, Surjadjaja and Mayhew (2008) identify approaches for managing stakeholders toward a consensus and alignment of positions. These indicate with whom (eg. progressive

religious groups) a particular approach (e.g. involvement in pro-change discussions) should be used. This may enable key policy advocates to develop strategies for action to effectively use potential window of opportunity in the policy making process. The authors suggest greater involvement of researchers in advocacy process and engage with stakeholders in development of strategies that promote change – though note that this may be best suited for think tanks rather than traditional academic institutions so as to not blur lines of independence.

Research has also been carried out on how religion and Islam has influenced the policy debate in Indonesia by Shapiro (2014) and van Doorn-Harder (2008). These authors look at how interpretations of Islamic text has evolved over the decades and how it has been shaped and used by Indonesian female activities and reformists, and identify some of the ongoing debates and positions in the policy advocacy landscape.

Adolescent sexual reproductive health has also been the subject of socio-political analysis. Utomo and McDonald in a 2009 study examined the changing social and political context of adolescent sexual and reproductive health policy in Indonesia. The authors describe how in 2001, Indonesia was on the brink of implementing an adolescent reproductive health policy that was consistent with international agreements to which the Indonesian government was a party. Although the health of young Indonesians was known to be at risk, the opportunity for reform passed quickly with the emergence of a new competing force, Middle Eastern fundamentalist Islam. Faced with the risk of regional separatism and competing politico-religious influences, the Indonesian government retreated to the safety of inaction in this area of policy. In the absence of a supportive and committed political environment that reinforces policy specifically targeted to young people's reproductive health, extremist approaches that involve considerable health risk prevailed. The authors argue sexual and reproductive values and behaviours that are emerging among single young people in contemporary Indonesia are conditioned by a political context that allows the conflicting forces of traditional Indonesian values, Westernization, and the strong emerging force of fundamentalist Islam to compete for the allegiance of young people.

A 2010 report by Amnesty International takes a specific look at the impact of Indonesian laws and regulations that impact upon and create barriers to women's reproductive health, specifically the obstacles faced by unmarried women and girls; married women and girls, including those who are childless; and victims of sexual abuse and the impact of the criminalization of abortion on reproductive health. The report argues that because women and girls can become pregnant, they are disproportionately affected by the state's restrictions on sexual and reproductive rights, and its failure to protect and fulfil these rights. The state's restrictions include, among other things, laws that support gender stereotyped roles, in particular regarding marriage and childbearing; laws that criminalize consensual sex and the provision of information on sexual and reproductive rights; laws and policies that discriminate on the grounds of marital status and exclude unmarried women and girls from full access to reproductive health services; laws which require the husband's consent for married women and girls to access certain reproductive health services; and the criminalization of abortion in all cases unless the health of the mother or foetus is endangered, or in the case of rape victims.

There has been research into the implementation of laws and regulations that are aimed to improve women's rights and gender equality in Indonesia, which should in effect also create a more supportive and enabling environment for advancing women's reproductive health.

The Indonesian Women's Research Institute (WRI) (2013) has conducted research into implementation of the Gender Equality Bill and supporting Gender Mainstreaming and Gender Budgeting regulations, development of gender responsive policies at local level, and the extent of support for gender equality in policy and regulations amongst local parliamentarians. The survey found that whilst support for improving gender equality and the need for gender responsive policies was generally high amongst parliamentarians, there was a lack of awareness and understanding of the content of related bills and regulations, and little understanding of how these should be implemented. Furthermore, WRI found that in a review of 154 local policies and regulations, 63 were found to directly discriminate against women, despite the presence of overarching legislation and conventions designed to protect women's rights, such as CEDAW, Human Rights Act and Gender Equality Bill. The report also cited the absence of regulations to support implementation of laws such as the Health Law passed in 2009.

