# IMPROVING ECONOMIC COMMUNITY EMPOWERMENT AND HEALTH CARE UTILIZATION THROUGH INSURANCE AWARENESS TO REDUCE MATERNAL DEATH IN INDONESIA

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#### **Abstract**

Maternal mortality is still a global public health problem. Despite the efforts that have been conducted to prevent maternal death, the rate remains high, especially in the low and middleincome country. Indonesia faced a big challenge, with increased number of maternal mortality in recent years which has reached more than 300 deaths per 100,000 live births, and fails to reach its Millennium Development Goal (MDGs) in 2015 of 102 maternal deaths per 100,000 live births. Several factors that have been related to maternal death include hemorrhage, hypertension, and infection as three main direct causes of maternal mortality. Several indirect causes include maternal preexisting medical problems, such as diabetes, anemia, HIV and chronic energy malnutrition. Problems regarding access and quality of health care, especially during the antenatal and postpartum period have also been linked to maternal mortality. With the current policy of universal coverage, maternal health care should reach women from all socioeconomic background which will alleviate this problem. It is also crucial to improve income to ensure that these women can afford insurance membership, especially those who are not covered by the government. This paper reviewed methods to decrease maternal mortality through increasing health care utilization by improving insurance awareness and community empowerment in economics which will enable women to have adequate access to quality health care.

# Keywords: maternal mortality, insurance awareness, health care utilization

# **Presenting Author's biography**



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## 1. Introduction

It is predicted that Indonesia will obtain demographic bonus in the year 2020-2030. Surya Chandra, member of DPR (Dewan Perwakilan Rakyat) Commission IX, on National Conference regarding population problem in Indonesia at the Faculty of Medicine, University of Indonesia said that the number of labor age (15-64 years) in 2020-2030 will reach 70 percent, while the rest 30 percent are people who are not productive (under 15 years old and over 65 years)[1]. The big problem is whether our country is able to take a demographic bonus on the strategic field for the acceleration of economic development. If this cannot be done, there will be the opposite effect that demographic bonus becomes the most painful punishment. Our country will lose the opportunity to maximize economic growth and there might be possibility of the increasing threat of economic recession.

One of the main causes of poverty is health problems that affect the productivity of the working population and affects income levels and economic independence [2]. Therefore, health policy of a country becomes a strategic issue in order to reduce poverty, increase income levels and financial management hopes on a positive trend of the National GDP (Gross Domestic Gross). According to Health Research (RISKESDAS) data in 2013, insurance coverage in Indonesia reached 49.5%; thus, there are still 50.5% of Indonesia's population who are not covered with health insurance [3]. From these data, it can be explained that the majority of Indonesia's population has a high risk of catastrophic expenditure in which big expense reached more than 50% of the revenue, which might happen to people with health problems and need to obtain the expensive health treatment. The problem of basic needs, such as health care and inadequate health and safety services, are not rule out as major causes of economic recession.

In eastern countries, including Indonesia, wives are in charge of the families' health, while the husbands have the responsibility for providing financial support for the family. The wife becomes the financial manager of the household, managing the allocation of finance. The readiness with the demographic bonus that must be balanced with adequate health insurance can be prepared early on mothers/wives.

Even though new labor force is predicted to come, it will still take 10 years to happen. They are those in elementary school and/or probably are still infants or on planning. A healthy child will be born to healthy mothers; thus, it can be affirmed that the State have to make strategic policy formula in dealing with the above formulation problems to ensure demographic bonus. The demographic bonus is a prediction, and it depends on the above problems related to the focus of development planning on the readiness of mother, which can be an alternative model that one must prove for its effectiveness.

According to the estimation by WHO, the number have been reduced from approximately 380 death per 100,000 live birth in the 1990s to 200 deaths per 100,000 live birth in 2013, but maternal death is still major health problem especially in low and middle-income countries [4]. It is estimated that only approximately 23 out of 181 countries achieve Millennium Development Goal 5 to reduce maternal death by 75% in 2015 [5]. Most of these deaths happened in low-middle income developing countries, in which resources are limited [4, 5].

Indonesia also still faces a huge challenge regarding maternal mortality. Recent reports showed that the National Maternal Mortality Rate (MMR) is still at least two times higher than our Millennium Development Goals target of 102 death per live birth in 2015 [6]. Although countermeasures have been conducted to reduce this number, the complexities of different level of proximal and distal causes continue to threaten women of reproductive age. One important health care-related cause is low utilization of maternal health care that can prevent early detection of pregnancy, delivery, or postpartum complication and delivery, which can eventually end in maternal mortality. Previous studies have indicated that health care cost and financial problem influence health care utilization and that insurance membership can improve health care utilization.

