Evidence Summit on Reducing Maternal and Neonatal Mortality in Indonesia

Consensus Report
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Thank You

USAID

Foreword

I express my deepest appreciation to all teams that have contributed to the implementation of "Evidence Summit on Reducing Maternal and Neonatal Mortality in Indonesia" (ES Indonesia), especially the consensus report compilation team. This consensus report explains the scientific process for implementing the Evidence Summit in Indonesia. In among other things, ES Indonesia produces trusted evidence within the scope of six determinant areas of maternal and neonatal deaths; shift from Evidence-Based Health Policy (EBHP) approach to Evidence-Informed Policy Making (EIPM); the process of translating evidence and information into advice and recommendations for policy making; and stakeholder engagement as process a key and strategic activity in ensuring success the success of the implementation of ES Indonesia.

In accordance with the functions and roles of AIPI as independent institutions formed based on UU no. 8/1990, AIPI was trusted as the organizer of this activity with support from USAID. ES Indonesia is the continuity of collaboration between AIPI and US National Academy of Science in 2013, which produced a consensus report titled Reducing Maternal and Neonatal Mortality in Indonesia: Saving Lives, Saving the Future. In this report, it was reported that there is a lack of certainty of valid data/information, to prove what really happened in Indonesia for decades. ES Indonesia began in 2016 by involving more stakeholders in the implementation, with the aim of improving joint ownership and maintaining sustainability for various efforts and agreements produced. In September 2017, the AIPI delegation received the opportunity to participate in the Global Evidence Summit in Cape Town, South Africa, to share the results and experience of implementing ES Indonesia. This global forum also serves as a place for strengthening the roles AIPI in promoting science on a global level.

ES Indonesia has produced a bibliographic list from the evidence that has met the requirements of the systematic study against more than 7,000 literature from various scientific journals, academic products, as well as reports in Indonesia; alternative formulation Policy; proposed recommendations and action plans; and get consensus from stakeholders related to collaborative programs that can be executed. Furthermore, AIPI has the moral responsibility to maintain the sustainability of output and results of the Evidence Summit which has produced scientific forums or research groups who are expected to always

use, manage, synthesize, and translate evidence; knowledge management to help in capacity building and supporting the use of evidence; and collaborative programs which are expected to maintain sustainability the implementation of EIPM.

Welcoming the era of the Industrial Revolution 4.0, where Indonesian people have to be data and technology literate, the output and sustainability of ES Indonesia are expected to be the pioneer of literacy 4.0 implementation through the development of Knowledge Management System (KMS) and collaborative work to improve maternal and neonatal health in Indonesia. KMS is supported by the information technology communication system with high-level security which expected to manage big data and encourage a culture of benefit sharing between stakeholders. On the other hand, KMS is expected to be able to strengthen the role of AIPI to overwatch the current development of science and technology in Indonesia and globally.
AIPI expresses its deepest gratitude to USAID which has supported the implementation of ES Indonesia through URC-TRAction and Jhpiego. We also greatly appreciate the support of the experts from global institutions: Marge Koblinsky, Stephen Wall, Turner Dance, Laurel Hatt, Sally Green, Steve McDonald, and Chef Agarwal. Their suggestions and direction is an invaluable contribution to the implementation of Indonesian ES.

In the final months of writing this ES consensus report, Massee Bateman leaves us. Massee is a figure with full commitment with AIPI and persistently started initiatives looking for causes of high maternal and neonatal deaths in Indonesia since 2012, which was stated in Reducing Maternal and Neonatal Mortality in Indonesia: Saving Lives, Saving the Future (2013). Four years after, Massee returned to work together with AIPI to conduct the Evidence Summit, to follow up one of the findings in the 2013 report. Until the end of his life on October 31, Massee confirmed that ES Indonesia can be implemented well. And in the end, this consensus report was published, in which he does not have the chance to see it. Thank you, Massee.
Finally, I hope this report can be a reference for interested parties, and also to contribute to the advancement of maternal and neonatal health in Indonesia.

Sangkot Marzuki
AIPI Chairman (2008-2018)

Content

Executive Summary

Preface

The Indonesian Academy of Sciences (AIPI) addresses the deaths of mothers and infants as a serious and urgent issue for Indonesia. The government has invested heavily in improving maternal and infant health services as an effort to achieve the Millennium Development Goals (MDGs), especially targets 4 and 5, but this is not matched by significant progress on the achievements of the MDGs indicators. Therefore, in 2013, AIPI along with the US National Academy of Sciences (NAS) and supported by USAID have conducted a study "Reducing Maternal and Neonatal Mortality in Indonesia: Saving Lives, Saving the Future" to evaluate the quality and consistency of maternal mortality data and newborns in Indonesia as well as formulating recommendations for improving the health of mothers and newborns in Indonesia. One of the main findings of the review is the lack of certainty of valid data/information, to be able to prove what actually happened to the deaths of mothers and newborns in Indonesia for decades.

The results of the MDGs evaluation in 2015 show that the MDGs achievement for maternal mortality rate by 2015 is quite far from the target, which is 305 / 100,000 from 102 / 100,000. On the other hand, the decline in newborn mortality rates has stagnated in the last nine years, ie, 20/1000 in 2003 and only declined to 19/1000 in 2012. This fact prompted AIPI to undertake a deeper study of the factors causing maternal mortality and newborns, as well as efforts to improve the health of mothers and newborns in accordance with the recommendations of previous studies. Therefore, AIPI with support from USAID through URC-TRAction and MCSP-Jhpiego conducted the Evidence Summit to Reduce Maternal and Newborn Mortality Rate in Indonesia (hereinafter referred to as Evidence Summit), which was implemented from June 2016 until March 2018.

The Evidence Summit aims to collect all the evidence relevant to maternal and infant mortality factors, to be further synthesized and translated into proposed evidence-based recommendations as a basis for stakeholders to develop policies and follow-up actions to accelerate the decline in maternal and neonatal mortality rates in Indonesia.

The culture of using scientific evidence as the basis for policy remains a major challenge in Indonesia, so AIPI is in line with its role contained in Law no. 8/1990, which provides opinions and advice to the government and people of Indonesia about the acquisition, development, and application of science and technology, can be a motor/enabler for the implementation of this culture.

To achieve the stated objectives, Evidence Summit develops the concept of implementation based on good practice of Evidence Summit model in some countries, taking into account the local context and determinant of the health system that influences mother and newborn death nationally. For that, Evidence Summit uses the Evidence-Informed Policy Making (EIPM) approach and focuses on six topic areas: (1) quality of health services, (2) referral systems, (3) implementation of the National Health Insurance (JKN), (4) contributions of regional government, (5) data usage in decision making and (6) women equality. Six topic areas then detailed into 20 key questions (focal questions) that form the basis for obtaining scientific evidence. With the EIPM approach, it is expected that scientific evidence can be accepted by stakeholders and become the basis of a reliable consideration in policy formulation.

The scientific evidence found in the Evidence Summit comes from a systematic review process, field trips, review of policy documents, a simple study of global literature with high confidence, the outcome of policy dialogue and expert consensus. The quality of the

evidence determines the level of confidence in the resulting recommendations. Evaluation of evidence quality (high, medium and low category) refers to the Effective Public Health Practice Project (EPHPP)1 for quantitative research, and Critical Appraisal Skills Program (CASP)2 for qualitative research.

The process of probing evidence yields 71 pieces of evidence (from over 7000 literature obtained) eligible for further synthesis. These pieces of evidence consist of 55 evidence related to maternal health and 16 evidence related to the health of the newborn, where most of the evidence is of low quality (53 pieces of evidence), 17 medium-quality evidence and only one high-quality evidence. In addition, the review process found four gaps as follows:

- The role of the private sector in improving the quality of maternal and newborn health services
- Influence on the quality of referrals to maternal and neonatal deaths in various geographical areas of Indonesia: urban, rural, remote and outer
- The effects of health insurance on other health system determinants for maternal and newborn health
- The role of evidence use on the effectiveness of regulations, guidelines and intervention strategies for the reduction of maternal and neonatal deaths in Indonesia, both by the government and private sectors

Subsequently, translations of scientific evidence into proposed recommendations through dialogue and consultation with stakeholders and national and global experts were done. Recommendations compiled as policy proposals include regulation, program evaluation, strengthening existing interventions or programs, and the development of new interventions or programs to accelerate the decline in maternal and neonatal deaths. In addition, the recommendation is also a proposal of further research priorities to fill the scientific evidence gaps found from the Evidence Summit. The formulation of evidence and recommendation recommendations from each of the topic areas is summarized in six topic area reports which are subsequently formulated into consensus reports as AIPI products. In addition, the Evidence Summit is also outlined in an international publication manuscript that is expected to provide learning and inspiration to other countries.

In running the Evidence Summit for 21 months, the main lessons learned are as follows:

1. The determination of the Evidence Summit model for the national scale needs to harmonize the standard to be used with the capacity it possesses.

   The Evidence Summit model with the main method of systematic review is ideally applied by a country that already has access and good data management related to quality research / literature. In addition, the research team / assessment team must have the competence, commitment and experience in conducting systematic review and supported by adequate facilities and platform of information technology and communication system.

   The Evidence Summit model conducted at national scale in Indonesia is a prime experience, and shows that the results of systematic review are not producing sufficient evidence to answer all the key questions that require the intensification of evidence-seeking by enriching the gray literature in the form of scientific studies or reports of unpublished programs, through a process of "call for evidence" to various stakeholders, especially universities. And also, to enrich evidence related to good practice of program implementation,

field visits, review of policy documents, simple study of global literature with high confidence, policy dialogue and expert consultation were done. Assistance from global experts in the Evidence Summit process is also important to provide a more objective perspective, to ensure the quality of processes and outcomes of the Evidence Summit.

This experience generates a unique and specific Evidence Summit model for Indonesia, so it is hoped that reliable scientific evidence can be found to produce recommendations formulation relevant to the context of health systems and policies in Indonesia.

2. The constancy of implementation concepts, topic areas and key questions affect the quality of evidence and recommendations.

   The determination of topic areas and key questions needs to refer to a well-drafted conceptual framework when designing an Evidence Summit model to obtain relevant and valid scientific evidence.

   The Evidence Summit process generates only about 1% of the evidence deemed eligible to be the basis of recommendations from all literature obtained, and most of the evidence is of poor quality. To fill this gap of evidence, a global literature review is conducted to obtain high-quality evidence as a basis for recommendations. This process requires additional effort and time, which ultimately extends the Evidence Summit implementation time.

3. The importance of stakeholder involvement in every stage of the Evidence Summit process. One of the strengths in the Evidence Summit process is the involvement of stakeholders to ensure acceptability and ownership of the recommendations generated by the Evidence Summit. Stakeholder analysis is conducted to map the contribution that each stakeholder can provide in each stage of the Evidence Summit process and determine a stakeholder engagement strategy to oversee the sustainability of the Evidence Summit.

For Indonesia, the Evidence Summit is expected to build awareness and culture on the importance of using scientific evidence, information and stakeholder engagement in public policy formulation. For the global context, the Evidence Summit in Indonesia, implemented at the national level, can be a lesson for other countries to adopt similar models.

Recommendations For Each Topic Area

Proposed recommendations, including advanced research priorities formulated based on scientific evidence findings, are outlined in accordance with the topic area. The strength/priority of the recommendations is determined based on the quality of supporting evidence, values, and choices of stakeholders, the balance between the benefits with potential problems, the availability of resources and the consideration of the probability of the implementation of the recommendations WHO Recommendation on health promotion intervention for maternal and newborn health. Geneva, World Health Organization; 2015[1].

Topic Area 1: Improving the Quality of Health Service in Public and Private Sectors

Formulation of Evidence

Quality of health services is the level of quality of health services to the wider community, certain groups of people and individual patients in an effort to achieve the best health status. Health services should be safe, effective, timely, fair, efficient, and focused on the community. The scope of maternal and neonatal health services includes maternal and infant care facilities, human health resources as health care providers, community participation in relief efforts for pregnant women, childbirth, and newborns, and involvement of private sector.

The systematic review found some local and global evidence with low to moderate quality ranges of delivery sites, health care providers, community participation and private sector roles. Sources of evidence about newborns are very little so that no evidence is found significant. The formulation of evidence found from the four scopes of health services is as follows:

[1] WHO Recommendation on health promotion intervention for maternal and newborn health. Geneva, World Health Organization; 2015.

A. Place of delivery :
   a. Home delivery with the help of non-health workers or health workers still increases the risk of death and vulnerability to illness for mothers and newborns;
   b. There is a difference in service quality among health care facilities that correlates with the accreditation status of the institution;
   c. There is limited access to training for health workers as providers of health services;
   d. There are limited health promotion efforts related to the lack of public knowledge about maternal and newborn health

Policy Recommendation:
- Improve the quality of delivery services in all hospitals by following the regulations on PONEK;
- Establish and enforce a policy that the delivery has to be in a health-care facility;
- Accreditation of all health service facilities to assess conformity/compliance of regulatory implementation on maternal health, delivery services and newborn care;
- Issue regulation for early planning of delivery and postpartum care based on the pregnancy and delivery risks that have been done early in pregnancy. This process uses the determinants of cultural factors, costs, community participation and distance to health care facilities as delivery venues, followed by dissemination and training to health workers and the community about the implementation.

Recommendations for Further Research:
- The direct cause of maternal death and newborn death;
- Quality of delivery service and newborn care;
- Skills of health workers in the resuscitation of newborns;
- Skills of health workers in delivery assistance.

B. Human resources of health :
   a. The risk of death increases in delivery assistance by TBAs compared with health workers;
   b. Maternal mortality remains high in delivery assistance by health personnel with delay in the search for help in health care facilities as predicted cause factor;
   c. There are differences in the quality of prenatal care in doctors, midwives, and nurses;
   d. Skill training and the number of health workers receiving training for delivery assistance factors are considered to reduce the number of maternal and neonatal mortality.

Policy Recommendation :
- Improving the quality of human resources of health in order to be able to apply the principle of the continuum of care in the pre-pregnant, pregnant, childbirth until postpartum cycle through :
- Provision of training modules and the implementation of intensive training on maternal and infant care in all public and private health care facilities;
- The imposition of strict sanctions on health-care facilities with human resources that do not meet minimum service standards and professional standards;
- Implementation of regulations on partnerships with professional organizations and associations of higher education institutions in the context of the development and application of health education curriculum and training modules to improve the quality of health personnel;
- Planning the type, quantity, and distribution of trained health personnel in all health service facilities;
- Change of work system from individual to collaboration (team based) between doctor, midwife, and nurse, and other health workers.

Recommendations for Further Research:
- The use of primary data on the quality of health personnel in emergency delivery and newborn care;
- The effectiveness of the role of professional organizations and associations of higher education institutions on health quality improvement of health personnel;
- The relationship and suitability of the curriculum of higher education with the needs of health services in the community.

