



## Family Decision Making in Utilization of Pregnancy and Maternity Services

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### ABSTRACT

Efforts to improve maternal and child health in Indonesia have been carried out for a long time, namely with quality maternal health services starting from the time of pregnancy, delivery assistance by trained health personnel, postpartum care for mothers and babies, special care and referrals if complications occur, obtaining leave pregnancy and childbirth, and access to family planning. Maternal health service is a place used to carry out service efforts. Health services for pregnant women are realized through the provision of antenatal care at least six times during pregnancy. Objective: This study was to determine the factors of family decision making in the utilization of pregnancy and delivery services. Methods This research will use an analytic type using a cross-sectional design. The number of samples in this study were 40 people with a duration of 7 months. Total sampling technique. Data analysis consisted of univariate analysis and bivariate analysis with the chi-square test. Results: The results of the study showed that the majority of the factors of good knowledge were 20 people, the majority of the high economic factors were 21 people and the mileage factor was 21 people. Conclusion: There is a relationship between knowledge, economics and distance traveled with the utilization of pregnancy and delivery services with a p value of 0.000. This research is expected to be an input for pregnancy and delivery services so that they can be maximized.

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### Kata kunci:

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### ABSTRAK

Upaya untuk meningkatkan kesehatan ibu dan anak di Indonesia telah lama dilakukan, yaitu dengan pelayanan kesehatan ibu yang berkualitas mulai dari saat hamil, pertolongan persalinan oleh tenaga kesehatan terlatih, perawatan pasca persalinan bagi ibu dan bayi, perawatan khusus dan rujukan jika terjadi komplikasi, memperoleh cuti hamil dan melahirkan, serta akses terhadap keluarga berencana. Pelayanan kesehatan ibu adalah tempat yang digunakan untuk menyelenggarakan upaya pelayanan. Pelayanan kesehatan ibu hamil diwujudkan melalui pemberian pelayanan antenatal sekurang-kurangnya enam kali selama masa kehamilan. Tujuan: Penelitian ini untuk mengetahui Faktor-faktor pengambilan keputusan keluarga dalam pemanfaatan pelayanan kehamilan dan bersalin. Metode Penelitian ini akan menggunakan jenis analitik dengan menggunakan desain cross-sectional. Jumlah sampel dalam penelitian ini adalah 40 orang dengan lama penelitian 7 bulan. Teknik pengambilan total sampling. Analisis data terdiri dari analisis univariat dan analisis bivariat dengan uji chi square. Hasil: Hasil penelitian mayoritas factor pengetahuan baik sebanyak 20 orang, mayoritas factor ekonomi tinggi 21 orang dan faktor jarak tempuh 21 orang. Kesimpulan: Terdapat hubungan antara factor pengetahuan, ekonomi dan jarak tempuh dengan pemanfaatan pelayanan kehamilan dan bersalin dengan p value 0.000. Penelitian ini diharapkan

dapat menjadi masukan bagi pelayanan kehamilan dan persalinan agar dapat lebih maksimal.

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## INTRODUCTION

Childbirth is a procedure for removing the products of conception (embryo and placenta) physiologically from the uterus to the outside through the birth canal or other means with assistance when the gestational age is sufficient (37-42 weeks). The problems identified in pregnancy and childbirth, including the maternal mortality rate (MMR), are influenced by the health status of the mother, assessment during pregnancy, assistance during labor and postnatal care. In an effort to reduce MMR and infant mortality (IMR), it is better for pregnant women to complete routine visits to competent service providers to minimize elements that can impact the health of the mother and baby through antenatal care (Imelda, 2018).

Efforts to improve maternal and child health in Indonesia have been carried out for a long time, namely with quality maternal health services starting from the time of pregnancy, delivery assistance by trained health personnel, postpartum care for mothers and babies, special care and referrals if complications occur, obtaining leave pregnancy and childbirth, and access to family planning. Maternal health services are places that are used to organize health service efforts (Andriani et al., 2019).