On the topic of policy process more broadly, an ODI study commissioned by AusAID (now DFAT) in 2011 under its Knowledge Sector Management Program provides insight into the political economy of policy-making and use of knowledge in Indonesia that could be applied to the maternal and reproductive health arena. The study aimed to assess factors that determine the use of knowledge in policy-making processes and uncover other (perhaps stronger) factors by undertaking a political economy analysis, focusing on how historical legacies coupled with institutional constraints (in essence, the 'rules of the game') shaped policy-makers' incentives to seek and use knowledge. The study found that a range of incentives influenced the use of knowledge and decision making, but overall, motivational and constraining factors are based largely on economic or monetary metrics, an assessment of power gained or lost, bolstering one's status and safeguarding relationships, among others. The political economy of the demand for and use of knowledge is clearly bound up with the political economy of the policy itself (Datta, et al., 2011).

Overall, there is growing body of research that aims to understand the socio-politico-religious influences in Indonesia particularly with respect to more sensitive domains such as abortion and adolescent sexual reproductive health. The research demonstrates how these domains are still contentious issues in the political and socio-religious sphere, and the heated debates have also left policy vacuums or ambiguity, which have not necessarily supported advancement of maternal and reproductive health goals. The research however, also points to areas of significant progress in once traditionally conservative domains such as family planning.

Knowledge and Information Gaps

Buse, et al. (2008) propose an action-research intervention to improve the prospects of evidence-based interventions in sexual and reproductive health by calmly and deliberately tackling the political circumstances that make the difference between success and failure. The authors suggest that such analysis and corresponding action will be undertaken by national policy-specific networks, such as advocacy coalitions composed of diverse advocates, politicians, civil servants, pressure groups, journalists, think tanks, and academics.

Shiffman (2007) also highlights the knowledge gap in agenda setting and policy implementation, concluding that policy communities in settings with significant health problems need to develop careful political strategies to ensure that their national leaders give these issues the attention and resources they deserve.

Datta, et al. recommend further research into sector- and/or issue-specific political economy analyses and, in doing so, map interests and incentives of actors who are considered to have some influence over policy outcomes: This could include analysis of the role of the president, ministers and other cabinet-level posts, deputy-ministers, directors-general, political parties, parliamentary commissions, researchers from Balitbang, universities and research institutes, the media, CSOs, the judiciary and business and corporate interests, among others. As well as policy development, this could focus on budgeting (allocation and disbursements) and policy enforcement.

There is little political economy analysis available at provincial and district levels, particularly in relation to health policy and decision making. This could also include what people understand about health (health literacy) and the importance they attach to health, including maternal and reproductive health, particularly political decision makers, and young people.

6 RECOMMENDATIONS

SUMMARY OF KNOWLEDGE AND INFORMATION GAPS

The following is a summary of the knowledge and information gaps as identified in existing research and through analysis of the broader landscape of research presented in this report.

Summary of Knowledge and Information Gaps

- Credible measure of maternal mortality that includes cause and burden of maternal death
- Unmet need for contraceptives/ family planning amongst unmarried (men and women) and married, including on method choice
- Incidence of abortion, method, abortion related mortality and morbidity, abortion costs (social and monetary)
- Qualitative studies on the cultural and social factors that are key determinants in access to and experience of health care for women in Indonesia
- Various age and sex disaggregated data on adolescent and youth reproductive health, including young adolescents (10-14 years old) covering information on behaviours, pre-marital sex, risk-taking, accessing services and knowledge
- Micro quantitative and qualitative studies on young people on the prevalence of premarital sex, abortion, and adolescent pregnancy, and the needs for reproductive health education and services for men and women in this age group
- Implications and impact on family planning services uptake from the roll out of JKN
- Knowledge of effective models of private sector partnerships, such as social franchises, or integrated planning of public and private service provision
- Up-to-date, national data on the incidence of abortion and on maternal morbidity and mortality resulting from unsafe abortion in Indonesia; subnational estimates
- In-depth research on women's experiences—the obstacles that limit their ability to use contraceptives effectively, the decision making process they undertake in the face of an unintended pregnancy, their attitudes toward abortion and the steps they take to terminate a pregnancy—would help leaders understand and respond to the problems women face in their efforts to control their fertility.
- Data on service readiness, quality and availability of private provider health services is generally lacking in Indonesia
- Understanding of the political terrain that affects the uptake and implementation of evidence-based policies in sexual and reproductive health,

including in generating political will and successful agenda setting, through to formulation of successful political strategies. This includes the socio-politico-religious dimensions to policy making, particularly in contentious areas such as adolescent sexual reproductive health, legal age of marriage, abortion, and contraception use for unmarried people.