C. Public Participation :
   There is no reliable evidence to show the role of the community (community leaders, clerics, and health cadres) in enhancing community knowledge

and awareness of decision-making capacity and facilitating access to health-care facilities

Policy Recommendation:

- Implementation of a more intensive regulation on the responsibilities of provincial and local governments in mobilizing public participation;
- Intensification of empowering and increasingthe knowledge of women (in rural areas, lowermiddle income, and in the group of women in aparticular group of people) who do not understand or have other views about the importance of prenatal care, childbirth and postpartum in preventing maternal and newborn born;
- The use of information and communication technology in the process of monitoring of pregnancy care and delivery planning;

Recommendations for Further Research:

- Mapping of community participation on pregnancy, delivery, and postpartum care;
- Analysis of factors influencing community participation in the context of cultural determinants, geography, and resources.

D. Role of the Private Sector :
Completeness of equipment and quality of services for pregnancy, delivery and postpartum care in private health care facilities is lower than the public

Policy Recommendation:

Preparation of government regulations that can increase the role of the private sector in improving the quality of health services for mothers and newborns.

Recommendations for Further Research:

- Utilization of private health care facilities for the care of pregnant women, childbirth and postpartum and factors affecting utilization;
- The scope and form of regulation that has the leverage to increase the role of private health service facilities in an effort to decrease maternal and newborn mortality.

Topic Area 2: Improving the Quality of Health Service in Public and Private Sectors

Formulation of Evidence:

1) Complications of labor that cause maternal and neonatal death can be prevented with prompt and appropriate treatment. Therefore, an effective referral system needs to be constructed so that there are no delays, late in making decisions, late access to health services and delayed service delivery;
2) Systematic review identifies eight pieces of literature addressing the issues and potential solutions related to the maternal and newborn health care referral system. Seven works of literature have moderate quality while one literature has a low level of quality;
3) Challenges for the implementation of referral systems for maternal and neonatal health services are unclear referral procedures, limited number, and quality of human resources, lack of adequate facilities, inadequate medical equipment and supplies and lack of communication among health facilities, also the lack of support from family and community (moderate evidence quality);
4) Pressure from central and local governments to reduce maternal and neonatal mortality causes a tendency to refer without appropriate indications and procedures in primary health care facilities (moderate evidence quality);
5) The delay in reimbursement of service fees from JKN causes reluctance for health workers at the Puskesmas to manage primary referral cases (moderate evidence quality);
6) The speed and accuracy of referrals from primary care facilities to district hospitals may be associated with reduced risk of low birth weight and very low birth weight, stillbirth and primary neonatal mortality (moderate evidence quality);
7) Insufficient and inaccurate triage, oxytocin administration, magnesium sulfate treatment, antibiotic prophylaxis in referral hospitals may increase near-miss cases and increase the risk of neonatal and perinatal deaths (moderate evidence quality);
8) Improvement of the mechanism of preparedness and accountability mechanism of the referral network, improvement of communication and coordination within the referral system, and improvement of the efficiency of the referral system, may increase the number of cases and

speed of reference (moderate evidence quality);
9) Shelter houses and ambulance standardization can improve communication and coordination between primary care facilities and referral health facilities (moderate evidence quality).

Policy Recommendation:

- Establish collaboration and coordination by establishing a network of maternal and newborn health services in Indonesia. This network is supported by the availability of integrated emergency health service teams and effective information communication technology systems in each region.
- Improve the quality of facilities, equipment, standard operating procedures in Community Based Health Efforts (UKBM), First Level Medical Facility (FKTP) and Advanced Health Facility (FKRTL) in accordance with the principle of the continuum of care in maternal and newborn. In addition, it is necessary to arrange the health facilities that are permitted to carry out Ante-Natal Care (ANC), delivery and surgery (especially Caesarean Section).
- Review and adjust the emergency referral system SOP for mothers and newborns to align with JKN schemes at the national level allowing direct access to referral services for risky pregnancies.

Recommendations for Further Research:

- The effectiveness of the referral system in various settings with experimental methods in the intervention and control group.
- Factors leading to delayed referral in primary and secondary health care.
- A systematic review of global research on interventions to improve referral in the health system in several geographic, economic and cultural settings.

Topic Area 3: Implementation of National Health Insurance (JKN), including Improved Maternal and Newborn Health Services, and Improved Financial Protection for Disadvantaged Communities

Formulation of Evidence:

1) JKN has an important role in improving access and quality of maternal and neonatal health services. Implementation of JKN focuses on justice in obtaining access to health services for the community to achieve universal health coverage. Therefore, the literature review focuses on the impact of JKN implementation on access to, quality and equity of maternal and newborn health services by considering the reach of poor and vulnerable populations, the utilization of universal health coverage by the poor, financial performance for JKN at the district level and problems of the health care system at the district level in the context of JKN implementation;
2) The systematic review found some local and global evidence with a low-quality range regarding the influence of health insurance and JKN on the use of maternal and neonatal health services. However, no evidence has been found on the impact of JKN on the quality of maternal and newborn health services. In addition, there has been no evidence of the extent of coverage of pregnant women who are participants of JKN and evidence showing the district's performance in terms of JKN-based health services financing.

Policy Recommendation:

- Improving public campaigns on the importance of registering as JKN participants and improvement of registration procedures and payment of JKN premiums;
- Increasing the commitment and role of local government in addressing the disparities of JKN implementation as a follow-up effort of Presidential Instruction No. 8 of 2017;
- Intensive coordination of JKN's financial and healthcare resources, namely BPJS, local government, and health service facilities, including supervision and control of cash flows at various levels;
- Establishment of audit indicators that refer to BPJS regulations and accreditation of health service facilities, especially for hospitals and health centers.

Recommendations for Further Research:

- The role of local government in increasing the use of JKN;
- Mapping of financial resources and health services for mothers and children at the district level;

- The influence of JKN on the quality of services of pregnant women, delivery and postpartum care.

Topic Area 4: Improvement of Local Government Regulatory System related to Health Policy

Formulation of Evidence

1) The role of local government is very important in supporting the enforcement of central government policies as well as global policies concerning the reduction of maternal and newborn deaths. Referring to the policy of decentralization of health in Indonesia, local government support, for example, can take the form of regulations, budget allocation, efforts to improve health facilities, and optimization of human resources. Therefore, various policy initiatives have been undertaken by local governments in Indonesia to accelerate the decline in maternal and newborn deaths;
2) Systematic review yields two low-quality evidence and field visit outcomes that explain the role of local government as a local policy initiator covering policy form, the role of various actors in policy formulation, the content of policies and the impact of policies on the reduction of maternal and neonatal mortality rates;
3) Form of local government policy compiled in the form of governor regulation, regent regulation, and regional regulation. Governor and regent regulations are an easier option because they do not go through the complex and long process of the DPRD;
4) The parties involved in the formulation, approval, and implementation of policies vary among regions. The involvement of religious and cultural figures and professional organizations can accelerate the process of policy adoption and acceptance of policy implementation through policy advocacy and socialization. International organizations/ institutions play a role in supporting funding and technical assistance when formulating, approving and implementing policies;
5) The focus of regional government policy is the provision of supply and demand from maternal and newborn health services with multi-sectoral cooperation. Provision of supply includes budget allocation, quality improvement of health personnel, provision of maternal and neonatal health facilities and equipment. Provision of demand by providing health insurance for pregnant women and provision of transportation funds for referrals not covered by health insurance. In addition, one proof explains the reward and punishment mechanisms that are undertaken to improve compliance with the regulations being made;
6) Regional policies may increase antenatal coverage and delivery assistance by health personnel. However, evidence of factors affecting the variation of successful maternal and neonatal mortality rates in each region cannot be found from the systematic review.

Policy Recommendation:

- Encourage regional governments to develop regulations relating to the reduction of maternal and neonatal mortality;
- Establish indicators of reduction of maternal and child mortality as performance indicators for each district head;
- Providing award from the president to heads of regions who excel in reducing maternal and neonatal mortality;
- Involving civil society in overseeing program implementation to reduce maternal and neonatal mortality in each region;
- Establish regulations for local governments to adopt regional programs of the central program;
- Accelerate the issuance of government regulations on minimum service standards (SPM).

Recommendations for Further Research:

- Analysis of local government achievement factors in reducing maternal and infant mortality rates at district/city and sub-district levels;
- Measuring the effectiveness of local government innovations in reducing maternal and infant mortality by applying a mixed method approach and focusing on comprehensive inputs, processes, and outcomes of the policy;
- Evaluate the impact of health sector decentralization on maternal and infant health at the district/city level.

Topic Area 5: Increasing the Use of Data in Public and Private Sector Decision Making

Formulation of Evidence:

1) Valid and reliable data and information is very important as the basis of consideration in the decision-making process, so as to improve the effectiveness and leverage of the resulting policy;

2) The systematic review cannot find any evidence of the effect of data and information on the reduction of maternal and newborn deaths. This is due to the limited scientific evidence that examines the use of data and information in the preparation of policies related to maternal and neonatal health by government and private sector. Field trips and review of policy documents can identify that scientific data is used in the process of formulation/ diagnosis of health problems, but is less used in the process of developing strategies, implementing and evaluating policies;
3) The systematic review found six low to moderate quality evidence showing that the impact of government policies on maternal and newborn mortality varies. Policies on village midwives, family planning and iron supplementation or folic acid can reduce neonatal mortality. Meanwhile, the Jampersal program has no impact on the reduction of maternal and newborn deaths. In fact, decentralization without the optimal capacity of health services in the regions is a factor inhibiting the success of newborn care.

Policy Recommendation:

- Develop a Knowledge Management System (KMS) on the health of mothers and newborns as a platform to improve access and creation of more inclusive, transparent and accountable trusted evidence;
- Establish a national committee to accelerate the reduction of maternal and neonatal mortality which also serves as a communication forum between researchers, practitioners, and policymakers who can harmonize research priorities and policy agenda;
- Establish regulations concerning the allocation of research budgets related to maternal and neonatal health in Indonesia;
- Develop sustainable programs to strengthen the capacity of individuals, organizations, and systems in the use of evidence as a basis for policy formulation.

Recommendations for Further Research:

- Evaluation of programs and good practices on patterns and effectiveness of data and information used in the development of newborn and infant policies in public and private sector settings at national and regional levels.

Topic Area 6: Implementation of Women's Equality to Support the Four Pillars of Safe Motherhood

Formulation of Evidence:

1) Gender equality can affect the successful implementation of "four pillars safe motherhood" in reducing maternal and neonatal mortality. The rapid and qualified utilization of maternal health services is influenced by the authority of women in making decisions to determine the best health services for themselves and their infants. Moreover, the right to equal participation for women in social and economic systems is an important factor for women's empowerment and gender equality;
2) The systematic review found eight low- to high-quality evidence that could explain the effect of gender on access to health services, but no evidence explicitly explains gender roles to decrease maternal and neonatal mortality;
3) Women with significant social roles pay high attention to the care of their children. Women's self-confidence creates the right decision-making capabilities regarding reproductive health, antenatal and delivery services (high-quality evidence);
4) The social stigma concerning the inferiority of women in families and communities is influenced by local culture and beliefs (moderate evidence quality);
5) Lack of support from husbands and other family members in providing consideration and financial assistance leads to inappropriate family planning services, low coverage of antenatal care, and delivery assistance by health personnel (moderate evidence quality);
6) The status of education and employment of women and husbands affects the behavior of pregnancy care, infant care and the search for maternal health services (low-quality evidence);
7) Government policies on maternal and child health that are biased toward gender lead to low male participation because they do not benefit directly from the program (moderate evidence quality);
8) The overlap between government regulations on gender and maternal health (low-quality evidence).

Policy Recommendation:

- Increasing male involvement in any intervention program for the reduction of maternal and neonatal deaths;
- Facilitate coordination among stakeholders in the formulation of regulations and community

engagement in the planning, implementation, and evaluation of the program;
- Conduct evidence-based review of regulations concerning the age limit of marriage and the duration of maternity leave for women and men;
- Provide students with an early understanding of gender equality tailored to the curriculum of each school.

Recommendations for Further Research:
- The effect of gender equality on the reduction of maternal and newborn deaths;
- The impact of marriage age on maternal and neonatal health status (quantitative study);
- Cost-benefit ratio analysis of policy alternatives regarding maternity leave for pregnant women and their husbands.

Maternal and neonatal health conditions are important indicators to see the level of welfare of a nation. WHO, UNICEF and UNFP agree that "The right to life is a fundamental human right ... for women, this right includes access to facilities that guarantee safety during pregnancy and birth." (WHO 1999)

With the fourth largest population in the world, Indonesia is home to more than 260 million people.

Preface

Indonesia's population is widespread throughout the country, but the majority of the population is located in rural areas. The unique geographical conditions encompassing islands with many remote areas, separate between the sea and land ranges, make efforts to equalize the welfare of the population to be very challenging. This condition, coupled with various socio-cultural factors, becomes a challenge in implementing strategies to improve social welfare conditions that are evenly distributed throughout the country. Maternal and neonatal health is an important measure in marking its success.

In industrialized countries of Western Europe and North America, the rate of accidents and deaths during pregnancy and childbirth has declined since the 19th century, as welfare conditions became more evenly distributed. But the same thing is not felt by women in developing countries, in part it even shows an increase. In 2000, the World Health Organization (WHO) launched the Millennium Development Goals (MDGs), with one of its main objectives include improving maternal health and reducing infant mortality. At the end of 2015, the MDGs continued by the Sustainable Development Goals (SDGs) that specifically targeted a reduction in maternal mortality (MMR) to a level of 70 per 100,000 live births and neonatal mortality (NMR) to 12 per 1,000 live births by 2030.

Although labor assisted by trained health personnel has reached more than 80% of the population, MMR and NMR are still two important health issues in Indonesia. The Indonesian Demographic and Health Survey (IDHS) shows an increase in MMR from 228 deaths per 100,000 live births in 2007 to 359 per 100,000 in 2012 (IDHS 2012), and only slightly decreased to 305 per 100,000 in 2015 (SUPAS 2015). Although the NMR appears to decline from 19 to 14 deaths per 1,000 live births in 2015, (SUPAS 2015), this figure is still higher than Malaysia, Thailand, and Vietnam. Moreover, NMR shows a more alarming condition than MMR, because there is less complete data available compared to MMR.

To overcome this problem, the Indonesian government has implemented a variety of programs in the health system and interventions to improve the health services of pregnant and newborn babies, for example through a specifically PONED and PONEK certification program for Puskesmas; health personnel education program; and health service financing programs through JKN. However, the condition of MMR and NMR still did not show the expected decline. Primarily, there are difficulties in determining the various factors that can be used as a basis for effective intervention programs related to the increased risk of death of pregnant women and newborns. Efforts to gather various evidence relevant to the determinants of MMR and NMR are very important to improve the quality and effectiveness of these intervention programs. Among the factors investigated are access to quality health care and gaps in health services for pregnant women and newborns, which are closely related to economic and social conditions, in addition to the geographical conditions of users of health services. As an archipelago with a large population, Indonesia still faces challenges in building adequate transportation and communication systems and infrastructure. Given the high reach of trained health workers in the population (80% of Indonesia's population), various factors that determine the quality of services and referrals becoming important.