The maternal mortality rate is very high. Approximately 295,000 women died during and after pregnancy and childbirth in 2017. The vast majority of these deaths (94%) occurred in low-resource settings, and most were preventable. Sub-Saharan Africa and South Asia accounted for around 86% (254,000) of the estimated global maternal deaths in 2017. Sub-Saharan Africa alone accounted for about two-thirds (196,000) of maternal deaths, while South Asia accounted for nearly one-fifth (58,000). At the same time, between 2000 and 2017, South Asia experienced the largest overall decline in MMR: a decline of almost 60% (from 384 MMR to 157). Despite its very high MMR in 2017, sub-Saharan Africa as a sub-region also achieved a substantial reduction in MMR of almost 40% since 2000. In addition, four other sub-regions roughly halved their MMR during this period: Asia Central, East Asia, Europe and North Africa. Overall, the maternal mortality ratio (MMR) in less developed countries has decreased to just under 50% (Ministry of Health, 2020)

The number of maternal deaths compiled from the registration of family health programs at the Ministry of Health in 2020 shows 4,627 deaths in Indonesia. This number shows an increase compared to 2019 of 4,221 deaths. Based on the causes, the majority of maternal deaths in 2020 were caused by 1,330 cases of bleeding, 1,110 cases of hypertension during pregnancy, and 230 cases of disorders of the circulatory system. Efforts to accelerate the reduction of MMR are carried out by ensuring that every mother is able to access quality maternal health services, such as health services for pregnant women, delivery assistance by trained health workers at health service facilities, postpartum care for mothers and babies, special care and referrals if complications occur. , and family

planning services including postpartum family planning (Ministry of Health, 2020)

Pregnancy is a condition in which a woman has an embryo or fetus in her womb. Pregnancy begins from the time of conception to the birth of the fetus, and the length of pregnancy starts from ovulation to parturition which is estimated to be around 40 weeks and does not exceed 43 weeks (Dharmayanti et al., 2019)

According to the Ministry of Health in 2020 antenatal visits to pregnant women to get care and services ANC is carried out at least 6 times during pregnancy, namely 2 visits in the first trimester (0-12 weeks), one visit in the second trimester (13-24 weeks) and three times in the third trimester (25-40 weeks). Where at least 2x was examined by a doctor during the first visit in the first trimester and once at the 5th visit in the third trimester (Ministry of Health, 2020).

From 2007 to 2020 the coverage of K4 pregnant women's health services tends to increase. However, a decrease occurred in 2020 compared to 2019, namely from 88.54% to 84.6%. This decrease is assumed to have occurred due to program implementation in areas affected by the COVID-19 pandemic. K4 coverage in North Sumatra is 79.8%. In addition to access to health service facilities, the obstacle faced in implementing health services for pregnant women is the quality of services that must be improved, including the fulfillment of all components of health services for pregnant women must be provided during visits (Ministry of Health, 2020)

Deliveries assisted by health personnel in 2020 in Indonesia at 89.8%. Meanwhile, pregnant women who underwent childbirth assisted by health workers at health care facilities were 86%. It can be said that there are still 3.8% of deliveries assisted by health personnel but not carried out in health care facilities. This difference has increased compared to 2019, which was 2.2.% and the achievement of deliveries assisted by health personnel at health facilities was 88.75% (Ministry of Health, 2020)

90.95 by 86% against the target of 87%. DKI Jakarta Province had the highest achievement of 99.6%, while Maluku had the lowest achievement of 31.4%. There are quite significant differences between the two provinces. Provinces with high achievements are generally in the western region, while provinces with low achievements are mostly in the eastern region. The Coverage of Delivery in Health Service Facilities in North Sumatra is 81.9%, still below the Ministry of Health's 2020 strategic target of 87% (Ministry of Health) Health, 2020)

Pregnancy check-up services are health services provided by health workers for pregnant women during their pregnancy, carried out in accordance with the standards of antenatal care in the Midwifery Service Standards. Health workers who are competent to provide antenatal care to pregnant women include obstetricians, doctors, midwives and nurses. Examinations carried out during antenatal care include weighing and measuring height (weighing), measuring blood pressure (pressure), measuring upper arm circumference, measuring uterine fundal height (height),

determining fetal presentation and fetal heart rate (DJJ), administering iron tablets (Tablets), administering tetanus toxoid (TT) immunization, holding speech meetings (providing interpersonal communication and counseling, including family planning), testing for infectious diseases and managing cases (Ministry of Health, 2020)

of care Continuum services during pregnancy, childbirth and the puerperium. The gap that occurred during pregnancy visits increased but births in health care facilities were 36.8%, the coverage of deliveries by health personnel was high but inadequate, the facilities and health workers were inadequate (Cahyani, 2019)