Therefore, this article reviews the importance of increasing health insurance awareness through community development focusing on improving health care utilization to significantly reduce maternal mortality in Indonesia as an alternative model for acceleration Indonesia Universal Coverage 2019 and readiness of demographic bonus.

### 2. Methods

Literature search was conducted through PUBMED, Google Scholar, Scopus, and ProQuest with search terms "Maternal Mortality," "Maternal Death," "Health Insurance Awareness," and "Health care Utilization." Articles related to the topics were reviewed and subsequent search of related citations and references were also conducted.

#### 3. Results and Discussions

In order to reduce maternal mortality, it is important to assess different level of causes of this problem. The main cause for maternal mortality in developing countries can be classified as direct causes and indirect causes. Major direct causes of maternal mortality in low middle-income countries include hemorrhaging (during pregnancy/antenatal, delivery, or postpartum), hypertension-related diseases (pre-eclampsia and eclampsia), and infection [7]. Some significant indirect causes of maternal mortality include pre-existing medical conditions such as diabetes, HIV, and anemia [7], and in Indonesia also includes chronic energy malnutrition [8].

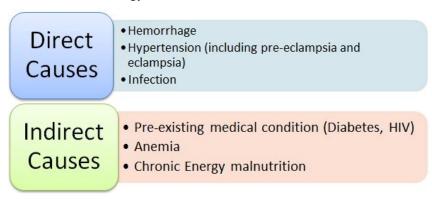


Figure 1. Direct and Indirect Pathophysiology of Maternal Death

In Indonesia, aside from some pathophysiological causes that listed above, there are also health care system and personal characteristics of mother that have been recognized as the cause of maternal mortality, including the hesitation of getting qualified health care [9]. As a country with diverse geographical and sociocultural characteristics, variations in health care service and utilizations is prominent [10, 11]. From previous studies conducted in low-middle income countries, access and utilization of health care are considered as important factors related to maternal mortality, especially in the implementation of universal health coverage that is also being gradually implemented in Indonesia [12].

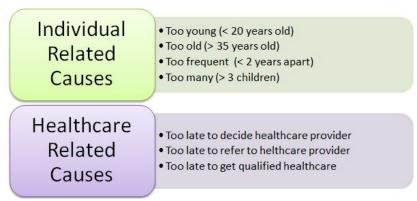


Figure 2. Individual and Health care Related Causes of Maternal Mortality

There are various programs that have been conducted in the national and local level. One important program is "DESA SIAGA" or "Alert Village," a continuation of "SUAMI SIAGA" or "Alert Husband" program, which reinforces the importance of husband and community involvement in ensuring women's health especially during pregnancy and childbirth, and more importantly in

obstetric emergencies [13]. The concept of DESA SIAGA includes recognizing risk factors of adverse events in pregnancy, developing and maintaining transportation system in case of emergency, and recommending family and husband of a pregnant mother to ensure adequate nutrition intake and antenatal checkups during pregnancy [14]. This program tried to reduce the problems of lack of health care and transportation trouble for mothers, especially those who live in rural area. The government also provides each village with midwives to improve delivery by a health care provider, as well as improving maternal care for women [15].

There is also an improvement of health care facilities to ensure comprehensive emergency obstetric and newborn care (PONEK- *Pelayanan Obstetri dan Neonatal Emergensi Komprehensif program*). This programs have improved the proportion of delivery by a health care provider from 41% in 1992 to 82% in 2010; however, the proportion of deliveries in health care is still low at 55% [16]. Government reports have also showed low utilization of health care regarding maternal health, in which 70.0% of women completed 4 antenatal checkups and only approximately 32.1% of women had three postpartum checkups as recommended by the government [3]. This low utilization of health care can be caused by lack of awareness from mothers and their family, especially those from poor and middle-income family. These problems can be caused by lack of knowledge on the importance of having health insurance, perception on the importance of insurance, and the benefit of health insurance, especially during pregnancy, delivery and postpartum [16–18].

Further, previous studies also have reported low awareness of insurance in Indonesia, especially amongst middle-income family, who cannot be covered by the government pro-poor insurance program [19, 20]. Lack of insurance awareness can be further classified as: 1) lack awareness of the importance of insurance which influence insurance membership and health care utilization; and 2) lack awareness of the benefit of the obtained insurance membership, which influence health care utilization. Both problems, in fact, occur in Indonesia. A recent report showed that only about 50% Indonesians are covered by insurance [21]. Although this proportion is expected to be higher with the implementation of Universal Health Coverage, some efforts are still needed to be done to improve people's perception on insurance and its benefits.