Gaps in service coverage, especially for childbirth in primary care facilities, suggest that certain groups have barriers to receive affordable health services needed. They are a group of poor people, less educated, and rural residents. How secondary-level care can support primary care for those who cannot reach them became an important question. With a growing population, the provision of quality health services relies heavily on the availability of adequately trained health workers,

through the distribution of more integrated access to education and health systems, including coordinating, monitoring health conditions, and disseminating information and related training. For example, among adolescents, inadequate reproductive health knowledge and education result in higher pregnancy rates and anemia prevalence. Similarly, less optimal postpartum and family planning services makes the period of subsequent pregnancy shorter.

Monitoring health conditions during pregnancy has not been fully implemented. For example, in the case of HIV infection and syphilis, there is still a risk of transmission from the mother. Prevention of the birth of fetus with congenital abnormalities has just been initiated. Meanwhile, coordination between programs is still not optimal, for example in the provision of logistics for early detection and prevention of diseases that complicate pregnancy such as malaria, tuberculosis, hepatitis B, diabetes mellitus, heart disease, and obesity.

Another challenge is in the management of maternal health programs, especially in areas with low coverage of maternal and neonatal health services. These areas, in general, have limited infrastructure and human resources. Financing health programs in the era of decentralization is still a priority issue. Health information systems and the availability of medicines and equipment still need to be improved so that they can effectively support the efforts to reduce maternal and neonatal mortality. Transparent monitoring and evaluation programs need to be established to support the program planning and development process.

Unsupportive legislation also requires more attention, including Marriage Law No. 1/1974, which states the minimum age for marriage is 16 years for women and 19 years for men. The public records system still does not cover all births and is not yet equipped with a cause of death inquiry procedure. Law No.36/2009 on Health has stipulated that the regional budget for health is at least 10% of the budget, but policies at the district/city level are still different in the implementation.

Studies on maternal and newborn health issues were published in 2013 through collaboration between AIPI and the US National Academy of Sciences, supported by USAID, titled Reducing Maternal and Neonatal Mortality in Indonesia: Saving Lives, Saving the Future. The report provides authoritative analysis and recommendations for the government of the maternal and neonatal deaths in Indonesia. The questionable validity of data/information to prove what actually happened in Indonesia for decades also been reported. Based on this report, "Evidence Summit on Maternal and Neonatal Health" specifically for the condition in Indonesia was implemented for the first time, by applying and developing a global Evidence Summit methodology on country level.

The Evidence Summit was held from June 2016 to March 2018, covering the process of gathering evidence and identifying the causes of maternal and neonatal mortality in Indonesia, with one of the outputs in the form of a consensus report. This report summarizes the results of the Evidence Summit process that outlines the health conditions of pregnant women and infants in Indonesia, in an effort to further examine the challenges and factors that affect the mortality rates of pregnant women and infants. Included in the summary are the results of national polls and a collection of references on national (local) and international (global) academic publication.

The consensus report can be used as a basis for government intervention in policy formulation and a series of follow-up recommendations. Further recommendations include options and topics that have the potency to be explored in the form of research and studies, including proposed potential solutions and subsequent steps; possible considerations for implementing recommendations; and the possibility of researching the gaps in an effort to determine factors related to the maternal and neonatal health conditions in Indonesia. Based on this report, policymakers and stakeholders can prepare plans and budgets in an effort to build awareness about the value, demands, and usefulness of evidence in policy development and the translation of scientific evidence.

The Evidence Summit mandate is to collect all the evidence relevant to the determinants of maternal and neonatal mortality rates, approaches for interventions, and related research. The Evidence Summit manages, summarizes, and synthesizes evidence so that it can provide a clear view in determining priority steps. In addition to building consensus among stakeholders in establishing valid evidence, interpreting it, and prioritizing action plans in overcoming the problem of

maternal and neonatal mortality.

The Evidence Summit also identifies areas where further research are needed to provide evidence-based health policies. The methodology used evidence-informed policymaking approach, which ensures that decisions are made with adequate information from the results of valid evidence. The Evidence Summit provides access and review of the evidence as an input to a systematic policy-making process to ensure that relevant research has been identified, assessed and used appropriately. This process is carried out transparently so that other parties can examine the evidence used in making related policies.

This Evidence Summit Indonesia has specificity when compared with the implementation of global evidence summits because it involves more stakeholders, including local government and health services at the provincial level. This specificity strengthens the methodology that uses a policy-making approach based on evidence and information. The aim is to ensure that decision making, carried out with adequate information from the results of research evidence, can be understood and accepted by various parties involved. This is characterized by systematic access and assessment of evidence as input to the policy-making process to ensure that relevant research has been identified, assessed, and used appropriately. Transparency is prioritized so that other parties can examine the research evidence used. In addition, stakeholder engagement that combines the value of interprofessional collaboration will strengthen stakeholder ownership of the process and results of this summit.

In summary, the Evidence Summit process starts from a systematic study in gathering and summarizing all empirical evidence implemented to answer a specific research question, followed by field assessments, discussion of issues per topic area, policy formulation options (including expert opinions), and translation of evidence into recommendation involving all stakeholders.

The process to answer the questions uses the evidence review approach. The evidence used includes descriptive studies of service quality and system determinants; intervention studies to improve service quality; and study of the role of professional organizations, governance, civil society, licensing, accreditation, and regulations in ensuring the quality of health service. The results of the evidence review for each key questions are complemented by global evidence consisting of high-quality systematic reviews from other middle-low income countries.

The method of assessing the quality of evidence in the systematic review process in the Evidence Summit (ES) refers to the Effective Public Health Practice Project (EPHPP) (Hamilton 2010). High quality means a high level of confidence, meaning that the actual effect is close to the effect predicted in the study. Moderate quality means a moderate level of confidence, meaning that the actual effects tend to lie close to the effects predicted in the study, but there is still a possibility that these effects differ substantially. Low quality means a limited level of confidence, meaning the actual effect is likely to differ substantially from the effects predicted in the study. Very low quality means that the level of confidence is very low, meaning that the actual effects tend to differ substantially from the effects predicted in the study. The quality of the evidence produced from the review process systematically determines the level of confidence in the recommendations produced.

A combination of evidence was used to develop the topic areas which ultimately became the basis for developing policies and recommendations to improve the quality of maternal and neonatal care. This consensus report is organized based on a series of questions grouped in six chapters that address the following topic areas:

Chapter 1 - Improving the Quality of Health Services in the Public and Private Sectors

This topic area includes evidence based on descriptive studies of service quality and system determinants; intervention studies to improve the quality of care; and study of the role of professional organizations, governance, civil society, licensing, accreditation, and regulations in ensuring service quality.

Chapter 2 - Improving Referral Systems at Community and Facility Levels

This topic area includes evidence based on descriptive studies of referral and referral services; intervention studies to improve the timeliness and effectiveness of referrals; and household and community level recognition and reference studies.

Chapter 3 - Implementation of National Health Insurance (JKN), Including Improvement of Maternal and Child Health Services, and Financial Protection Improvement for the Poor

This topic area includes evidence based on: studies that focus on determining the definition of and reach of the poorest and most vulnerable populations; descriptive research on the use of universal health coverage by the poor; implementation of financial performance/budget at the district level; and descriptive studies of system problems at the district level and below that affect service delivery.

Chapter 4 - Improving the Local Government's Governance System for Health Policy

This topic area includes evidence based on descriptive studies of local government leadership and other factors in delivering rescue services for mothers and infants; interventional studies to improve the effectiveness, responsiveness and accountability of local governments in providing essential services; and study of the role of media and civil society to increase accountability on providing high-quality services.

Chapter 5 - Increasing Use of Data in Decision Making in the Public and Private Sectors

This topic area includes evidence based on: studies of the use of routine data to inform program decisions and policies, completeness and accessibility of routine death reporting; information about the characteristics of the population and the state of death of people who might be missed in routine reporting; alternative approaches to produce complete baseline data on deaths at the district level; and study of the role of civil society and the media in accessing and using data.

Chapter 6 - Implementation of Equality of Women to Support Four Pillars of Safe Motherhood

This topic area includes evidence based on research aimed at strengthening primary health care services using a family care approach; the ratio of formal education between women and men; participation rate for family planning programs; access to reproductive health facilities; government regulations to support women's equality (for example, early marriage and maternity leave).

In each topic area, the initial recommendations will highlight:

a — Areas where there is sufficient evidence to support policies to maintain and adjust the intervention approach, improve program policies and/or guidelines.

b — Promising approaches and innovations, which address priority issues to reduce mortality, but the evidence is insufficient and evidence gathering is a priority.

c — Lack of priority evidence, where the discovery of new evidence and knowledge can provide basic information to support policies and programs, and accelerate progress towards reducing maternal and neonatal mortality in Indonesia.

The focus on each topic area is placed on maternal and neonatal deaths; vulnerable and 40% poorest groups; community-level issues and interventions; specific evidence of Eastern Indonesia or other specific regions; gender equality; also public and private sectors. The expected results for each problem are recommendations with high-quality evidence, recommendations with low-quality evidence, or without evidence (decided by expert opinion). The uniqueness of Indonesia ES is the implementation carried out at the national level so that it involves wider stakeholders from the central and regional governments, higher education institutions, professional organizations, NGOs, and the media. In addition to this consensus report, the Evidence Summit will also publish online bibliographic evidence that will be accessible for all. The bibliography will substantially focus on the determinants of maternal and neonatal mortality in Indonesia and the implementation of the most relevant health system approaches to achieving a reduction in mortality.

Initial recommendations in each topic area are the main focus of the review of evidence. This initial recommendation will be a source of information at the Stakeholder Consultation Meeting in April 2018 and other efforts aimed at strengthening actions towards reducing maternal and neonatal mortality.

This activity is the first step in the process of reviewing the evidence that will continue, the formulation of recommendations for policymakers, and priority setting that will continue for years to come. Indonesia ES is expected to provide a foundation for all interested parties to set priorities for actions to improve maternal and neonatal health. In addition, as the first Evidence

Summit at the country level, this activity is also expected to be a model for other countries in carrying out similar initiatives.

In addition to the consensus report, the Evidence Summit also produces a report on the Implementation of Evidence Summit (convening activity report) on the results of studies on efforts to reduce maternal and neonatal deaths in Indonesia and policy options and recommendations. The Consensus Report and Indonesia Evidence Summit Implementation Report are AIPI's products to promote the contribution of science that needs to be the basis of various important decisions or government policies, industrial or private environments, community organizations and families and individuals in the general public.

Chapter 1

Improving the Quality of Health Services in the Public and Private Sectors

Introduction

WHO outlines the quality of health services as "the level of provision of health services to individuals and patients in improving the desired quality of health. To achieve this, health services must be safe, effective, timely, efficient, fair and focused on the community." Quality of service depends on, among other things, health care facilities, providers, and knowledge; the ability and capacity to handle both normal pregnancies and complications that require immediate life-saving. Improving the quality of care is important for preventing deaths that can be avoided and preventing morbidity in mothers and newborns.

The quality of maternal and neonatal services is determined by human resources which mainly consist of health service providers, community members involved in the process, as well as material resources such as health facilities. In addition, the quality of care is also influenced by situation factors (cities, remote villages, border areas, the private sector); the existence of Basic Emergency Obstetrics and Neonatal Services (PONED) and Comprehensive Emergency Obstetric and Neonatal Services (PONEK) in health facilities; and educational programs in the form of training, support and accreditation.

This chapter investigates the impact of various health care providers, health facilities that provide quality maternal and neonatal care, the quality of health care providers that influenced by respective professional organizations and their efforts to improve competency and performance, and ultimately quality after the intervention. Evidence of the review consisted of descriptive studies of the quality of care and determinants of the system; interventional studies to improve the quality of care; and research on the role of professional organizations, governance, civil society, licensing, accreditation, and regulations to ensure the quality of care.

Asked Questions

1 — Does the place of birth affect maternal and neonatal mortality incident?
2 — How can the community (cadres, village officials, traditional leaders) participate in health prevention, promotion, and early detection of conditions related to maternal and neonatal health?
3 — How variations in access to health services in urban, rural, remote and border areas impact the maternal and neonatal mortality and morbidity?
4 — What is the contribution of the private sector to ensuring the continued availability of maternal and neonatal health services?
5 — What are the differences in mortality and morbidity in mothers who receive care from a variety of health workers/providers?
6 — Are there differences in the quality of maternal and neonatal health services from various health workers/providers?
7 — What are the differences in the mortality and morbidity rates of infants who receive health care from a variety of health care providers?
8 — How do professional organizations influence the improvement of competence and performance of health workers?
9 — Are there differences in the quality of care and the quality of delivery services between health facilities that are classified as PONED / PONEK and those not included in the category?
10 — Are there differences in the quality of services between health care facilities that have received training, assistance programs, or accreditation?

The results of this review of evidence are discussed in four main topics:

Main Topic 1

Place of Labor

This main topic analyses the place of labor as one of the factors that help to reduce maternal and neonatal mortality rates. The source of evidence used to investigate this topic area includes national data surveys; review of evidence from 14 quantitative studies, three qualitative studies, and two mixed-method studies; field visits, field assessments; and other sources (Research on Health Facilities/Rifaskes).

Evidence Formulation

1 — Childbirth at home assisted by non-health workers or health workers still increase the risk of mortality and morbidity for pregnant women and newborns. Although data from Riskesdas 2010 showed that most deliveries had been carried out in health facilities, namely 55.4%, the percentage of maternal deaths at home was still high at 37.7% (Population Census 2010) and 40.7% (SUPAS 2015) (Pardosi et al. 2015; BPS 2015). Four studies show that home delivery tends to increase the risk of maternal and newborn deaths compared to hospital-based health services (two local evidence, two global evidence, good and low-quality evidence) (Rahardja 2013; Purnama 2010; Sandall 2016; Chinkhumba 2014). Three of them also show susceptibility to the disease for pregnant women and newborns (Rahardja 2013; Purnama 2010; Sandall 2016). Childbirth at home that is helped by traditional or professional workers still increases the risk of the early death of newborns (local evidence, low evidence quality) (Titaley 2005; Titaley 2012; Hatt 2009). Home delivery increases the mortality rate of newborns compared to delivery in health facilities (Titaley 2009; Dekhi 2012). The number of deliveries performed at home with the help of a shaman is also still significant at 12.88% (SUPAS 2015).

2 — There is a tendency for differences in the quality of services between health facilities that correlate with the accreditation status (medium-quality evidence and based on expert opinion). Evidence is not enough to determine the difference in the quality of services between health facilities, precisely between PONED accredited primary health center and PONEK hospitals with non-PONED primary health centers and non-PONEK hospitals.

3 — PONED and PONEK are the primary referrals for health facilities that meet the 17 criteria of the competency standard of the Ministry of Health, including the availability of 24-hour health services supported by complete equipment and trained health personnel. The availability of PONED health centers and PONEK hospitals in Indonesia is insufficient. The percentage of deliveries carried out in village maternity centers (polindes)/village health posts (poskesdes) was 1.4%. In this case, Bali has the highest percentage (100%) of birth rates in health facilities and polindes/poskesdes, while Maluku is the lowest (80%). Data from Rifaskes 2011 shows that the percentage of the health center in Indonesia is 18.64%. The data also shows that the number of hospitals that meet 17 criteria for PONEK hospitals is only 7.6%, while hospitals that meet 9 and 11 PONEK criteria are 21% and 16%, respectively.

4 — There is a tendency for differences in the quality of services between health facilities related to training, supporting programs, and accreditation.