The behavior of patients in need of health assistance, namely when patients feel complaints for the disease or condition that the patient feels, then the patient seeks help from health workers at health facility services in order to resolve the health problems they face, in the form of follow-up therapy or appropriate treatment. Patient behavior in the form of individual or group health has an impact on the basis of several elements such as knowledge, behavior, beliefs, values and perceptions that will influence individual and group motivation to act. Based on research, it is proven that patient behavior towards decisions to use health facilities decreases after being influenced by culture and hereditary beliefs that prefer traditional healers, thus showing a consistent relationship (Obasohan et al., 2019).

Utilization of health services is basically the result of interaction between service users (consumers) and service providers (providers). This interaction is a very complex matter and is related to many factors. Factors that influence the utilization of health services include sociocultural factors, factors related to consumers, factors related to health service providers and other factors (Raehan & Irfan, 2022)

**METHOD**

The type of research used is analytic with a cross-sectional design. The implementation was carried out at the Pancur Batu Health Center from December to June 2022. The population and sample in this study were families with pregnant women. The sampling technique is *non-probability sampling*, namely *total sampling*. The instrument used in this study was a questionnaire containing questions on knowledge, economics (income) and mileage.

**RESULTS AND DISCUSSION**

**RESULTS**

**Table 1. Factors of Family Decision Making in Utilization of Pregnancy and Maternity Services**

Factors of	Service Utilization				Amount of		P Value
	Utilized		Not Utilized		n	%	
	n	%	n	%			
<b>Knowledge</b>							
Good	20	9	1	6	21	53	<b>0.000</b>
Enough	2	9	16	89	18	45	
Less	0	0	1	6	1	3	
<b>Total</b>	<b>22</b>	<b>55</b>	<b>18</b>	<b>45</b>	<b>40</b>	<b>100</b>	
<b>Economy</b>							
High	21	95	1	6	22	55	<b>0.000</b>
Medium	1	5	16	89	17	43	
Low	0	0	1	6	1	3	
<b>Total</b>	<b>22</b>	<b>55</b>	<b>18</b>	<b>45</b>	<b>40</b>	<b>100</b>	

While the mileage factor based on the results of statistical statistical tests *P value* 0.000 is less than 0.05 so there is a relationship between the mileage factor and family decision making in the use of pregnancy and maternity services

**DISCUSSIONS**

**Utilization of Pregnancy and Maternity Health Services Based on the Knowledge**

Factor The knowledge factor shows that the results of the statistical test *P value* 0.000 are less than 0.05 so that there is a relationship between the knowledge factor and family decision making in the utilization of pregnancy and maternity services. One of the factors that influence knowledge is the educational factor because education is one of the basic human needs that is indispensable for self-development, the higher a person's education level, the easier it will be to receive, sort and develop knowledge. Apart from education and work, according to Hal et al., 2021, factors that influence knowledge are experience, beliefs and socio-culture. One's experience greatly influences

knowledge, the more one's experience of something, the more one's knowledge of it will increase. Beliefs acquired by a person can usually be obtained from generation to generation and cannot be proven in advance, positive beliefs and negative beliefs can affect one's knowledge. Culture and habits in the family can influence a person's knowledge, perceptions and attitudes towards something (Hal et al., 2021).

Knowledge is one of the supporters in forming attitudes to know about the use of health facilities. This knowledge is obtained from education, as well as information sources (health workers, books/magazines, television, friends, family), as expressed by (Raehan & Irfan, 2022), namely the factors that influence knowledge include education and information. Knowledge itself according to (Hou & Ma, 2019) is influenced by factors of formal education. Knowledge is very closely related to education, where it is hoped that with higher education the person will also have a wider knowledge base (Khudhori, 2012).