The advocacy and education should focus on middle and high-income families that might not benefit from the pro-poor insurance program in Indonesia. Studies have also reported that insurance membership can improve health care utilizations in Indonesia [22]. A study in Thailand also reported that uninsured women, especially those coming from low middle-class family are more likely to delay their antenatal care and deliver babies at home, instead of having a birth in the hospital [23]. It is also important to improve people's awareness on the benefit of their insurance membership because one of the main reasons for not using health care during pregnancy is their lack of knowledge on the coverage that they will have from their insurance, especially for low and middle-income women[12,24].

Model of Community Development in this article focusing on maternal mortality was developed from the model CERIA (Community Empowerment and Insurance Awareness), which is applied to the community service program by Murti and Widyaningsih Karanganyar 2015 in Central Java [25]. This model differs from the previous models, since this model focuses on the community empowerment, especially for women and certain age groups to reduce maternal mortality which is expected to be an alternative model in Indonesia to accelerate universal coverage 2019 and face the demographic bonus. The model developed can be seen in Figure 3.

The implementation of Universal Health Coverage (UHC) is believed to improve maternal health, especially through the utilization of health care [12]. Starting from 2014, Indonesia is moving towards universal health coverage (UHC) with the goal that every citizen will have qualified and accessible health care, including for pregnancy, delivery, and postpartum [26]. However, the implementation of this policy should be followed by improving awareness of insurance to increase insurance membership for independent insurance payers who cannot be covered by the government or employer scheme. It is also crucial to improve people's awareness on the benefit of insurance membership to make sure adequate utilization of health care. A recent report from a study conducted in Ethiopia emphasized the important of education and raising people's awareness on the benefit of insurance to increase insurance membership and health care utilization [27]. However, it is also important to consider some countermeasures to overcome moral hazard, a condition in which member of insurance over-utilize

health care. Several methods that can be done include implementation of deductibles, co-payment, and co-insurance.

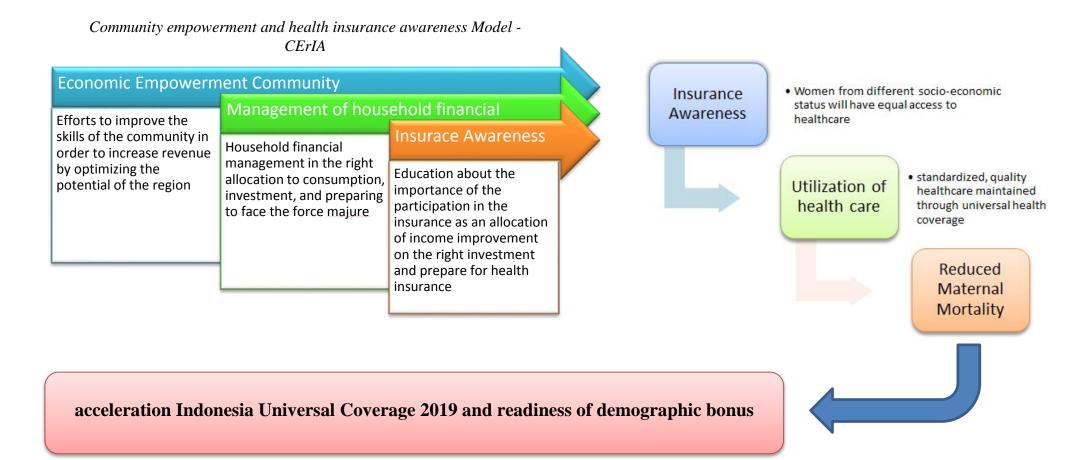


Figure 3. Theoretical Framework

## 4. Conclusion and Recommendation

Maternal death is still a big challenge for public health in Indonesia. High number of maternal mortality can be caused by different layer of individual and environmental factors including health care utilization and cost. In order to address the problem in health care financing and utilization, improvement of insurance awareness is necessary to increase health insurance membership, especially to middle and high-income families that cannot be covered by poor family program from the government. This step should be followed by proper education and advocacy on insurance membership benefitting to ensure health care utilization especially during pregnancy, delivery, and postpartum to ensure significant decrease of maternal death in Indonesia.

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