5 — There are limited health promotion efforts related to the lack of public knowledge about the health of pregnant women and newborns. The limited training of health workers, the spread of programs, and health promotion led to a lack of knowledge of midwives and the community. Three local qualitative studies show that the workload of midwives and other health workers affects their abilities and performance. Close supervision tends to make the consultation time of patients with midwives longer and lead to a decline in midwife performance (Sanga 2005; Kareth 2015; Rahmi 2016). The results of the systematic review (global evidence, low-quality evidence) indicate that the availability of qualified personnel and health providers can be achieved through training (Berhan 2014).

Policy Recommendations

1 — Improve the quality of delivery services in all hospitals by following the regulations on PONEK in accordance with the Regulation of the Ministry of Health No.1051/Menkes/SK/XI/2008 concerning Guidelines for the Implementation of 24-Hour Comprehensive Emergency Obstetric and Neonatal Care Services (PONEK) in hospitals.

2 — Establish and implement a policy that the place of delivery has to be in a health service facility; support enforcement of regulations that require delivery in health facilities (Permenkes No. 97/2014 regarding Health Services for Pre-Pregnancy, Pregnancy, Childbirth, and After-Childbirth, Implementation of Contraception Services, and Sexual Health Services).
3 — Accreditation of all health service facilities to assess the suitability/compliance with regulations regarding maternal health, delivery services, and neonatal care.
4 — Increase the number of availability of delivery services in good hospitals by following the regulations on the criteria for health competency standards of the Ministry of Health PONED/ PONEK accreditation as an effort to collect further evidence on the relationship of differences in service quality among health facilities that correlate with institutional accreditation status.
5 — Issue policy for carrying out early planning of childbirth and postpartum care based on the determination of the risks of pregnancy and childbirth carried out from the beginning of pregnancy. This process uses determinants of cultural factors, costs, community participation, and distance to health care facilities as places of delivery, followed by the dissemination and training of health workers and the community about their implementation.
6 — Detection of risks in pregnant women is carried out from the beginning of pregnancy to direct the planned location for labor and postnatal care.
7 — Strategies to deal with matters relating to the place of delivery need to consider factors such as cost, culture, and distance that can be resolved through deliberations assistance by the community and regional leaders.

Recommendations for Further Research

1 — Factors directly causing maternal deaths and neonatal deaths;
2 — Quality of delivery and newborn care services;
3 — Skills of health workers in carrying out neonatal resuscitation;
4 — Skills of health workers in childbirth assistance.

Main Topic 2

Human Resources of Health

The number of health service providers, including doctors, midwives, and nurses, increased from 2000 to 2004. The use of their services also rose from 72.37% in 2005 to 88.68% in 2014. However, maternal mortality did not show a decline. This shows that the problem of maternal and newborn deaths depends not only on the number but also on the quality of health care providers. This main topic investigates how the quality of health care providers has an impact on maternal and newborn mortality. The evidence sources used are three quantitative studies on the effect of the diversity of the provision of health services between urban, rural, remote, and border areas towards maternal and neonatal mortality and morbidity.

Evidence Formulation

1. The risk of death increases in childbirth assistance by shamans compared to trained health workers.

Childbirth assisted by shamans at home increase the risk of newborn deaths by six times compared to births in health facilities (local evidence, medium quality evidence) (Abdullah 2016). The risk of death increases in labor assisted by a shaman. Because there is no evidence comparing between providers of health services, additional searches were conducted to obtain information for systematic reviews. The systematic review includes data from a national survey of 41 African countries which are cross-sectional data with large sample size. There is a negative correlation between the proportion of trained health workers assisted births at the national level with national maternal mortality rates. These data confirm that the higher the number of births handled by trained health workers, the lower the maternal mortality rate. This finding shows that the mortality rate for newborns decreases as the proportion of births handled by trained health workers increases (Berhan & Berhan 2014).

2. Maternal mortality remained high in births handled by trained health workers which are suspected to be caused by the delay in seeking help to health care facilities.

A case-control study found that the presence of trained health personnel during labor was 1.9 times higher in cases of death (95% CI: 1.4-2.5). While a retrospective population-based cohort study found that among women whose births were handled by trained health personnel, the likelihood of death increased with increasing distance from the health center (or per km; Indonesia: 1.07 [95% CI: 1.02-1.11]). An increase in the

death rate for births handled by trained health workers may be due to delayed referral, whereas the case is too deteriorated when it is finally referred (Ronsmans et al. 2009). Another study (Scott et al. 2013) found that people who live far from the health center are likely to undergo labor without the help of trained health personnel. Maternal mortality increases in people living far from health centers compared to those closer to health centers. This can be explained by the fact that residents only visit health workers when an emergency occurs, which means that when the cases are very severe when it referred to health workers (Scott et al. 2013).

3. The risk of maternal death is higher in cases of obstetric emergencies referred by obstetric and gynecology specialists compared to midwives and general practitioners.
This may be related to the seriousness of the cases handled by obstetricians and gynecologists compared to other health workers. However, most cases were initially handled by midwives, and most referrals were made due to limited facilities. The cases in the study that have been reviewed consist of five causes of maternal death, namely hypertension during pregnancy, antepartum bleeding, obstructed birth, postpartum bleeding, and infection.

4. There are differences in the quality of prenatal care between midwives, doctors, and nurses, in which nurses' prenatal care knowledge is found to be lower.
To find out the differences in the quality of maternal and neonatal health care among various health care providers/providers, a review of evidence in Indonesia was carried out using data from the Indonesian Family Life Survey (IFLS) 1997. This survey studied the value of quality antenatal care based on knowledge of clinical guidelines. The knowledge of antenatal care among private health workers is fairly low. Among doctors, midwives, and nurses in private facilities, private nurses have lower knowledge. In the Java-Bali region, private midwives have the highest ratings while private nurses rank the lowest. However, outside Java-Bali private doctors ranked the highest while the private nurses ranked the lowest. The evidence review did not find a direct comparison that assessed the quality of maternal care by various health workers in Indonesia based on parameters that reflected the implementation of clinical procedures.

5. Factors in skills training and the number of health workers who receive training for childbirth assistance are considered to be able to reduce the number of maternal and neonatal mortality.
The increasing percentage of births handled by trained midwives reduces the probability of newborn deaths by 30%, compared to deliveries with untrained health workers. Trained midwives can reduce the number of stillbirths and perinatal deaths. The rate of neonatal deaths decreases with the increasing proportion of births handled by trained health workers. This evidence is unfortunately of low quality. For investigation regarding the differences in mortality and vulnerability to neonatal disease in infants who were handled by different health providers/workers, five quantitative studies in Indonesia were found as evidence. Titaley et al. (2008) state that a high percentage of the use of trained midwife services is associated with a reduced likelihood of neonatal death. A cross-sectional survey of the 2001-2003 IDHS did not show a significant difference between neonatal deaths based on births handled by trained health workers or those managed by traditional birth attendants. It was also mentioned that the likelihood of neonatal deaths decreases with increasing births handled by trained health workers (Titaley et al. 2008).

Regarding the influence of labor handled by trained midwives on stillbirth and perinatal death, evidence with low confidence is found, that trained midwives can reduce the rate of stillbirth and perinatal death (Yakoob et al. 2011). Another systematic review examined high-quality study from high-income countries comparing the continuity of the midwife's care model to other models of care by obstetricians or family doctors, or both. It was found that patients who received a midwife care model have lower neonatal mortality and abortion. Abortion and neonatal death have a probability to decrease by 16% in patients who receive a model of care from midwives (Sandall et al. 2013). It must be emphasized that intrapartum care by midwives should only be done in a hospital. What's more, these studies are carried out in high-income countries, such as Australia, Britain, and Canada. The relevance of these findings with conditions in Indonesia have to be considered, given the practice of midwives in Indonesia can be done in hospitals or in private facilities.

There is not much difference in quality between mid-level health care providers. A systematic review of four studies in African and Southeast Asian countries (global evidence, low to medium quality) comparing the quality of maternal health services found no difference in the quality of care among mid-level health care providers (Lassi et al. 2013). Other reviews include five studies related to the effect of using mid-level health workers trained for abortion services. This review assesses their ability to carry out aspiration and medical abortion compared to trained doctors (obstetrics and gynecology specialists). This study found no difference in incomplete or failed abortions compared to doctors (evidence with moderate confidence) but may lead to further complications (evidence with moderate confidence). The result also shows medical abortion that is handled by mid-level health care providers that result in incomplete and failed abortion is less than doctors (evidence of moderate belief) (Ngo et al. 2013).

Other reviews include six studies in low-income countries about the results of cesarean section by non-physician health professionals compared to doctors. This review found that cesarean section performed by non-physician health professionals tended to result in wound infection and dehiscence compared to if performed by doctors (evidence of low confidence). The difference in maternal or perinatal mortality in cesarean section between non-physician and physician health workers is not clear (evidence of confidence is very low) (Wilson et al. 2011). Generally, the quality of care for providers of post-abortion health services by mid-level health service providers when compared to doctors is only slightly different or even almost none (Lassi 2016; Ngo 2013; Wilson 2011).

6. There is a lack of evidence regarding the role of health professional organizations in improving the performance and competence of health service providers.

The evaluation report of the Bidan Delima program (IBI accreditation program, Indonesian Midwives Association) in September 2006 was reviewed to determine the influence of professional organizations in improving the competence and performance of health workers. The Bidan Delima review aims to evaluate the role of midwives in improving the quality of care in family planning programs, related to compliance with care standards and service quality. This study included private midwives in the provinces of South Sumatra and Bengkulu. These provinces have basic characteristics that are similar in terms of reproductive health indicators and exposure to mass media. Three types of data were collected at the basic level and follow-up, namely midwife services, midwife practice facilities, and Client-Provider Interaction Data. Evidence of data was also collected from SUPAS 2015, Rifaskes 2011, IDHS 2012, and global evidence from Kemenristekdikti.

Evidence that the IBI Bidan Delima program increases the competence of midwives in contraceptive counselling, the ability to inject and prevent infection is very limited. The quality of midwives is classified as poor, whereas 70% of obstetric services are covered by midwives.

In general, the literature obtained has not been able to provide sufficient information on whether professional organizations (obstetricians and midwives, paediatricians, general practitioners, midwives, and nurses) have a role in improving the competence and performance of health workers to reduce maternal and neonatal mortality rates. Professional organizations or universities are important to monitor and improve the quality of midwives, including competence, professionalism, and performance. This effort must be adjusted to the needs, habits, and level of difficulty faced, and contribute to determining the results to be achieved and how to achieve them.

Policy Recommendations

1 — Improving the quality of human resources for health must be able to apply the principle of the continuum of care to the prenatal cycle, pregnancy, delivery, until postpartum, through:
   - a — Provision of training modules and the implementation of intensive training on maternal health services and emergency newborn care in all public and private health care facilities;
   - b — Enforcement of strict sanctions on health service facilities with human resources that do not meet minimum service standards and professional standards;
   - c — Implementation of regulations concerning partnerships with professional

organizations and associations of health professions higher education institutions in the framework of developing and implementing health professionals higher education curricula and training modules to improve the quality of health workers;

d — Planning the types, quantities, and distribution of trained health personnel in all health service facilities;

e — Change the work system from individual-based to team-based collaboration between doctors, midwives and nurses, and other health professions.

2 — Increasing maternal and neonatal health services in various places of delivery, both private practice, private facilities, and public facilities in accordance with the Ministry of Health Regulation No. 43/2016 regarding Minimum Standards for Health Services.

3 — Training to improve the competence of health workers in health facilities, especially for those who are members of the PONEK and PONED teams.

4 — Increasing the number of trained birth attendants can reduce maternal and neonatal mortality rate, as well as training and conducting intensive training on maternal health services and emergency newborn care in all public and private health care facilities.

5 — Birth and care for newborn care must be carried out by a team of trained health personnel in appropriate health care facilities in accordance with existing regulations, where the implementation of these regulations needs to be monitored.

6 — Minimum standardization of clinics that provide antenatal care and labor services needs to be considered, along with an evaluation and accreditation system; is it permissible to provide some maternal and neonatal services. A regulation from professional organizations and the government is needed on standard facilities where maternal and neonatal health workers can practice (including doctors, midwives, and nurses).

7 — Consideration must be given to input from midwife professional organizations (IBI) in the midwifery education curriculum, as well as the medical education curriculum and specialist education made by medical and specialist units (college of obstetrics and gynecology).
In addition, it is also necessary to consider the involvement of nurse professional associations and midwives in developing their professional education accreditation standards.

8 — Consider training in emergency neonatal care services as well as training in maternal and neonatal health services for providers of health services, both private and public facilities.

9 — The establishment of a special committee for reducing MMR and NMR can be considered.

Consideration

The fundamental problems in the dissemination of its main training programs are:

1 — There is no clear system of the role of professional associations (Indonesian Midwives Association, IBI) in maintaining the quality of midwifery education. As much as 70% of midwifery services are carried out by midwives as the spearhead of the first service, but the quality of midwifery graduates is low.

2 — Continuing professional development education -workshops/training- will increase the knowledge and reliability of health workers, but costs are still a problem.

3 — Administrative work burdened midwives who were supposed to work as health care workers.

4 — Have to work for one year after graduation.

5 — There is no data regarding PONEK and PONED available according to the purpose.

A study from WHO and data from Kemenristekdikti and MTKI (Indonesian Health Workers' Assembly) stated that the quality of midwives was poor. The number of midwives in 2013 and 2017 who took the competency exam were 6,696 and 11,927 respectively. Of these, those who passed the exam in 2013 were 53.3%, while in 2017 there were 55.1%. Meanwhile, the average test scores obtained were 41.08 (2013) and 36.80 (2017) (Kemenristekdikti and MTKI 2013; 2017). The quality of health personnel also affects the health of newborns. One of the regulations regarding newborn health services is the Republic of Indonesia Minister of Health Regulation Number 25/2014 concerning Child Health Efforts, including the health efforts of newborns. As regulated by the Ministry of Health, newborn health services must include the most important care for neonatal health, screening, and education about neonatal care, as well as communication and

information delivery to mothers and families.

Recommendations for Further Research

1 — Use of primary data on the quality of health workers in delivery assistance and care for newborns in an emergency;
2 — Effectiveness of the role of professional organizations and associations of health professions higher education institutions on improving the quality of health workers;
3 — Relationship and suitability of the health education curriculum with the needs of public health services.

The type of evidence collected in this main topic review is an observational study (cross-sectional) with a high degree of heterogeneity, a high degree of possible bias, including publication bias - because data plotting is not done - also low precision and yield consistency. Research is needed using primary evidence. Research also needs to be conducted with a focus on diverse Indonesian localities to provide evidence to answer focused questions while confirming the results of studies that are not from Indonesia.