- Implementation of national laws and regulations on women's rights and gender equality, human rights and young people's rights. Understanding of how the law and related regulations can be used to uphold women's rights, and how this may be translated through to service planning and delivery, may be used to support an increase in uptake of lifesaving services that respect the rights of the client.

SUMMARY OF FUTURE RESEARCH RECOMMENDATIONS PRIORITY

HIGH PRIORITY:

1. Research on unmet need for family planning amongst married and unmarried; smaller scale studies could be carried out while advocacy on expanding scope of DHS is pursued. This could include research into unmet need of method choice amongst married and unmarried women.
2. Developing a more considered research agenda into the political economy of maternal and reproductive health, at national and select subnational levels. This would seek to generate knowledge on how policy reform and significant changes have occurred in the past, the reform barriers and enablers, that consider not just political decision making, but the influence of culture, religion and decentralisation.
3. Supporting research that investigates the implementation of relevant national laws and regulations that relate to maternal and reproductive health and gender equality to understand how these are being applied or upheld in practice.
4. Advocate on the collection of up-to-date, national data on the incidence of abortion and on maternal morbidity and mortality resulting from unsafe abortion in Indonesia; subnational estimates of these events are also essential, in light of the recent decentralization of many government functions.

MEDIUM PRIORITY

1. In-depth research on women's experiences—the obstacles that limit their ability to use contraceptives effectively, the decision making process they undertake in the face of an unintended pregnancy, their attitudes toward abortion and the steps they take to terminate a pregnancy—would help leaders understand and respond to the problems women face in their efforts to control their fertility.
2. Micro quantitative and qualitative research and studies into adolescent sexual reproductive health in areas such as prevalence of premarital sex, abortion, and adolescent pregnancy, and the needs for reproductive health education and services for men and women in this age group.
3. Research into developing a greater understanding of the complex interplay between culture, religion, poverty, geography and access to health services. This enriches the biomedical and epidemiological knowledge of maternal death, and supports the development of policies and plans that aim to remove barriers to health, and also focus on what the health system can do, and what should be part of a broader multi-sectoral and community wide initiatives.
4. Research into male involvement in family planning and as supporters of women's reproductive health and rights. It could also aim to better understand men's attitudes and practices in regards to sexual activity, pre-marital sex, use of contraception, unintended pregnancy and sexual health seeking behaviour.

5. Monitoring/ research into rollout of JKN and coverage of private sector providers and its impact on uptake of services including family planning.

6. Undertake assessments of the costs of unsafe abortion—both monetary and social—to women, their families, health care systems and the government are also essential to understanding unsafe abortion's impact on society.

7. Research that compares Indonesia to other Muslim countries with regard to abortion incidence, rates of complications and maternal mortality resulting from abortion, and policies and programs intended to reduce unsafe abortion.

8. Research that focuses on effective models of district management and quality service delivery for maternal and reproductive health care that can inform policy at local and national levels. These may be through existing government or donor support programs. The upcoming PERMATA program provides an obvious starting point for MAMPU to pursue research in this area.

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ANNEX

ANNEX 1: LIST OF RELEVANT GOVERNMENT LEGISLATION AND REGULATIONS

The following is a list of relevant legislation and regulation relating to maternal and reproductive health in Indonesia. It is provided as background information and context for the following research review sections. It includes specific details about aspects of the relevant law, but does not provide a critique or specific analysis of their application. Information for this section was largely drawn from the 2010 Amnesty International Report.

Health Law (No.36/2009)

The law refers to abortion as "a certain medical procedure". It allows abortions up to six weeks gestation, but generally only in rape cases or where there is serious risk to the mother's health. In life-threatening emergencies, the woman's husband is required to give consent.

The Health Law provide for heavy terms of imprisonment for women, and individuals, including health workers, who seek and/or perform an illegal abortion.

