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Exploration of Socio-Cultural Determinants of Maternal Mortality in Indonesia

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ABSTRACT
Indonesia is a developing country in which maternal mortality remains a major public health issue. The question which arises here is "What does literature say about socio-cultural factors related to pregnancy and childbirth determines maternal mortality in Indonesia?" This paper aims to explore the socio-culture aspects of pregnancy and childbirth which determines maternal mortality in Indonesia. A systematic search has been conducted to understand the socio-culture aspect of pregnancy and delivery which determines maternal mortality in Indonesia. 37 articles were retrieved but only 25 articles ranging from 2005 to 2015 were reviewed and they yielded 2 themes which have emerged from the literature review. They are; (1)Vulnerable populations of Maternal Mortality in Indonesia, and (2) Cultural-Barriers. The first theme raised the fact that there are vulnerable population susceptible to maternal mortality in Indonesia including the low economic status family (poor family and low education), people living in rural areas and teenagers and unmarried women. The second theme explored culture barriers consisting of perceptions related to pregnancy, delivery and death, perceptions related to family planning, practice related to pregnancy and delivery, Traditional Birth Attendant, gender inequity, and perception related to midwife performance and health services.

Keywords:*Indonesia, Maternal mortality, Socio cultural*

1. INTRODUCTION

Indonesia is a developing country in which maternal mortality remains a major public health issue as data shows that the mortality rate is 220 per 100,000 live births (UNDP 2013). Each year there are approximately 20,000 maternal deaths occurring due to complications related to pregnancy and delivery [1]. In order to have an adequate solution, it is necessary to understand the underlying causes of the problem including socio-cultural aspects. Culture is "that complex whole which includes knowledge, belief, art, law, custom, and any other capabilities and habits acquired by man as a member of society" [2]. The question which arises here is "What does literature say about socio-cultural factors related to pregnancy and childbirth determines maternal mortality in Indonesia?" This paper aims to explore the socio-culture aspects of pregnancy and childbirth which determines maternal mortality in Indonesia. This study will provide a significant input for the policy makers, the program planners and the researchers, both international and national concerning preventing maternal death in Indonesia.

2. METHODS

A systematic search of literature ranging from 2005 to the present was applied to have more recent information regarding socio-cultural aspects of pregnancy and childbirth as determinants of maternal mortality in Indonesia. Scopus, Popline, Sociological Abstract and Goggle Scholar were databases and search engines searched to provide a full range of data regarding reproductive health, health science and social science [3], [4],[5]. Additionally, grey literature, 'literature published independently' [6], was obtained from the World Health organization (WHO), United Nation (UN), United Nations Development Project (UNDP) and Ministry of Health of Indonesia and Reachout Indonesia.

With the assistance of a librarian and by applying PICO, MeSH and Boolean concept [4], [6], [5], [7]all databases were searched singly or combined for search

terms Indonesia, cultur* OR tradition*, midwi*, matern* OR Pregnan* OR childbirth resulting in 932 articles from three databases. Then the literature was limited to the year from 2005 to present, resulting 37 articles. Of these, all articles were examined in detail based on their key words, abstract and full text to find whether it was a relevant article to the topic and found that 6 were duplicated and 6 were irrelevant to the topic. Therefore, the articles which have been reviewed were 25 articles.

EndNote system was used for storage of the articles and a literature tracking sheet was used to record themes which emerged from the literature. Themes were identified based on the search terms and the author's expertise in relation to public health and international [6][8]. Themes were broken down from the general theme to the narrow theme, which is what this literature focuses on [8].

3. RESULT AND DISCUSSION

Basically, themes emerged are drawn based on the fact that Millennium Development Goals (MDGs) as a public health approach in global setting whereby improve maternal mortality is one of the goals, vulnerable groups are focus in the implementation of reduction strategies, and social determinants of health or causes of the causes including socio-cultural aspect is the main concern of public health [9], [10], [11], [12]. Therefore, 2 themes emerged from the literature review, which are, (1). Vulnerable Group of Maternal Mortality in Indonesia, and (2) Cultural-Barriers.

3.1 *Vulnerable populations of maternal mortality in Indonesia*

The issue of health inequity is indicated in some populations, as noted below.