Main Topic 3

Public participation

This main topic investigates public participation guided by community leaders and regional leaders in helping reduce maternal and newborn deaths. The evidence gathered consisted of four studies (two quantitative and two qualitative), national survey data from five reports, and global evidence data from one systematic review. The data quality range is low to moderate (local evidence data). A cross-sectional study with a sample of 67 cadres in the urban area of Mojokerto, East Java, in disseminating information about the P4K (Program for Planning and Prevention of Complications) among pregnant women showed an unclear effect before and after the intervention (low data quality) (Rachmawati 2012). With a sample of 891 women in three regions in West Java, a trial was conducted in which four types of SIAGA campaigns were conducted. This trial failed to find a significant association between the various levels of exposure to the use of trained health workers to assist births or the use of postpartum care for mothers and infants (moderate data confidence). The use of actually trained health personnel for birth services is relatively high for research samples regardless of their exposure status (Sood et al. 2009). The SIAGA campaign program itself shows an improvement in the subject's awareness of bleeding; birth readiness; use of antenatal care and trained health personnel; and community networks to increase the participation of pregnant and birth women in health facilities (Mikrajab 2012; Pratiwi NL 2007; Sood 2009; and Pramono 2013). However, reliable evidence that shows the role of the community (community leaders, scholars, and health cadres) in increasing public knowledge and awareness of decision-making capacity and facilitating access to health service facilities is yet to be found.

Policy Recommendations

1 — Implementation of more intensive regulations on the responsibilities of the provincial government and the regional government in mobilizing and community participation;
2 — Intensification of empowerment and increased knowledge of women (in rural areas, middle to lower income, and women's groups in certain community groups) who have not understood or had other views about the importance of care for pregnancy, childbirth and postpartum in preventing maternal and newborn deaths;
3 — Use of information and communication technology in monitoring pregnancy care and delivery planning. Mobile phone reminders via short messages might improve services in health care appointments compared to no reminders at all. These reminders may also increase antenatal visits. M-Health (mobile-health) interventions for pregnant women may improve antenatal care services, use of facility services, use of trained birth attendants, and vaccination rates.
4 — Community mobilization and antenatal and postnatal home visits; community groups or women's groups; community mobilization for home-based treatment; and training of traditional birth attendants who make antenatal and postnatal home visits can reduce maternal mortality.
5 — Learning cycle activities and participatory activities by women's groups are effective strategies to reduce costs in rural areas in lower-middle-income countries and can increase maternal safety.
6 — Basic training for traditional birth attendants (shamans) can reduce bleeding and sepsis, and increase the referral of pregnant women with

uterine complications. However, this can increase the number of pregnant women with obstructed pregnancies (evidence with low confidence).

7 — Community mobilization for antenatal and postnatal visits can reduce neonatal mortality.

8 — Community groups or women's groups and community mobilization for home-based home neonatal care treatment have the potential to reduce neonatal mortality.

9 — Women's groups that carry out learning cycles and participatory activities are cost-effective strategies in increasing the level of maternal safety in rural areas, but are less effective in urban areas.

10 — Women's groups that carry out participatory learning and activity cycles are cost-effective strategies in increasing the level of maternal safety in rural areas and can improve the rate of newborn safety.

Recommendations for Further Research

1 — Mapping community participation in the care of pregnancy, childbirth, and postpartum;

2 — Analysis of factors that influence community participation in the context of determinants of culture, geography, and resources.

Other Inputs/Recommendations Based on Expert Opinions

The role of cadres in an effort to reduce maternal mortality rates is sufficient, but these efforts can be increased. The initial participation of cadres can be done by identifying problems using the SWOT method (strengths, weaknesses, opportunities, and threats) to achieve good birth, where the mother and baby are in good health. The problems found must come from the community so that a sense of shared ownership and independence from outside parties arises. External guides such as donors, local governments, or health facilities only guide to produce sustainable activities. It is important to have cadres who receive additional special education in order to reach out to the community regarding maternal and neonatal health.

Consideration

- In society, neighbors have an important role as a source of information about contraception ("Pilihanku" Baseline Research Survey, JHCCP 2015).
- Information technology-based coverage: use of Telemedicine health services.
- Lack of knowledge about maternal and neonatal health and lack of trust in doctors.
- The culture and habits of Indonesians who trust the family as a support system for maternal and neonatal health.
- There is no single system that applies to all regions. Communities must be taught to recognize and analyze problems and seek solutions based on acceptable resource and cultural capabilities. Each community group in each region has its own problems and solutions.

Main Topic 4

The Role of the Private Sector

Evidence Formulation

This review of the main topics uses five quantitative studies to evaluate how far the role of the private sector in implementing sustainable maternal and neonatal health services. These private facilities include private clinics, private midwife practices, and religious organizations (Muhammadiyah, Christian church organizations, missionary hospitals, etc.). A cross-sectional survey was conducted in 1991. Of the 22,909 married women in the family planning program, 21.7% used private health facilities, 11.5% used private places for childbirth (low quality, low evidence relevance) (Berman 1996). Data shows that the number of deliveries in private health facilities continued to increase from 2002 to 2007. The 2016 poll showed that the percentage of obstetric drug availability of oxytocin and magnesium sulfate (MgSO4) in private health facilities was comparable to public facilities such as puskesmas, but the availability of calcium gluconate and ergometrine found to be lower. In addition, the number of antenatal care in the private sector is lower than public facilities. Completeness of basic obstetric care tools is lower in the private facilities compared to puskesmas. In Java-Bali, the quality of prenatal care in health centers is better than in private facilities. Finally, the completeness of equipment and the quality of services for the care of pregnant women, childbirth, and postpartum in private health care facilities is lower than the public.

Policy Recommendations

1 — Government regulations that can enhance the role of the private sector in improving the quality

of maternal and neonatal health services.

2 — Increased availability of drugs, tools, and private sector readiness in handling maternal and neonatal health, given the increased use of maternal and infant health services in private services.

3 — Review of the evidence did not find a study of the specific role of the private sector in improving maternal and neonatal care

4 — In general, efforts to train maternal and neonatal health services, especially prenatal care and newborn resuscitation, need to be implemented for health workers, including midwives and nurses in the private sector.

Recommendations for Further Research

1 — Utilization of private health care facilities for the care of pregnant, childbirth, and postpartum mothers as well as factors that influence utilization;

2 — Scope and form of regulation that has the leverage to increase the role of private health care facilities.

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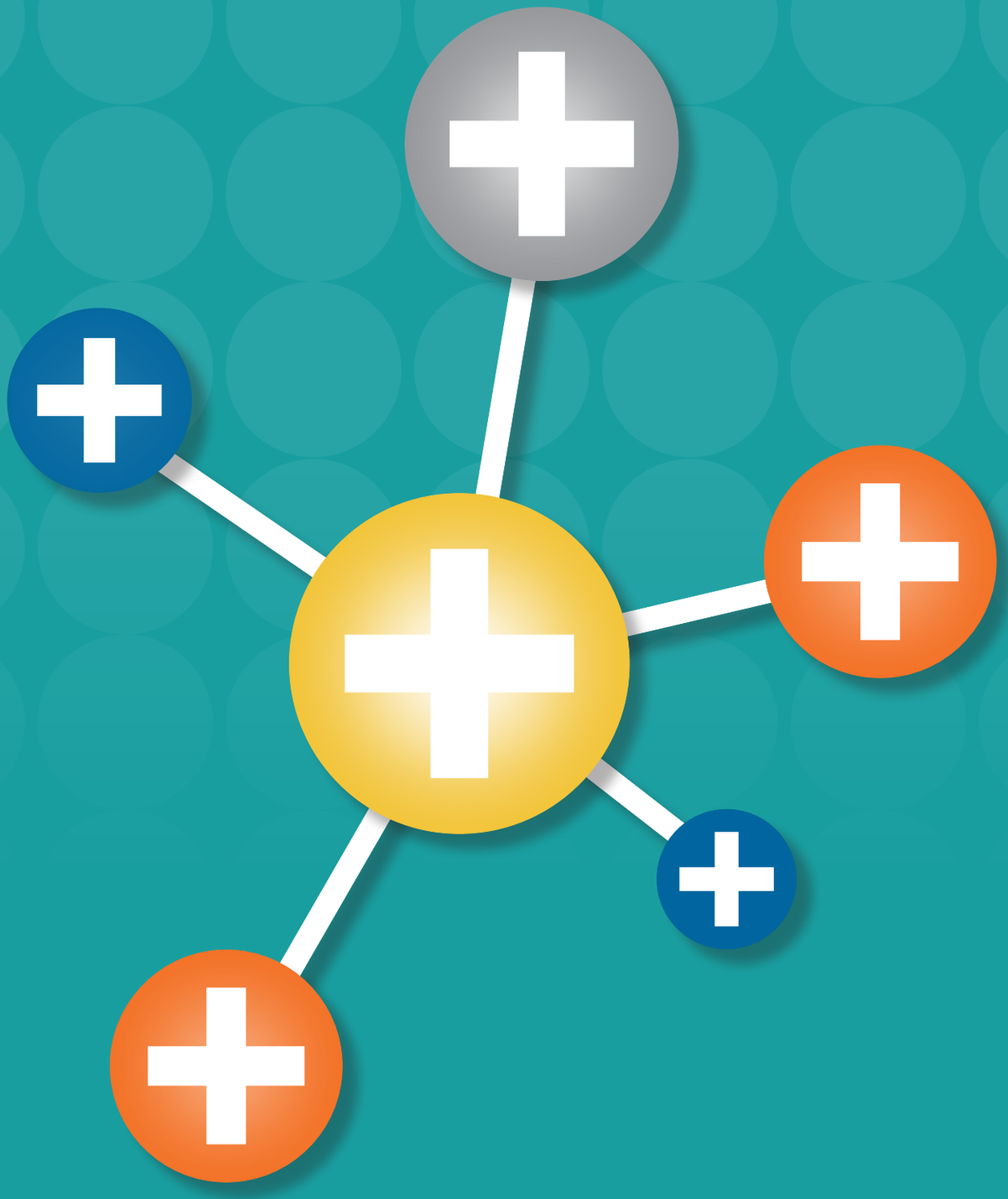
Chapter 2

Improving Referral System at Community level and Facilities



Introduction

Complications in pregnancy are still the main cause of death for pregnant women in Indonesia, but this can be prevented by the presence of quality and timely obstetric emergency services. A study in Banten in 2004-2005 (Qomariyah 2013) showed that 39% of a total of 421 maternal deaths occurred in a very short time, namely during labor and the first 24 hours after delivery. Furthermore, the study also found that 65% of deaths occur at home, which shows the urgency and importance of emergency care preparedness during childbirth.

Access to emergency care consists of a functioning referral system and facilities with adequate quality of care at all levels of service. This must be supported by appropriate policies and regulations, for example, clear and standardized procedures. Limitations on this can slow health services for pregnant women. The delay in achieving emergency care consists of three stages (Thaddeus & Maine 1994), namely:

1 — Too late to make a decision to seek treatment.
2 — Too late to reach treatment.
3 — oo late to receive adequate care services.

With regard to neonatal death, a better obstetric referral will have a significant positive effect on neonatal mortality. Because, most neonatal deaths occur in the first week, especially in the first 24 hours of labor (Lawn, Cousens, & Zupan 2005). In Indonesia, the main causes of early neonatal deaths are respiratory related problems/asphyxia (36%) and prematurity (32.4%), which suggests the need for handling cases in hospitals. However, it is very unfortunate that there is no national data on the value of referral systems in Indonesia.

A study of systematic review was conducted to answer four key questions related to the pattern of referral systems in Indonesia, including references between various levels of facilities, between private hospitals and government hospitals, and their variations according to socio-economic status, as well as changes before and after the implementation National Health Insurance (JKN).

Asked Questions

1 — Are there differences in the frequency of referrals, morbidity and maternal and neonatal deaths in the poorest and vulnerable populations before and after JKN?
2 — What is the description of referral patterns in urban, rural, very remote, outermost, and foremost areas, and their impact on maternal and newborn mortality and morbidity?
3 — Do PONED / PONEK health services improve referral quality?
4 — How is the influence of the availability of a determinant system on the timeliness and effectiveness of the referral system in urban, rural, very remote, outermost and foremost areas?

Evidence Formulation

1 — Complications of labor that cause maternal and newborn deaths can be prevented by rapid and appropriate treatment. Therefore, an effective referral system needs to be built so that there are no three delays, namely late decision making, late reaching access to health services, and late getting quality services;
2 — Systematic analysis identifies eight literature that addresses problems and potential solutions related to the referral system for maternal and newborn health services. Seven pieces of literature have moderate quality, while one literature has a low-quality level;
3 — The challenge of implementing a referral system for maternal and neonatal health services is an unclear referral procedure; limited number and quality of human resources; facilities, equipment, and supplies of medical devices

and medicines that are not adequate; lack of communication between health facilities, and lack of family and community support (moderate evidence quality);

4 — Pressure from the central and regional governments to reduce maternal and neonatal mortality causes a tendency to make referrals without appropriate indications and procedures in primary health care facilities (moderate evidence quality);

5 — Delay in reimbursing service fees from JKN causes reluctance for health workers in puskesmas to manage primary referral cases (moderate evidence quality);

6 — The speed and accuracy of referrals from primary care facilities to district hospitals can be related to a reduced risk of low and very low birth weight babies, stillbirths, and primary neonatal deaths (moderate evidence quality);

7 — Delay and inaccurate triage, oxytocin administration, magnesium sulfate treatment, and antibiotic prophylaxis in the referral hospital can increase cases of "near miss" and increase the risk of neonatal and perinatal death (moderate evidence quality);

8 — Improve the readiness mechanism and accountability mechanism for referral networks, improve communication and coordination in the referral system, as well as improving the efficiency of the referral system, can increase the number of cases and speed of referrals (moderate evidence quality);

9 — Shelter and standardization of ambulances can improve communication and coordination between primary service facilities and referral health facilities (moderate evidence quality).

Systematic studies have identified 11 related studies, eight of which discuss the magnitude of the problem and three studies discuss potential solutions. Eight studies describing the magnitude of the problem consisted of five qualitative studies, two cohort studies and one cross-sectional study. Seven studies have moderate quality levels while one study has a low quality level.

Diverse, five qualitative studies highlight the shortcomings in the implementation and operation of referral systems: unclear referral procedures, limited human resources, and lack of adequate facilities (Wahyudi & Nurfaidah 2014); incomplete or inadequate medical devices and medical supplies (Komala 2014); and the lack of agreed reference standards so that facilities at different levels blame each other for failures in service (Adi 2012). The lack of knowledge of the village midwife about when to refer to the PONEK facility and the low family and community support were also identified as important factors reported by a study in Bogor Regency (Prastyani 2009). This is also supported by a study in Bantul District which revealed that inadequate training for providers of health services and poor communication between various levels of facilities was responsible for the low implementation of the referral system (Komala 2014). A different finding was reported in a study from Bantul District which highlighted that the number of referral cases was due to the fact that health service providers made initial referrals because they were pressured to reduce maternal and newborn deaths in their locations (Kismoyo 2011). Subsequent studies show the importance of health center contributions in reducing maternal mortality (Irianto & Suharjo 2015).

It can be concluded that a number of factors can cause problems in referrals, namely:

- Lack of standard referral procedures agreed upon by all participating facilities and health service providers.
- Lack of adherence to referral procedures, due to lack of knowledge about referral procedures.
- Lack of training in referral procedures.
- Preference for health professionals to refer too early to avoid mistakes.
- Poor communication between various levels of facilities.
- Limitations in health information systems to support referral systems.
- Limited ability of health centers to manage patients (referred to or before referral) due to limited facilities, equipment, medicines, human resources, clinical procedures.
- Low level of support from family and community
- Replacement of service fees from JKN late, disappointing health staff in managing referral cases.