Under Articles 72 and 78 of the Health Law, access to sexual and reproductive health services may only be provided to "legal partners" (*pasangan yang sah* and *pasangan usia subur*), which implies that in practice only married couples can access family planning services.

Population and Family Development Law (no.52/2009)

Law provides that access to sexual and reproductive health services may only be given to legally married couples, thus excluding all unmarried people from these services.

Article 21.1 provides that the policy of family planning is aimed at supporting husbands and wives (or future husbands and wives) in making the right decision about their reproductive rights (*hak reproduksi*). Articles 24.1 and 25.2 provide that contraceptive services are aimed at legally married couples (*pasangan suami isteri*).

The Population and Family Development Law states that abortion as a method to regulate pregnancies is forbidden (Article 21.3).

Marriage Law (no.1/1974)

States that "the husband is the head of the family while the wife is the head of the household" (Article 31.3). "[T]he husband has the responsibility of protecting his wife and of providing her with all the necessities of life in a household in accordance with his capabilities" (Article 34.1), while the wife "has the responsibility of taking care of the household to the best of her ability" (Article 34.2).

The Marriage Law provides that the legal age of marriage in Indonesia is 16 for women, and 19 for men (Article 7).

The Marriage Law authorizes polygamy.31 According to Article 4.1 and 4.2, men may seek to have more than one wife provided that (a) their wife does not fulfil the obligations of a wife; (b) their wife has a health condition which cannot be treated; or (c) their wife has not borne a child (*isteri tidak dapat melahirkan keturunan*).

Pornography Law (no.44/2008)

The Pornography Law defines pornography broadly. It encompasses material that "*contravenes norms of community morality*", and provides for punishment of between four and 15 years of imprisonment for those who produce, disseminate, fund or use such material. This new law and its broad provisions add to the effect of other legal restrictions on provision or dissemination of information or education on sexual and reproductive rights issues.

Human Rights Act (no.36/1999)

The right to equality before the law is provided for in the Human Rights Act (Article 3.2).

The right to non-discrimination is also provided for in the Human Rights Act (Article 3.3).

Indonesian Constitution

The right to equality before the law is provided for in the Indonesian Constitution (Article 27.1)

The right to non-discrimination is also provided for in the Constitution (Article 28.I [2])

The Indonesian Constitution provides that "*[e]very person shall have the right to establish a family and to procreate based upon lawful marriage*" (Article 28B [1]). However, the Constitution does not contain specific provisions which guarantee the right for unmarried men and women to have children. This lack implies that the right to establish a family and procreate is only protected in the context of marriage.

Convention on Elimination of Discrimination Against Women (CEDAW)

The Convention on the Elimination of all Forms of Discrimination against Women (CEDAW) defines the term "discrimination against women" as any distinction, exclusion or restriction made on the basis of sex which has the effect or purpose of impairing or nullifying the recognition, enjoyment or exercise by women, irrespective of their marital status, on a basis of equality of men and women, of human rights and fundamental freedoms in the political, economic, social, cultural, civil or any other field. By ratifying CEDAW, states commit themselves to undertake a series of measures to end discrimination against women in all forms, including:

- To incorporate the principle of equality of men and women in their legal system, abolish all discriminatory laws and adopt appropriate ones prohibiting discrimination against women;

- To establish tribunals and other public institutions to ensure the effective protection of women against discrimination; and
- To ensure elimination of all acts of discrimination against women by persons, organizations or enterprises.

International Covenant Economic, Social and Cultural Rights (ICESCR)

The Committee on Economic, Social and Cultural Rights (the ESCR Committee), which monitors state's implementation of the International Covenant on Economic, Social and Cultural Rights (ICESCR), to which Indonesia is a party, has stated that *"[s]tates should refrain from limiting access to contraceptives and other means of maintaining sexual and reproductive health, from censoring, withholding or intentionally misrepresenting health related information, including sexual education and information"*.81

Indonesia Criminal Code & Elimination of Violence in Households Law (No.23/2004)

The Criminal Code (*Kitab Undang-undang Hukum Pidana*, KUHP) has traditionally been the law under which cases of violence against women are dealt with. With the enactment of the Domestic Violence Law (No. 23/2004) in 2004 and the passing of the Witness Protection Act (No.13/2006) in 2006, the legal protections available to victims and witnesses of domestic violence have considerably increased. However, women and girls who are victims of sexual violence continue to face a range of obstacles in law and practice when they report to the police. The definitions referring to "rape" or "sexual violence" contained in the Domestic Violence Law and the Criminal Code lack clarity. The definitions are narrow and not consistent across the two pieces of legislation, which leads to a level of uncertainty about what is and is not a criminal offence.