3.1.1 Low socio-economic status family

It is found that a poor family prefers to have a Traditional Birth Attendant (TBA). TBA service is cheaper and sometimes free if the TBA is their relative and the payment is flexible whereby it can be paid in using kind, for example an animal and or fruit [13], [14], [15], [16], [17], [18]. Health insurance for poor people does not cover all services for free such as a room and medicine [18], [19].

Husbands with low income such as fishermen, laborers, and farmers are afraid of the cost of health services which make them delay in seeking medical care [16], [19]. The fact that services of health facilities are available only in daylight is a challenge for women working in farming in a rural area because if they come to the health facilities, it will impact on their income [20].

Mother with lower education has less Ante Natal Care (ANC) than those with higher education [17], [15]. They are also observed having food taboos more than women with higher education [21]. References [21]that women with higher education have awareness of the importance of iron and milk while those with lower education prefer to consume 'jamu' or traditional medicine as a protection against supernatural powers which will affect mother and infant health. To prevent the mother and infant being harmed from the powers of the supernatural and black magic, they protect themselves with materials called 'jimat' such as garlic, scissors and knives [15]. Women who are aware of the health of the baby tend to have healthy behaviour,including adequate consumption of iron [22].

3.1.2Rural area

Women in rural and remote areas are disadvantaged in regard to maternity services. The main reason is because of geographical constraint and scarcity of adequate health facilities such as medical supplies and ambulances so that they have to provide additional cost for transportation and food [23], [19], [20], [18], [20], [5]. They need to make a long journey of around 2-3 hours in a typical terrain road resulting in delay in reaching adequate emergency obstetric care [23].

Additionally, a midwife working in a rural area often leaves the village empty even though the government has provided an official house for them [17], [25], [14], [18].Uncomfortable with the environment in the village, and the advantage of working in private sector or continuing with study are some of the reasons for a midwife leaving the village [25], [24], [20]. Unavailability of a midwife in the villages will be a disadvantage for women as [26]contend that maternity services such as iron supplements and ANC are more accessible when the midwife is present in the village.

It is also reported that people in rural areas have limited access to a health insurance scheme provided by the government due to lack of information and a complicated procedure to have it which means they have to pay out of their own pocket [19][18]. They also observe more food taboos [21]. Vegetable and fruit are more important than meat or fish, rice is the only staple food to be consumed, iron tablets will increase the baby's size which makes it more difficult in delivery and they think that to consume some foods such as eggs will mean effect on long time needed in delivery process as the women will act as a chicken [21], [27]. This fact implied the limitation of health promotion in rural area [28]

3.1.3 Teenagers and unmarried women

Study shows that the earliest year to have sex in young people is about 15 years old [29], [30]. References [30]state that 32 % of young people experiencing premarital sex also experienced unintended pregnancy and most of them experienced illegal abortion. The term "Finished first' or 'study first' encourage young people to finish their study and postpone having sex [31]. Women and their families are embarrassed with that situation and attempt to hide the pregnancy [29].This situation sometimes is accompanied by the complication that her partner is less likely to marry the woman because a bride price involves a large amount of money and animals demanded by the woman's family and is unaffordable and there is also the risk of the woman having to leave school [29].

Similarly, unmarried women are considered at high risk of maternal mortality. Because it is highly stigmatized, she and her family tend to hide the pregnancy [28], [18]. References [18]also the family or relatives of unmarried women are passive in seeking medical help in an emergency situation and accept that situation as the pregnant woman's destiny.

3.2 Cultural - Barriers.

3.2.1 Perceptions related to pregnancy, delivery and death.

People perceived that pregnancy is a normal cycle in a woman's life so that health services will be sought only if there is a complication that cannot be handled [32], [15], [14], [24]. Women who have complications in delivery face the belief that this is caused by supernatural and black magic forces that only can be handled by a TBA, shaman or traditional healer [16], [19], [33]. Belief in ancestors who prohibit having modern health services and contraception influences people's behaviour to avoid health services in order to protect them from miscarriage and infertility [28]. The death of a mother is perceived as her destiny and the will of God [19], [15], [18], [16]. This perception causes delay in the family seeking care as they are being passive and pray to God without any effort to get help because they believe that death cannot be avoided and is unchangeable [18], [16].