However, it needs to be emphasized, it does not mean that someone with low formal education also has low knowledge. This is considering that increasing knowledge is not absolutely obtained from formal education, but can be obtained through non-formal education. The level of public

education is associated with the ability to absorb and receive information in the health sector (Roy et al., 2017).

According to say that knowledge results from "knowing" and that occurs after people sense a certain object, sensing occurs through the five human senses, namely the senses sight, smell, taste, hearing and touch. Most knowledge or cognition is a very important domain for the formation of one's actions (Tiruneh et al., 2017)

According to (Ganle et al., 2018a) Knowledge is an impression in the human mind as a result of using its five senses. Factors influencing Knowledge are everything that is known based on age, interests, education and experience that is obtained by every human being. Basically knowledge will continue to increase and vary according to the process of human experience that is experienced. This is in line with the statement (Ulfa et al., 2017) Knowledge is the result of knowing, and this occurs after people sense an object.

Knowledge is an important part of shaping one's behavior. Someone who is based on good knowledge of health, then that person will understand the importance of maintaining health. The higher the mother's knowledge of the importance of health, makes the mother aware of the benefits of health service facilities, a good and safe helper during childbirth and also the right place to give birth, which in turn will influence the behavior of the mother. Knowledge can be obtained from various information media, from experience, beliefs, traditions and from socio-cultural factors. In addition, high knowledge cannot be separated from higher education as well. Mothers with high levels of education find it easier to receive information and do it. Behavioral theory states that knowledge is an important part of shaping a person's behavior (Putri et al., 2021).

The results of this study are in line with the results of previous studies which state that good knowledge about health plays an important role in shaping the behavior of mothers, especially in terms of decision making regarding the place of delivery. A mother with a good level of knowledge about the importance of giving birth at a health facility will certainly use a health facility as a place to give birth, and vice versa. Utilization of health facilities as a place for delivery will also have an impact on reducing MMR and babies. Increased knowledge can be carried out through the class program for pregnant women, through posyandu activities, the mass media and the role of health workers in utilizing social media to disseminate health information, as well as direct visits by cadres for pregnant and giving birth mothers, especially for mothers who do not give birth in fasyankes (Aswar Zulkifli Syam, Syria, 2019).

The results of this study are in line with research (Ganle et al., 2018a) that there is an effect of education or knowledge on choosing a place of delivery. Research by (Almas et al., 2021) also shows that there is a relationship between knowledge and choosing a place of delivery. The results of the research are in accordance with the theory (Cahyani, 2019), that human behavior is formed from predisposing factors, enabling factors and reinforcing factors. Knowledge is one of the predisposing factors so that knowledge plays a role in shaping human behavior. So that in choosing a place of delivery, knowledge about delivery and place of delivery is a very important domain for the formation of a mother's behavior in choosing a place of delivery. Mothers with less knowledge will prefer to give birth at home (Manuk et al., 2021).

This is because the mother does not know that during childbirth complications can occur at any time and if the birth is at home and has complications, it cannot be handled properly. Another fact that exists among mothers is that

even though they have sufficient knowledge they still choose a dukun as a birth attendant at home. Various reasons were put forward by them for not choosing to give birth at a health facility or assisted by a midwife, including not trusting young midwives. Increased knowledge of mothers giving birth can be done in various ways including increasing access to information through classes for pregnant women, posyandu, mass media and health workers where it is very important to bring access to information closer to mothers about the importance of giving birth in health facilities. The better the mother's knowledge of pregnancy and childbirth, the more likely the mother is to use health services. This will indirectly contribute to reducing maternal and infant mortality (Manuk et al., 2021).

### **Utilization of Pregnancy and Maternity Health Services Based on Factors Economic**

While the economic factor based on the results of statistical tests *P value* 0.000 is less than 0.05 so that there is a relationship between economic factors and family decision making in the use of pregnancy and maternity services.

Implementation of health services will be influenced by the economic level in society. The higher a person's economy, health services will be more concerned and easy to reach, and vice versa if a person's economic level is low, it is very difficult to reach health services considering the cost of health services is quite expensive. This economic situation can affect the health service system (Dharmayanti et al., 2019).