Two other studies show that timely referrals from primary care facilities to district hospitals can be associated with a reduced risk of low and very low birth weight babies, stillbirths and neonatal deaths; while

good hospital management can improve maternal and newborn health. Retrospective cohort studies in Yogyakarta (Mawarti, Utarini, & Hakimi 2017) looked at the quality of triage responses, hospital resident responses, oxytocin administration, magnesium sulfate treatment, and antibiotic prophylaxis. A six-month prospective cohort study conducted in two hospitals in East Java found that "near-miss" status when received could increase the risk of neonatal and perinatal death (Anggondowati et al. 2017).

The EMAS (Maternal and Neonatal Survival) program shows some evidence that allows for interventions to improve referral system performance. The EMAS evaluation highlights that improvements in the preparedness mechanism and accountability mechanisms for referral networks, communication, and coordination in the referral system, and the efficiency of the referral system, can increase the number of cases referred to and receive appropriate response times. However, the program shows that, although achievement is quite good, delays still occur at all levels, especially clinical decisions that are not immediate (third delay).

The Kwast study designates Polindes (maternity houses) and ambulances as potential inputs for good referrals, together with communication and coordination (Kwast 1996). However, this study has low quality.

Considerations in Implementation

The main consideration is the JKN regulation regarding the referral system. Under JKN, vertical referrals are started from primary health care facilities. If needed, referrals to secondary health care can be obtained by a letter from the primary health care facility. Similarly, if a higher level of care is needed, referrals to tertiary health care facilities can be obtained by referral letters from secondary health care facilities. Direct referrals from primary to tertiary health care can only be given to patients with clear diagnosis and treatment; repeat care; and if treatment can only be provided from tertiary health care facilities (BPJS).

Research Gaps

Evidence in the form of strong studies in Indonesia is still insufficient to be able to provide a basis for making current referral system improvement policies so that lessons from other countries that have similar characteristics can be helpful in planning policies.

Policy Recommendations

1 — Building collaboration and coordination by establishing a network of maternal and newborn health services in Indonesia. This network is supported by the availability of integrated emergency health service teams and effective communication information technology systems in each region.
2 — Improving the quality of facilities, equipment, standard operating procedures both in Community Resource Health Efforts (UKBM), First-Level Health Facilities (FKTP) and Advanced Referral Health Facilities (FKRTL) in accordance with the principle of the continuum of care in the maternal health care system newborn baby. In addition, it is necessary to arrange health facilities that are permitted to carry out Ante-Natal Care (ANC), labor, and surgery (especially sectio caesaria).
3 — Review and adjust the SOP of the emergency referral system for mothers and newborns to be in line with the JKN scheme at the national level which allows direct access to referral services for risky pregnancies.

Recommendations for Further Research

1 — Effectiveness of the referral system in various situations and conditions with the experimental method in the intervention and control groups.
2 — Factors that cause delays in referrals in primary and secondary health services.
3 — A systematic review of global research on interventions to improve referrals in health systems in a number of geographic, economic and cultural situations.

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Chapter 3

Implementation of National Health Insurance, Including Improvement of Maternal and Newborn Health Services, and Improvement of Financial Protection for the Poor

Introduction

Increasing access to health services, quality, and fairness in maternal and newborn health is the key to reducing the mortality rate. Financial barriers limit access to quality health services for mothers and infants (Donnell 2007; McNamee, Ternent, & Hussein 2009; Titaley, Hunter, Heywood, & Dibley 2010). Unfortunately, with health spending of 3.1% of GDP, Indonesia, compared to countries with the same income level, has the lowest per capita level of health expenditure (OECD 2016). Responding to economic problems in accessing health services since the last few decades the Indonesian central government and regional governments to a certain extent have provided various financial means of health protection targeted at certain population groups. These include Askes, Astek, Jamsostek, JPS-BK, Harapan Family Program, Jamkesmas, Jampersal, and currently, JKN as national health insurance programs.

The government has spent a lot of resources to subsidize JKN contribution payments to citizens, especially for the poor and near-poor. In 2015, for example, the government had invested JKN management funds of around IDR 20 trillion or USD 1.53 billion (Health Policy Plus). Every effort has been made to secure JKN's fiscal sustainability, among others by regulating the price of JKN health service payments and by controlling high pharmaceutical expenditures. The government considers JKN to be part of a key instrument to achieve universal health coverage and several other SDGs, which include better outcomes for maternal and newborn health.

Reviewing whether JKN is effective in improving maternal and newborn health is a critical topic. Issues such as health insurance that is not well targeted, lack of coverage, and non-optimal use need to be addressed so that JKN can effectively improve access to care, quality and justice in maternal and newborn health, to reduce maternal and newborn mortality. Studies show that JKN implementation has received diverse and different responses in different contexts. Therefore, an understanding of how and in what conditions JKN will improve access to care, quality and justice in maternal and newborn health is very important.

Asked Questions

1 — What is the effectiveness of JKN in improving services and the health status of mothers and newborns?
2 — Does JKN improve services at PONED and PONEK facilities?
3 — Are there differences in the frequency of referrals, morbidity and maternal and neonatal deaths in the vulnerable and poorest populations before and after JKN?
4 — What is the difference between the system determinants in regions that have regional health insurance and those that do not?

Evidence Formulation

1 — JKN has an important role in efforts to improve access and quality of maternal and neonatal health services. JKN implementation focuses on equality in accessing health services for the community to achieve universal health insurance utilization. Therefore, the literature review focuses on the impact of JKN implementation on access, quality, and equality of maternal and newborn health services taking into account the reach of poor and vulnerable populations, poor JKN utilization, JKN financial performance at the district level, and system problems health services at the district level in the context of JKN implementation.
2 — Systematic review finds some local and global evidence with a low-quality range regarding the effect of health insurance and JKN on the use of maternal and newborn health services. However, there is no evidence of the effect of JKN on the quality of maternal and newborn

health services. In addition, no evidence has been found regarding the magnitude of coverage of pregnant women who are JKN participants or evidence that shows district performance in terms of financing JKN-based health services.

Most studies of the impact of financial programs on health protection against the use, quality, and fairness of health services are designed in cross-sectional ways. Studies reviewed provide different and varied responses to the effectiveness of financial health protection programs. Three systematic review studies systematically discussed the impact of JKN on outcomes in maternal and newborn health. A quantitative study with a very low level of trust shows that Jampersal and JKN increase utilization of maternal care services and increase the percentage of cesarean delivery (Sukri 2016). A qualitative study with a very low level of trust showed that there was no difference between Jampersal and JKN in terms of birth, antenatal, delivery, and coverage of postpartum services (Yulia 2015). Furthermore, a quantitative and qualitative study with a very low level of trust shows that there is no effect of JKN on the main family planning program indicators and there is no difference in perception in the use of family planning services between before and after JKN implementation (Center for Health Policy and Management 2014). JKN-related study reports, which unfortunately were not included in the systematic review, were the main source of information to answer the key questions of the JKN assessment. The report shows consistently that JKN has a positive impact on the increasing use of maternal and newborn health services, and reduces inequalities in access to maternal and newborn care between the rich and the poor. There is no convincing evidence regarding the effect of JKN on improving the quality of maternal and newborn health care and reducing maternal and neonatal mortality.

Studies of related regulations indicate that national and regional regulations regarding JKN participation for community members and service providers, and the need to improve the quality of health services are very important. Such regulations exist at the national level but are not at all at the local government level. Availability of regulations such as in DKI Jakarta and a number of districts has strengthened the effectiveness of JKN, particularly in increasing the utilization of maternal and newborn health care services. Unfortunately, many district governments are not ready for the regional regulations.

Field assessments and JKN policy studies conducted in DKI Jakarta in June-July 2017 showed that the DKI Jakarta government implemented JKN policies well by providing governor regulations on JKN participation and use of health care services, and investment funds to improve health infrastructure and labor. All community members who have not registered or have not paid JKN premiums for months but have a Jakarta residence card are entitled to receive third-class health services. Data shows an increase in the use of institutional labor, but with an increase in excess cesarean delivery.
A literature review and a systematic review of low-quality global evidence find evidence of the effects of health insurance on the increasing use of maternal and newborn health services (Comfort, Peterson, & Hatt 2013; OECD 2016). However, this study does not provide convincing evidence about improving the quality of maternal and newborn care and decreasing maternal and newborn mortality.

A National Stakeholder Consultation Forum was held on October 4-5 2017 involving relevant national experts and practitioners from government, NGOs, and research institutions that discussed maternal and newborn health issues, and strategic solutions. This forum raised the following issues: 1) Lack of a mechanism to control the quality of maternal and infant health services in the JKN era. 2) The funding source deficit on JKN and the late payment of claims to providers are feared to have implications for the decline in the quality of maternal and newborn health services. 3) Lack of evaluation of regulations and use of funds so that maternal and newborn health service targets are not achieved. 4) Lack of understanding, involvement and control of the regional government towards JKN to improve the availability of health facilities and equipment that supports maternal and newborn health services. 5) Local government policies do not support health care providers (cutting claims for midwives is based on regional autonomy). This forum also provides recommendations in overcoming these issues which are then summarized in the final recommendations.

Considerations in Implementation

- Health-finance protection programs alone will not be sufficient to improve the use and quality

of health care. It should be noted that several factors limit the use of maternal and infant health care: physical distances that require a large number of transportation costs that are not included in the benefits; lack of information about administrative processes and benefits covered; and maternal health services that are not completely free.

- Although there is an increase in JKN participation, there are gaps in which social injustice is noted in the use of health insurance. Older, working and highly educated women have greater access to health insurance compared to other fellow women. In addition, the unavailability of health and blind insurance services was mentioned as the two main factors that prevented non-poor informal workers from participating in national health insurance.
- The positive effect of JKN on the use of maternal and infant health care more on delivery care and less having an impact on antenatal care, newborn care, and family planning services postpartum.
- The positive impact of JKN on maternal and infant health care depends on several factors, including: the availability of clear local government regulations on services that can be requested; clear information about the use of JKN for tiered health services; adequacy of health facilities and trained health personnel; and the amount of capitation funds given to health centers.
- Inequalities in JKN registration and use of health services between informal workers and formal health workers remain because the premiums for contributions remain higher than the amount desired by workers, lack of access to information and health services, and competition with various priorities of informal workers.

Research Gaps

A comprehensive review of the effects of JKN on maternal and newborn health provides consistent findings, despite having a low / very low level of trust, that JKN has increased utilization of maternal and newborn health services, especially among the poor. Therefore, JKN reduces inequality in the use of maternal and newborn health care services between the poor and the rich. However, the study did not find enough evidence to conclude that the JKN program improved the quality of maternal and newborn health care. The global evidence review also provides inconclusive results regarding the impact of health insurance on improving the quality of JKN care. The study did not find a convincing study to link the JKN program to the health status of mothers and newborns.

Furthermore, this review can find direct specific evidence regarding the effects of JKN on increasing rates of referral of maternal and newborn health among vulnerable and poor populations. This review can also state that JKN raises the level of referral of maternal and newborn health, and poor populations, by providing evidence that JKN increases skilled birth attendants and cesarean delivery. However, this study has not been able to find evidence of determinants of health between regions with and without Jamkesda.

Policy Recommendations

1 — Improve public campaigns about the importance of registering as JKN participants and improving registration procedures and JKN premium payments.
2 — Increasing the commitment and role of local government in addressing the gap in JKN implementation as a follow-up effort from Presidential Instruction No. 8/2017 concerning Optimizing the Implementation of the JKN Program.
3 — Coordination of intensive financial resources and JKN health services, namely BPJS, regional government, and health service facilities, including supervision and control of cash flows at various levels.
4 — Determination of audit indicators that refer to BPJS regulations and accreditation of health service facilities, especially for hospitals and health centers.

Recommendations for Further Research

1 — The role of the regional government in increasing JKN use.
2 — Mapping of financial resources and health services for mothers and newborns at the district level.
3 — Influence of JKN on the quality of services for pregnant women, childbirth, and postpartum care.

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Chapter 4

Enhancing the Local Government's Governance System for Health Policy

Introduction

The government has tried to address maternal and newborn health problems by establishing and enforcing related policies. Local/local government support, for example, can take the form of regulations on budgets, health facilities, and human resources. The implementation of policies in this area can refer to national policies as well as regional policies. For example, local government regulations stating that regions have an obligation to allocate health budgets of at least 10% of total budget expenditure (Saputra, Fanggidae, & Mafthuchan 2015). Likewise, human resources related to maternal and newborn health, which are regulated through national regulations, are followed by regional regulations on the distribution of these resources (Ministry of Health 2015). One form of local government support is the regulation of delivery services available at health facilities and assisted by health workers. This allows the local government to allocate a Special Allocation Fund (DAK) for the development of primary health services or puskesmas services, including houses for midwives in the same location so that they are ready to help deliver 24 hours a day. Other examples of regional policies are the Infant and Child Health Program (KIBBLA) and the Expanding Maternal and Neonatal Survival (EMAS) program. Until now there has not been a comprehensive and systematic evaluation of the correlation of regional government support on maternal and newborn health in Indonesia. This research was designed to determine whether local government support is effective in overcoming the rates of maternal and newborn morbidity, as well as aspects of supporting which local governments actually contribute to reducing maternal and newborn mortality.

Asked Questions

Can local government support affect maternal and newborn morbidity and mortality?

Evidence Formulation

In this study, a review of the evidence was conducted on two studies (one qualitative study and one study with a combined method) of low quality. The systematic study of these two studies provides information on the role of local governments to reform the system and implement programs to reduce maternal and newborn deaths (Rustika & Raflizar 2015; Saputra, Fanggidae, &Mafthuchan 2015). A field study was conducted in DKI Jakarta Province during June-July 2017 through interviews with policymakers, program officers, and health service providers at the provincial, district/city and sub-district levels. This field study provides information on health policy in the DKI Jakarta Province. Information related to health policy in local governments also appeared in the National Stakeholder Consultation Forum on 4-5 October 2017.

1 — The role of local government is very important in supporting enforcement of central government policies as well as global policies regarding the reduction of maternal and newborn deaths. Referring to the health decentralization policy in Indonesia, local government support, for example, can take the form of regulations, budget allocations, efforts to improve health facilities, and optimization of human resources. Therefore, various policy initiatives have been carried out by regional governments in Indonesia to accelerate the reduction of maternal and newborn deaths.

2 — Systematic review produces two proofs with low quality and results of field visits explaining the role of local governments as local policy initiators which include policy forms, the roles of various actors in policy formulation, policy content and the impact of policies on reducing maternal and newborn mortality rates.

3 — Forms of regional government policies compiled in the form of governor regulations, regent

regulations, and regional regulations. Governor and regent regulations are easier choices because they do not go through a complex and long process in the DPRD.

4 — Parties involved in formulating, ratifying and implementing policies vary between regions. The involvement of religious and cultural leaders and professional organizations can accelerate the process of ratification of policies and acceptance of policy implementation through policy advocacy and socialization. International organizations/institutions play a role in supporting funding and technical assistance when formulating, ratifying, and implementing policies.