3.2.2 Perception related to family planning

The value of sons and daughters impact on the number of children wanted. A son is important in relation to the continuity of the husband's family name as well as in his role in religious ceremony, which makes women feel comfortable if they have a son even if it means facing poverty [34].People believe in the advantage of a big family with the thought that "the more children, the greater the luck for the family", and also the guarantee of help when the parents get old and for helping in work [35], [34]. Additionally, people also emphasize the importance of having both sons and daughters [28]. This belief influences the increase of the Total Fertility Rate (TFR) and the Infant Mortality Rate (IMR) in some places in Indonesia [25].

3.2.3 Practice related to Pregnancy and Delivery.

With a lack of knowledge of the dangers signs of pregnancy, such as headaches, sprayed water conducted by a TBA is perceived as an effective way to heal a headache appearing during pregnancy [32], [15]. Regarding place of delivery, [13]contends that a mother is brought to the forest for delivery and fibers of bamboo and guava leaf are used for cutting the umbilical cord and cleaning the baby. [18], state that a round house, a traditional house which is believed in as a symbol of welfare and fertility is preferred as a good place for delivery. Women also prefer home delivery because they can do their household chores instead of waiting in a health facility [14]. A ritual called 'dikei' will be performed to facilitate delayed childbirth in Riau, Indonesia [36]. Similarly, in eastern Indonesia, ritual called 'nakety' will be performed if there is a complication happening during delivery causing delay in seeking medical help [18]. TBA or traditional healers and shamans are preferable as they believe modern services are unable to overcome black magic and the supernatural [19]Traditional Birth Attendant

The practice of utilizing a TBA is common in mother and child health. TBA or 'dukunbayi' or 'paraji' is usually a local person who has their own children and/or old woman delivering services that are seen as assigned by God and providing authentic practice [13], [33], [32]. They are considered patient, and experienced because they already have their own children, and have practiced for a longer time [14], [33]. They provide services such as prayer, and massage during pregnancy because they know the baby's position in the womb and are able to bring it into good position for normal delivery. They can also maintain the uterus into normal size after delivery, assist in pushing in delivery, help with household chores and treat the baby until it is 40 days old [17], [28], [32], [20], [13], [14]. They have an expectation that their skill remains utilized in the community, and this makes them less interested in cooperating with the midwife [28],[20]. This will be a challenge in developing partnership because the midwives who are taught western methods as 'modern', intend to remove the practice of TBAs who are considered as primitive or traditional [33].

3.2.4 Gender inequity

Women seem to be powerless because they follow the tradition as recommended by parents, parents in law and others whether this is about food or tradition during pregnancy in delivery, without understanding the real meaning of that tradition but just to have comfort and to please their family members [27], [15]. Discussion will be held first between the husband and family member, around 20, before a woman will be brought into the health facility [33], [32]. Even more, women also lack autonomy to choose who will be their husband [35]. Some of them are forced to get married at 16 years [23] and in community, women aged 22 years old are considered too old for having their first baby [34]. In relation to eating habits, husband and another child are mainly the persons who will be more prioritized for having food [21].

3.2.5 Perception related to midwife performance and health services

People perceived midwives as inexperienced because their age is too young and they are a stranger [28]. As a wife, a midwife also relies on their husband's permission if people need their help outside office hours [20]. Some women feel embarrassed if they have a midwife service without payment despite the fact they hold a social insurance card [14]. The midwife tends to put less concern on the women's privacy as evidence shows that inadequate room for the ANC is uncomfortable for women [25]. Women are dissatisfied with midwife's service because they were not notified about the result of their examination [17]. Episiotomy, a method used to enable faster delivery process, is perceived as showing a midwife who is not patient in the delivery process [32]. Unavailability of hot water in the health facility also causes a preference for home delivery [28].Moreover, it is also noted that people who held a card in the social insurance scheme experienced discriminative and unfriendly services in the health facility which makes them feel uncomfortable [16]. As [23] found that health care services do not protect women's rights adequately.

4. CONCLUSION

A systematic search has been conducted to understand the socio-culture aspect of pregnancy and delivery which determines maternal mortality in Indonesia. 37 articles were retrieved but only 25 articles ranging from 2005 to the present were reviewed and they yielded 2 themes which have emerged from the literature review. They are; (1).Vulnerable populations of Maternal Mortality in Indonesia, and (2). Cultural-Barriers.

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