Income is money received and given to economic subjects based on the suggested achievements, namely income from work, income from professions carried out alone or individual businesses and income from wealth and from sub-system factors (Putri et al., 2021). Income is the total receipt (money and not money) of a person or a household during a certain period (Wau & Razella, 2020). Research (Kebede et al., 2021) states that the family income variable has an influence on the utilization of antenatal services

. In line with research conducted (Dewi, 2012) that family income is a form of satisfaction in obtaining health services. Likewise the author's assumption that respondents with low incomes with their health insurance are respondents who consider examination fees affordable and there are even free services at the Puskesmas. This condition is the same as research (Aryastami & Mubasyiroh, 2019), namely the respondent's perception of the cost of antenatal care being considered affordable by the community so that income has no effect on the utilization of health services.

The better the community's economic conditions, the higher the percentage who use health services (Vidler et al., 2016)

Decent work certainly has an impact on income or earnings. The better the job obtained from educational achievements, the more it determines a person's high income (Akpenpuun, 2018). The results of the study have reported that the higher the income, the greater the tendency to choose delivery services in the private sector, even so there are still high income respondents who choose services in the government, this can be caused by educational factors. This research is in line with research (Begley et al., 2019) that there is a relationship between the economic status of the family and the choice of delivery at a health facility. Research (Wau & Razella, 2020) also states that there is a relationship between family income and the



choice of birth attendants. (Matna Sihani Gulo<sup>1</sup>, Sony Priajaya Warouw<sup>2</sup>, 2022) in his research stated that income reflects a person's socioeconomic level, where most respondents have moderate income/middle socioeconomic level. Income affects the purchasing power of patients/respondents for outpatient services at the Pandanaran Health Center, Semarang City. The patient's purchasing power will affect the patient's perception of expectations and satisfaction with outpatient services because it also determines the type of service desired (Matna Sihani Gulo<sup>1</sup>, Sony Priajaya Warouw<sup>2</sup>, 2022)

With nutritious food, family members will receive better nutritional intake for growth and development for infants and health maintenance for adult family members. Adequacy of food consumed certainly supports health status so that it will support productivity (Ulfa et al., 2017).

In line with research conducted (Dewi, 2012) that family income is a form of satisfaction in obtaining health services. Likewise the author's assumption that respondents with low incomes with their health insurance are respondents who consider examination fees affordable and there are even free services at the Puskesmas. This condition is the same as research (Ulfa et al., 2017), namely respondents' perceptions of the cost of antenatal care being considered affordable by the community so that income has no effect on the utilization of health services

(Roy et al., 2017) reveals that price is a burden in the form of costs to a goods or services, which are replaced with benefits obtained for having or using these products or services. Higher costs lead to greater awareness of the monetary dangers associated with purchases, thereby encouraging cheaper searches for similar items. Based on the research, it was found that the results of the use of health services were based on the service fee that needed to be paid. The results of the study (Andriani et al., 2019) revealed that the community's powerlessness to pay expensive service fees resulted in a low desire to obtain health services.

Income is money received and given to economic subjects based on suggested achievements, namely income from work, income from professions carried out alone or individual businesses and income from wealth and from sub-system factors (Andriani et al., 2019). Income is the total receipt (money and not money) of a person or a household for a certain period (Manuk et al., 2021).

High family income will increase expenditure and *demand* for health services. The higher a person's income will increase the need for health. (Khudhori, 2012), states that high income will increase *demand* for the utilization of health services. Meanwhile, according to (Matna Sihani Gulo<sup>1</sup>, Sony Priajaya Warouw<sup>2</sup>, 2022), states that economic factors influence better use of health services.

### Utilization of Pregnancy and Birth Based Health Services Mileage

Factor Meanwhile, based on the statistical test results, the mileage factor is *P value* 0.000 which is less than 0.05 so that there is a relationship between the mileage factor and family decision making in the use of pregnancy and maternity services.

Accessibility means that health services must be accessible to the community, not hindered by geographical, social and economic conditions. The farther the distance from the house to the health center, the less often the mother makes an inspection visit to the health center. Geographic access is measured by distance, travel time, travel costs, types of transportation to get health services

and economic access. Economic access relates to the ability to pay for health services. Pregnant women who take advantage of antenatal services can easily access health services (Andriani et al., 2019).