5 — The focus of local government policy is to provide supply and demand for maternal and newborn health services accompanied by multisectoral cooperation. Provision of offers includes budget allocation, improvement of the quality of health workers, provision of facilities and medical devices for mothers and babies born. Provision of requests is carried out by providing health insurance for pregnant women and the allocation of transportation funds for referrals that are not covered by health insurance. In addition, one piece of evidence explains the mechanism of rewards and punishments made to improve compliance with regulations that have been made.

6 — Regional policies can increase antenatal coverage and delivery assistance by health workers. However, evidence regarding factors that influence the variation in success in decreasing maternal and neonatal mortality in each region cannot be found from a systematic review.

The evidence review found that barriers to optimizing the role of the government in reducing maternal and neonatal mortality are regulations between levels of government that are less consistent because of the diverse interests of the parties and the instability of decentralization practices in regional government (Rustika & Raflizar 2015; Saputra, Fanggidae, & Mafthuchan 2015). In the provinces of East Nusa Tenggara and Kupang Regency, the government does not process regulations through the legislature because legislators assess maternal and newborn health is not a matter of priority (Rustika & Raflizar 2015; Saputra, Fanggidae, & Mafthuchan 2015). Decentralized health systems have encouraged several innovative policies, but their implementation has not been carried out as mandated by Law No. 23 of 2014 in most regional governments. On the other hand, this study and external references have identified facilitators in the form of intensive assistance from international donors, active community participation and relevant cultural approaches (Rustika & Raflizar 2015; Saputra, Fanggidae, & Mafthuchan 2015; Maftuchan, Manu, Yumni, Kholifah, & Panguriseng 2015; Hanney, Greenhalgh, BlatchJones, Glover, & Raftery 2017).

Donors have an important contribution to the success of policy implementation by providing adequate technical support including increasing the capacity of the health workforce, assisting research and drafting regulations, and facilitating stakeholder involvement (Saputra, Fanggidae, & Mafthuchan 2015; Maftuchan, Manu, Yumni, Kholifah, & Panguriseng 2015; Hanney, Greenhalgh, Blatch-Jones, Glover, & Raftery 2017). Community commitment is described from various programs carried out such as social funds for referral transportation (jimpitan, arisan), registration of village blood groups to support emergency referrals, and various health education programs (Saputra, Fanggidae, & Mafthuchan 2015; Maftuchan, Manu, Yumni, Kholifah , & Panguriseng, 2015; Hanney, Greenhalgh, Blatch-Jones, Glover, & Raftery 2017). The involvement of cultural and religious leaders creates harmonization between policies and local values and beliefs. Thus, wide acceptance is obtained from majority elements such as politicians, government institutions, civil society organizations, residents of the majority of sub-districts, and women as beneficiaries (Saputra, Fanggidae, & Mafthuchan 2015; Hanney, Greenhalgh, BlatchJones, Glover, & Raftery 2017).

The results of the field study indicate that health policies in DKI Jakarta are regulated by local regulations only for the Regional Health System (Siskesda). Other operational policies are formulated in governor regulations. The formulation of regulations is less desirable because it takes a relatively long time (more than six months). The formulation of regulations must be discussed with the provincial DPRD, which usually requires several meetings and explanations to convince them of the urgency and benefits of the regulation.

Considerations in ImplementationInnovative policies need to be followed by accountable and transparent implementation using relevant evidence. In addition, the consistency of regulations in the government is very important to ensure the allocation of resources and the achievement of efficient health outcomes. Finally, even though decentralization encourages innovative programs in the local context, it should be considered that the application of health policies and systems in each region will vary according to local needs.

Research Gaps

1 — Limited research on the role of local governments in reducing maternal and newborn deaths seen from the elements of a comprehensive health system.
2 — Lack of documentation regarding innovative programs and best practices from various districts and provinces.
3 — Further research is needed on the overall role of government in reducing maternal and neonatal mortality and how decentralization affects these figures at the district/city level.

Policy Recommendations

1 — Encouraging local governments to draft regulations relating to efforts to reduce maternal and newborn mortality.
2 — Establish indicators of reducing maternal and neonatal mortality as performance indicators for each regional head.
3 — Giving an award from the president to regional heads who excel in reducing maternal and newborn mortality.
4 — Involve civil society in overseeing the implementation of programs to reduce maternal and newborn mortality in each region.
5 — Establish regulations for regional governments to adjust regional programs from the central program.
6 — Speed up the issuance of government regulations on minimum service standards (SPM).

Recommendations for Further Research

1 — Analysis of factors of regional government achievement in reducing maternal and newborn mortality rates at the district/city level and sub-district.
2 — Measuring the effectiveness of local government innovations in reducing maternal and neonatal mortality by applying a mixed methods approach and focusing on comprehensive inputs, processes, and outputs of the policy.

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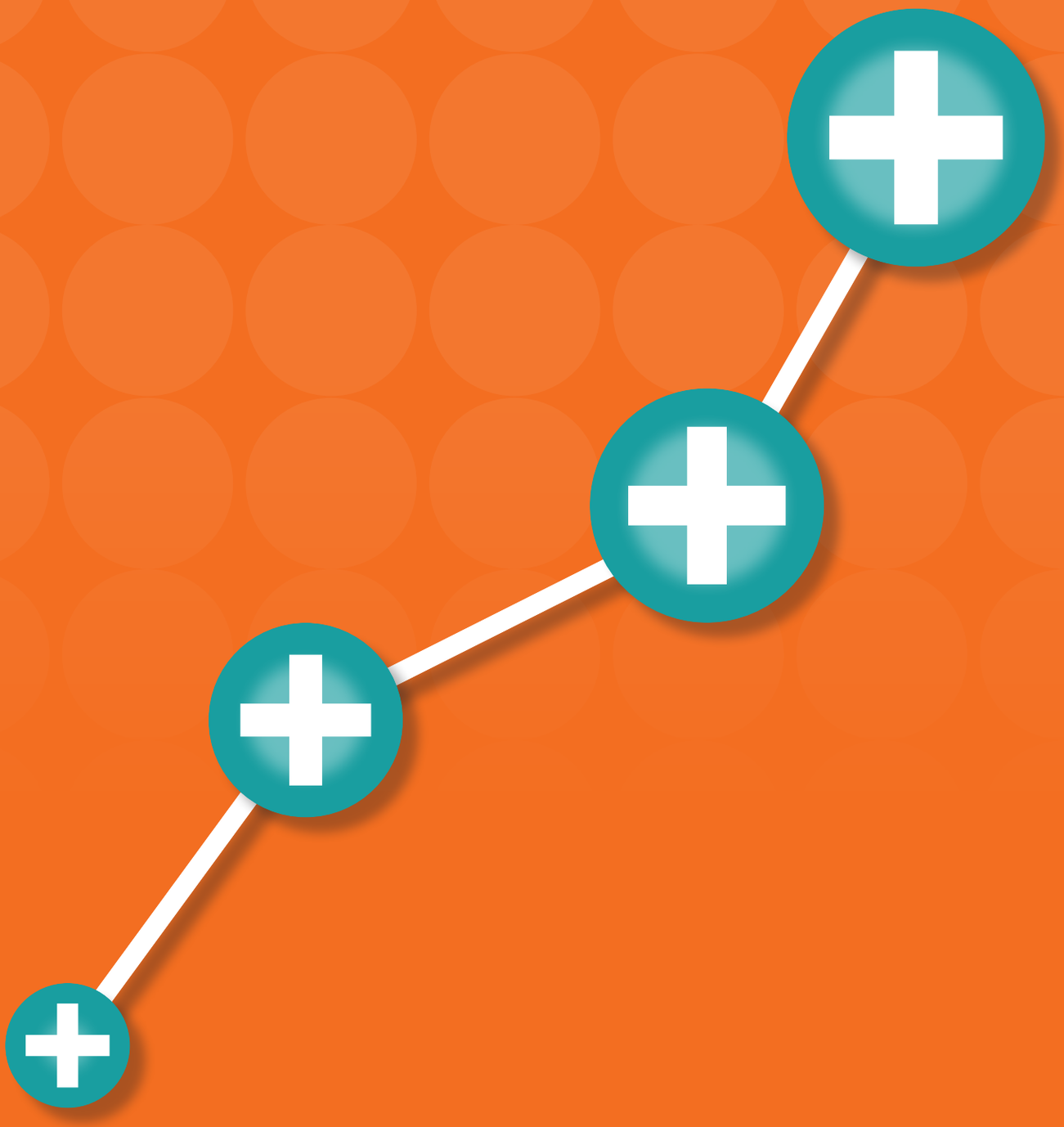
Chapter 5

Increasing the Use of Data in Decision Making in the Public and Private Sectors



Introduction

Although Indonesia has made substantial efforts to improve maternal and newborn health, the maternal and neonatal mortality rate is still worrying and indicators of the MDG target have not been achieved (Ministry of National Development Planning 2015). One of the reasons for the ineffectiveness of efforts to reduce maternal and newborn deaths is the unavailability of evidence (Kendall & Langer 2015; Oxman, Lavis, Lewin, & Fretheim 2009). The term evidence is increasingly used to find out the latest and reliable information that is relevant from valid research and evaluation that is proposed to be used to support conclusions or decisions. To get the right decision, policy makers need access to evidence. A variety of invalid data now makes it difficult for the government to ascertain what actually happened in Indonesia in decades. For example, there are differences in MMR reports by various institutions, such as the Basic Health Survey (SDKI), WHO Indonesia, and the Population Census Inter-Survey (SUPAS) (BPS 2012; WHO 2014; BPS 2015).

Policy Making based on Information Evidence (EIPM) is a fundamental strategy for reducing maternal and newborn mortality by ensuring the effectiveness of health policies and increasing accountability (Kendall & Langer 2015; Shiftman, 2007; Uneke et al. 2016). Significant improvements in health outcomes have been reported after the promotion of evidence use in policy development in countries with low and middle income (Hirose, Hall, Memon, & Hussein 2015; NabyongaOrem & Mijumbi 2015; Orton, Lloyd-Williams, Taylor-Robinson, O ' Flaherty, & Capewell 2011; Uneke et al. 2016). In Indonesia, the use of evidence in policy making is increasing, but strong and active efforts are needed to improve it. Based on program evaluations in Central Java Province, several challenges in providing accurate data for program planning included irregular data collection, inconsistent reporting, miscalculation of target populations and unorganized data management (Indonesia MK 2016a; Murnita 2014; Thenu, Sediyono, & Purnami 2016; Indonesia MK 2016b). Topic Area 5 examines the use of evidence to support decisions and policy-making regarding maternal and newborn health in Indonesia.

Asked Questions

What is the impact of government policies regarding mothers on maternal and newborn morbidity and mortality rates?

Evidence Formulation

1 — Systematic review cannot find evidence of the effect of using data and information on reducing maternal and newborn deaths. This is because of the limited scientific evidence that examines the use of data and information in the formulation of policies related to maternal and newborn health by the government and the private sector. Field visits and review of policy documents can identify that scientific data is used in the process of formulating/diagnosing health problems, but is less used in the process of strategy formulation, implementation, and policy evaluation.

2 — Systematic review found six low to moderate quality evidence which showed that the effects of government policies on maternal and newborn deaths varied. Policies regarding village midwives, family planning, and iron (Fe) supplementation and folic acid can reduce neonatal mortality. Meanwhile, the Jampersal program has an impact on reducing maternal and newborn deaths. In fact, decentralization without being balanced with optimal capacity of health services in the regions is a barrier to the success of newborn care.

Proof of Results

A systematic review was carried out and identified six studies (four quantitative studies and two qualitative studies), with low to moderate quality. Six literature

studies with low levels of trust did not explicitly state maternal mortality as a result. Some policies have an impact, both positive, non-impact, and negative. The policy of the village midwife program has a positive impact on changes in the distribution of labor in rural areas and an increase in maternal morbidity (IDHS 1986-2002) and a decrease in neonatal mortality (Hatt et al. 2007). However, this policy did not have much impact on the postpartum period (a retrospective study in 10 provinces in 1960-1989) (Shresta 2007). Unfortunately, this data is considered to be less relevant because it is not the latest data. Other policies that have a positive impact are family planning and iron and folate supplementation (IDHS 2002-2007) (Titaley & Dibley 2012). Through this policy, it was recorded that there was a decline in newborn mortality by 51%. Policies that have not shown an impact on maternal and newborn health are obtained through observational and qualitative studies (1991-2012) on Jampersal (special labor policies) (Helmizar 2014). However, this study was noted as evidence of low trust because data were obtained only from program reports. Furthermore, the negative impact of inadequate policy implementation is documented by the low quality of family planning counseling services and the low quality of care and referral systems in decentralization in the health sector (Duysburgh et al. 2014).

Policy Document Review Results

The use of evidence for agenda setting, as the initial stage of the policy development process, has been carried out using national surveys and censuses (Indonesian Demographic and Health Survey, Basic Health Survey, Health Facility Survey, and Intercensal Population Survey). The use of this national survey data is provided adequately and is easily accessible through ICSFD, as input for diagnosis of health problems, decision making of technical experts, and conceptualization of situations for government policy makers. Long and medium term health planning documents have used national survey data to analyze national strategic issues. However, most of the evidence is used only in the agenda-setting process and is less used during the development phase.

In the process of drafting regulations in the form of law/action, academic documents are needed. In addition, operational evidence to increase the effectiveness of initiatives is also needed as part of the policy implementation process. However, the national program plan document does not describe the use of evidence or research findings before the selection of strategies/interventions. In this study, there was no information on how the program evaluation was determined using relevant data and information.

Results of Field Study

The results of the field study show that the regional regulations of DKI Jakarta only regulate the policy, namely the Regional Health System. Other operational health policies are formulated in governor regulations. The formulation of regulations is less attractive because it takes a relatively long time (more than six months) through several discussions with the provincial DPRD with complicated procedures.

On the other hand, program development was adopted from previous programs without an initial assessment of the effectiveness and evidence of the research. Local authorities face difficulties in processing, analyzing, and using existing raw data because staff receiving health information training are accustomed to using raw data without a follow-up as part of program reports. However, one collaborative home visit program is claimed to be the best practice because of strong political support.

Results of Global Evidence Review

Current studies show that available local Indonesian evidence cannot provide sufficient information about the use of evidence in the policy-making process. Therefore, a brief review was conducted through three systematic reviews at the global level to identify supporting factors, including barriers and facilitators, to use evidence in policy-making (Humphries, Stafinski, Mumtaz, & Menon 2014; Liverani, Hawkins, & Parkhurst 2013; Oliver , Innvar, Lorenc, Woodman, & Thomas 2014). Although only two articles focused on the setting of low and middle-income countries, the findings clearly illustrate the supporting factors for using evidence in decision making (Armstrong et al. 2013; Murthy et al. 2012).