For example, marital rape has yet to be criminalized in the Criminal Code, and the Domestic Violence Law refers to sexual violence (*kekerasaan seksual*), but not specifically to rape (*perkosaan*). Moreover, the law requires that there be two elements of proof of rape (for example testimony from the victim; the defendant; an expert etc) – which in reality can be very difficult for victims to demonstrate. For women and girls who become pregnant as a result of sexual violence, these obstacles also become barriers to ensuring that they can access the reproductive health care they need. For example, although rape victims are now legally entitled to abortion services, they can only legally access these services after reporting to the authorities and within the first six weeks of pregnancy.

The Criminal Code provides for heavy terms of imprisonment for women, and individuals, including health workers, who seek and/or perform an illegal abortion

ANNEX 2: LIST OF RELEVANT GOVERNMENT POLICIES AND STRATEGIES TO ADDRESS MATERNAL MORTALITY

The World Bank Maternal Health Assessment (2010) provides a clear overview of the government's current policies for reducing maternal mortality: 'Healthy Indonesia 2010', 'Minimum Service Standards' and 'Making Pregnancy Safer' programs.

The Healthy Indonesia 2010 program emphasizes empowering communities. It also defines the following goals:

- 90 percent of deliveries with a skilled health provider;
- a midwife ratio of 100 to 100.000 population;
- achieving a Posyandu 'Purnama' and 'Mandiri' participation rate of 40 percent;4
- iron consumption by 80 percent of pregnant women;
- a ratio of general doctors of 40 per 100,000 population;
- 80 percent of the eligible poor covered by Jamkesmas; and
- a contraceptive prevalence rate of 70 percent.

As part of the decentralization effort, the service delivery practices at the community health centre were reviewed and revised. The Minimum Service Standard includes six areas addressing maternal health. These service standards include lists of service delivery activities, manuals and guidelines to manage care and expected human resources necessary to implement the service. They include: (i) the practices for antenatal care; (ii) treatment of obstetric complications; (iii) delivery with a skilled provider; (iv) postnatal care; (v) family planning; and (vi) coverage of costs for poor families. A guidebook for managers lays out their responsibilities. However the MSS remain ill-defined, complex to measure and few districts actually apply them. Family planning MSS are not used (Haynes & Harahap forthcoming).

The policies and strategies for maternal health delineated under the Making Pregnancy Safer program now guide the majority of program interventions. The government has outlined the following as essential components:

- continued use of village midwives to reach all women and to support the policy that all births should be attended by a skilled provider;
- renewed emphasis on antenatal care, including having the first prenatal visit in the first trimester;
- development of the emergency neonatal and obstetric basic and comprehensive systems, which rely on facilities to provide interventions;
- maternal death audits to better pinpoint the causes of death;
- promotion of exclusive and immediate breast-feeding, including within the first hour of birth;
- family planning and postabortion care; and
- expanding the Desa Siaga effort nationwide and encompassing multiple public health objectives.

To implement the Making Pregnancy Safer program, the ministry has outlined a strategic program encompassing:

- an emphasis on quality within health services delivery;

- empowering the community (much like the original Siaga campaign, this focuses on complication prevention and birth preparedness and is referred to as P4K (Perencanaan Persalinan Pencegahan Komplikasi) or Childbirth Complications Prevention Planning;
- partnerships between MoH and other sectors, such as donors, the private sector, and
- NGOs in order to reduce mortality; and
- a renewed emphasis on management, including surveillance, monitoring and evaluation, and collecting data for planning purposes.

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