Distance is the number of routes so that a person can reach health care facilities such as health centers, clinics, maternity homes or hospitals whose convenience is assessed based on the required travel time, the amount of distance traveled and the funds spent to reach that place (Dewi, 2012). According to (Ganle et al., 2018b), any effort (time, energy and so on) involved in each activity will increase the sense of ownership so that it will influence one's actions. Research (Simanjuntak et al., 2017) revealed results where there was a comparison of service utilization in a large number of Jamkesmas patients who lived near health services compared to Jamkesmas patients who lived far from health care facilities. Thus the hypothesis put forward is:

According to research (Shire Jimale et al., 2020) states that distance (long distance) affects people in seeking treatment facilities. Meanwhile (Roy et al., 2017) concluded that the factor of the proximity of health services to residential homes is the first order factor for consumer demand in the utilization of health services.

From the results of the analysis, it shows that most mothers have easy access to places of service. Researchers assume that mothers with easy distance/access always take advantage of antenatal services compared to mothers who find it difficult to reach places of service, but that does not mean that mothers do not use services at all because of the long distance. it is difficult or far away for this mother to visit the place closest to her place of residence, so having a pregnancy checked at a place of service outside the work area does not mean that a mother who is far away does not take advantage of antenatal care. In line with research (Raehan & Irfan, 2022) that the distance to health services is one of the factors that play a role in the use of antenatal services, the closer to the home of pregnant women to health services, the easier it will be for mothers to frequently check their pregnancies.

Distance is how far the route taken by the respondent to the place of health services which includes hospitals, health centers, posyandu, and others. A measure of how easy or difficult a location is to reach, one of which is stated by (Matna Sihani Gulo<sup>1</sup>, Sony Priajaya Warouw<sup>2</sup>, 2022), he states that the accessibility of a place is a function of the proximity to alternative destinations of various utilities, as measured by the time indicator, distance and cost.

The distance to health services based on the 2011 Riskesdas Report is classified as less than 1 kilometer (<1 km), 1 to five kilometers (1–5 km), more than five kilometers (>5 km). Meanwhile, travel time is classified as less than 15 minutes (<15'), between 16 to 30 minutes (16'-30') and between 31 to 60 minutes (31'-60') and more than sixty minutes (>60').

(Ulfa et al., 2017) concluded that the factor of the proximity of health services to residential homes is the first order factor for consumer demand in the utilization of health services. According to research (Goldberg, 2019), there are 2,930 more Jamkesmas members who have a positive attitude on attaining health facilities than members who have a negative attitude.

Accessibility of health services, namely the affordability of health service places as assessed from the aspect of the mode of transportation used, travel time (in minutes) and transportation costs to the health facility. Remote access to health services is not a reason that prevents mothers from giving birth at health facilities. Availability of means of

transportation and transport costs that can still be reached, coupled with good road conditions, will make it easier for mothers to go to health facilities. (Begley et al., 2019) states that health behavior is also influenced by the availability and affordability of health resources. The findings of this study support the findings of previous studies which state that mothers who are far and near have the same opportunity to be able to reach health facilities. A mother's decision to choose a health facility as a place for delivery is not only influenced by access to services but also supporting factors such as husband's support which also influences maternal health behavior (Putri et al., 2021).

The affordability of the community, including the distance to health facilities, influences the selection of health services. In addition, distance is the second component that allows a person to take advantage of medical services. Affordability is based on the perception of distance and the presence or absence of private vehicles. Availability and ease of reaching service points, access to health facilities and transportation is one of the family's considerations in making a decision to find a place for health services (Raehan & Irfan, 2022).

#### LIMITATION OF THE STUDY

The limitations of this study are the small number of samples, many family decision-making variables in the use of pregnancy and maternity services that have not been studied

#### CONCLUSIONS AND SUGGESTIONS

Factors of knowledge, economy, and mileage show the results of the statistical test  $P$  value 0.000 is less than 0.05 so that there is a relationship between knowledge factors and family decision making in the use of pregnancy and maternity services. It is hoped that for future researchers it is necessary to conduct research with other variables because there are many factors that can be explored about the factors that influence the choice of place of delivery

#### ETHICAL CONSIDERATIONS

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