These supporting factors include: 1) availability and quality of information (access to research databases and information on research needs, relevance and reliability of research findings on practice, quality of information systems, time and costs needed for research), 2) organizational mechanisms such as structure and culture (intra-organizational relations,

human resources, work environment, process and decision-making culture, administrative procedures, management support, institutional silos), 3) individual capacity (research literacy, research utilization, commitment and awareness, acceptance of change), 4) interaction (relations between researchers and decision-makers, mutual understanding of health issues and research needs and patterns of communication between researchers, policy makers, and health program managers, the existence of knowledge brokers) and 5) politics (political systems [centralized / decentralized] and culture [hierarchy and control], transparency of governance, style and culture to leadership, involvement of experts and international organizations).

Results of the Policy Dialogue

The policy dialogue revealed the existence of problems including the difficulty of data access, the absence of convincing data, and long bureaucracy in obtaining data and information. In addition, data producers have different priority perspectives with policymakers. Discontinuity of data use among stakeholders also occurs because available data are not communicated among responsible institutions.

Considerations in Implementation

In this study no recommendations were made, some of the limitations below can be considered in the future development and implementation of recommendations:

1 — Key questions do not properly map the required evidence from the topic area so that other sources of information are used to fill the information gap. This diverse and unvalidated collection of information and collection sources contributes to the possibility of higher bias and may limit the reliability of this report.

2 — There is a global consensus that assessing the extent to which evidence is used in policy making is a complex and challenging effort. Although it is available, this method is in dire need of very intensive resources and has not been widely applied. This limits the ability to reliably determine whether and how research is used in prioritizing, formulating, implementing, or evaluating maternal and newborn health policies in Indonesia.

3 — There is no identification of reliable information about the use of evidence in the private sector.

4 — There is no identification of evidence which shows that the use of evidence in policymaking has an impact in reducing mortality.

Research Gaps

1 — Limited research on the use of evidence in decision making and policy making processes in maternal and newborn health in Indonesia. Further research is needed to fully assess the extent to which evidence is used in policy making in Indonesia.

2 — Limited research on the impact of evidence used to improve the effectiveness of government policies to reduce maternal and neonatal mortality in Indonesia. Further research is needed to explore the influence of the evidence used in current policies, strategies, and guidelines on maternal and newborn outcomes, with methods that are rigorous and include the public and private sectors.

3 — Global evidence provides useful guidance on how to improve research use in policies in low and middle-income countries. However, further research is still needed to determine the potential acceptance and transfer capability of potential approaches in the Indonesian context.

4 — Continuous research is needed to find out whether the EIPM approach is useful for other topics taking into account the Indonesian context.

Policy Recommendations

1 — Develop a Knowledge Management System (KMS) on maternal and newborn health as a platform to increase access and the creation of trusted evidence that is more inclusive, transparent and accountable.

2 — Establish a national committee to accelerate the reduction of maternal and newborn mortality, which also functions as a communication forum between researchers, practitioners, and policymakers who can align research priorities and policy agendas.

3 — Establish regulations regarding budget allocation for research related to maternal and newborn health in Indonesia.

4 — Develop sustainable programs in an effort to strengthen the capacity of individuals, organizations, and systems in the use of evidence as a basis for policy formulation.

Recommendations for Further Research

Program evaluation and good practices regarding the pattern and effectiveness of using data and information in the formulation of maternal and newborn policies are born in the order of the government and the private sector at the national and regional levels.

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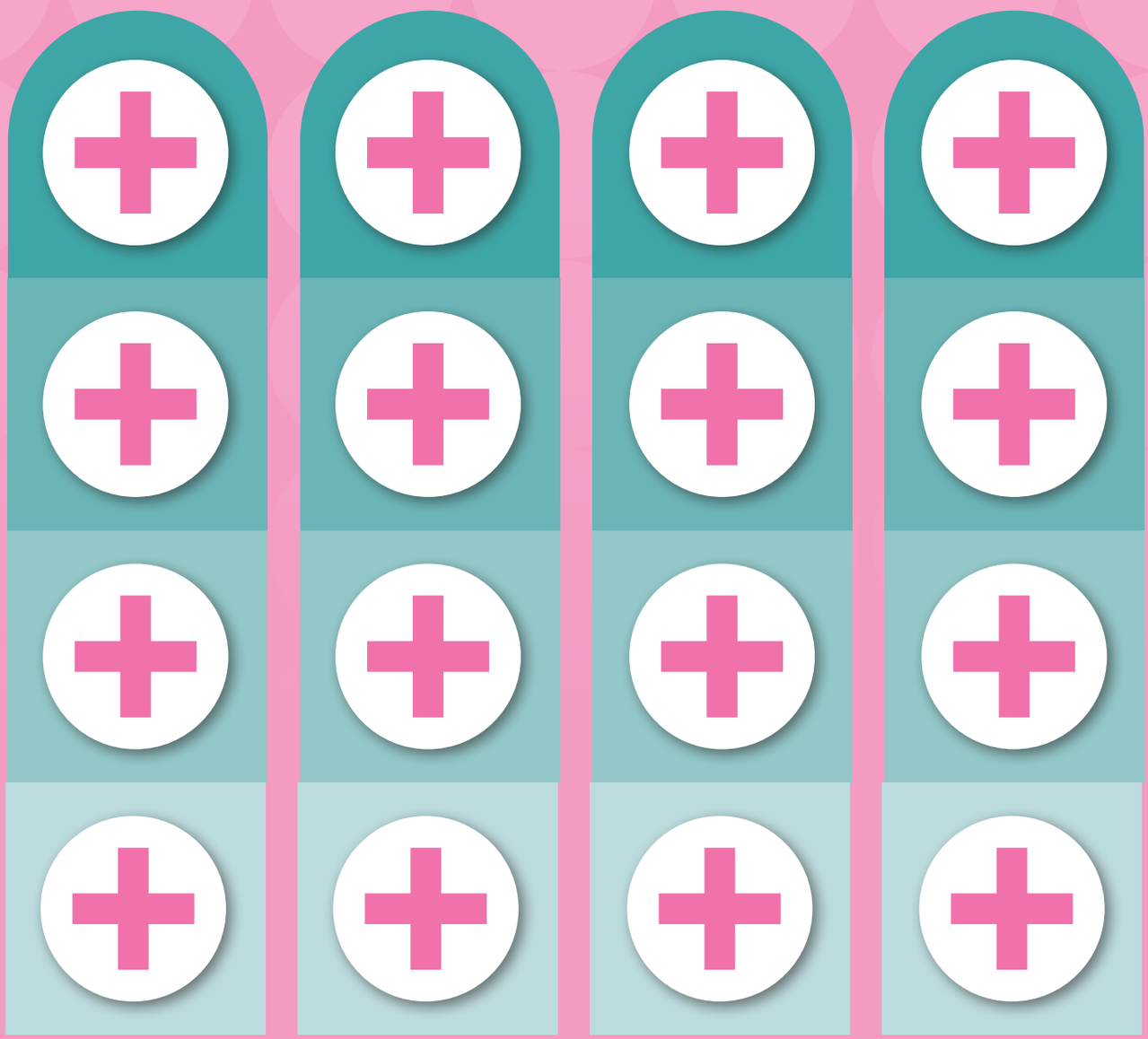
Chapter 6

Implementation of Equality of Women to Support Four Pillars of Safe Motherhood



Introduction

ASafe motherhood" refers to the ability of a mother to undergo a safe and healthy pregnancy and childbirth. The "Safe Motherhood Initiative" was launched by WHO in 1987 to address the mortality rate of women due to complications of pregnancy and childbirth. The right to "safe motherhood" comes from reproductive rights, which is part of the right of every woman to be able to access maternal health care. Maternal health care refers to four main elements, namely family planning, antenatal care, clean delivery, and important obstetric care. One of the pillars of "safe motherhood" is gender equality. Access to affordable, high-quality, and respectable maternal health care will be obtained if women's equality is guaranteed.

Globally, the 2010 Human Development Report introduces the Gender Inequality Index (GII), which reflects gender-based inequalities in three dimensions — reproductive health, empowerment, and economic activity. Gender inequality, which is characterized by high GII values, correlates with the high maternal mortality rate in several countries. Indonesia has a GII value of 0.467, ranked 105 out of 159 countries in the 2015 index.

With high MMR (126 / 100,000 live births, WHO 2015), Indonesia does not have a lot of studies on gender inequality in Indonesia and its impact on maternal and newborn deaths. The topic of this area aims to identify evidence of gender inequalities that affect maternal and newborn mortality and the implementation of current gender equality interventions to support the four pillars of maternal safety in a strategy to reduce maternal and newborn mortality.

Asked Questions

How do gender inequalities affect maternal and newborn morbidity and mortality?

Evidence Formulation

1 — Gender equality can affect the success of the application of "four pillars of safe motherhood" in reducing maternal and newborn mortality. The rapid and quality utilization of maternal health services is influenced by the authority of women in making decisions to determine the best health services for themselves and their babies. In addition, women's rights to the same role in the social and economic system are important factors in women's empowerment and gender equality.

2 — Systematic review found eight evidence with high to low quality that could explain the influence of gender on access to health services. However, there is no evidence that explicitly explains the role of gender in reducing maternal and newborn mortality.

3 — Women with significant social roles pay high attention to the care of their babies. Women's confidence shapes the ability to make appropriate decisions regarding reproductive health, antenatal care, and delivery (high-quality evidence).

4 — The social stigma regarding the inferiority of women in family and society is influenced by local culture and beliefs (moderate evidence quality).

5 — Lack of support from husbands and other family members in giving consideration and financial assistance has caused the provision of family planning services do not meet the needs, coverage of antenatal care is low, and lack of support to seek childbirth assistance by health workers (moderate evidence quality).

6 — Education and employment status of women and husbands influence the behavior during pregnancy, infant care, and the search for maternal health services (low evidence quality).

7— Government policies regarding maternal and

newborn health that are gender biased lead to low male participation because they do not get direct benefits from the program (moderate evidence quality).

8 — Overlap between government regulations regarding gender and maternal health (low evidence quality).

In this study, a review of eight studies was conducted (five quantitative studies and three qualitative studies) with one high-quality study, one medium-quality study, and the other low-quality studies. The systematic review of these eight studies provides information on the impact of gender inequality on maternal and newborn health. A review of seven policy documents from 1974 to 2014 provides an overview of existing policies / regulations on gender. Furthermore, global evidence in the form of a WHO recommendation is used to enrich systematic review and provide views on the proposed solution (WHO 2015). National Stakeholder Consultation Forum on October 4-5 2017 with participants consisting of researchers, NGO representatives and the government providing confirmation of the evidence and findings collected. Brainstorming is also conducted on several policy choices.

All studies in the review of evidence indicate that the low utilization of maternal health services - which are related to maternal mortality and morbidity - is influenced by gender inequality. All of these studies also discussed limited access to maternal health services (Imbron 2015), such as the failure to meet the need for family planning (Sanneving, Trygg, Saxena, Mavalankar, & Thomsen 2013; Sedgh & Hussain 2007), low coverage of antenatal services (Purnomo 2004; (Simkhada, Van Teijlingen, Porter, & Simkhada 2008; Tripathi & Singh 2017), low coverage of skilled birth attendants (Imbron 2015; Harisani, Gultom, Puspasari, & Miscicih 2012), and low access to essential obstetric care (Schröders, Wall, Kusnanto, & Ng 2015; Titaley, Dibley, Agho, Roberts, & Hall 2008) Gender-related barriers were also identified as having important influences such as the education level of mothers (Schröders et al. 2015), the level of knowledge and attitudes of husbands (Imbron 2015; Purnomo 2004; Hasnah 2003; (Pardosi, Parr, & Muhidin 2017), social norms and family (Imbron 2015; Purnomo 2004; Schröders et al. 2015; Hasnah 2003; Pardosi et al. 2017), and p government era.

Review of policy documents found fundamental conditions related to gender barriers that have an impact on maternal and newborn deaths: 1) maternal and newborn health policies are not gender sensitive, 2) low ownership of maternal and newborn health programs, 3) gender inequality limits access to health, 4) women lack power in health-related decision making, 5) there is a gender bias regarding food allocation (men get better food), 6) there is a gender bias in the survival rate of newborns because of biological differences (baby girls are stronger than baby boys). The Consultation Forum also found the same thing, with additional findings that there were employment policies that were not friendly to the health of mothers and newborns.

It can be concluded that this study shows the limited reliable research that examines the specific gender impact on maternal and infant mortality. The results of the review of evidence indicate that gender inequality is often associated with the subordination of wives by husbands as decision makers. The role of law and legislation does not support many efforts to achieve gender equality as indicated by conflicting regulations.

Considerations in Implementation

Indonesia is a country with a diversity of customs and cultures that are strongly influenced by the family structure of a patriarchal majority family. Daily life, customs, and culture of society tend to be influenced by gender norms in every practice. This affects the opportunity to obtain appropriate reproductive health services, make decisions to increase the number of children, and choose the type of contraception, which is a woman's reproductive rights. The issue of gender inequality in Indonesia is related to policy aspects, aspects of the culture of mother and family, education, poverty, and access to health services. All of this should be considered in the implementation of recommendations or proposed solutions.

Research Gaps

Further studies are needed to identify interventions to improve gender empowerment that are acceptable in the Indonesian context. In addition, a review of the evidence regarding proper age for marriage for men and women in Indonesia needs to be explored.

Policy Recommendations

1 — Increasing male involvement in each program to

reduce maternal and newborn deaths.

2 — Facilitating coordination between stakeholders in the formulation of regulations and community involvement in program planning, implementation, and evaluation.

3 — Conduct evidence-based reviews of regulations regarding the age limit for marriage and maternity leave for women and men.

4 — Provide students with an early understanding of gender equality tailored to the curriculum in each school.

Recommendations for Further Research

1 — Effect of gender equality on reducing maternal and newborn deaths.

2 — Impact of marriage age on maternal and newborn health status (quantitative study).

3 — Analysis of the cost-benefit ratio of alternative policies regarding maternity leave for pregnant women and their husbands.

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Topic Area 2 - Improving Referral System at Community and Facility Levels

Key Question 2A: Are there differences in the frequency of referral, morbidity and maternal and neonatal mortality in the most vulnerable and poorest populations before and after JKN?

No bibliographic evidence found.

Key Question 2B: What is the description of the referral pattern in urban, rural, very remote, outermost, and its impact on maternal and infant mortality and morbidity?

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Key Question 3C: What is the difference between determinant systems in regions that have regional health insurance and those that don't?

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Topic Area 6 — Implementation of Equality of Women to Support Four Pillars of Safe Motherhood

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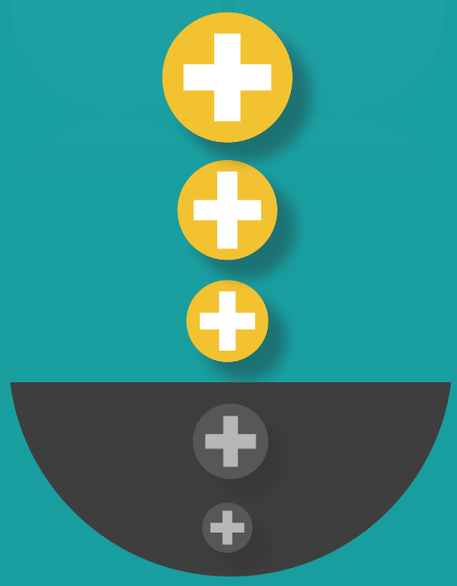

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