Factors Influencing the Utilization of Childbirth Services in Health Care Facilities at Anggaberi Primary Health Care, Konawe District

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Abstract

The childbirth coverage in health facilities (PF) at Primary Health Care Anggaberi Public Health Center in 2017 has reached 72.6%, and increased in 2018 by 76.18%. At district level, the PF indicator at Primary Health Care Anggaberi Public Health Center has exceeded the target in Konawe District by 59.37%, however but the 80% target achievement of PF at the Primary Health Care Anggaberi Public Health Center has not been achieved. Seeing this, the coverage of PF at the Primary Health Care Anggaberi Public Health Center, there are still labors that are not performed in health facilities, so that it can affect the achievement of PF at the Primary Health Care Anggaberi Public Health Center, Konawe District. The aim of the study was to analyze factors that influence utilization of health care facilities at the Primary Health Care Anggaberi Public Health Center. This research is an analytical study with a cross sectional approach. The research
instrument used was a structured questionnaire on the factors that affect the utilization of labor service in health care facilities. The number of samples was 51 women who had labor at the Anggaberi Health Center. Bivariate analysis was done with chi square test and multivariate analysis with logistic regression test. The results showed the six factors (education \( p = 0.041 \)) and work \( (p = 0.019) \) family income \( (p = 0.041) \) and accessibility \( (p = 0.021) \) husband support \( (p = 0.011) \) and health personnel support \( (p = 0.011) \) ) on the use of childbirth services in health care facilities at the Primary Health Care Anggaberi Public Health Center, Konawe District. The multivariate results show that all independent variables in this study have a significance limit of \( p \)-value \( \leq 0.25 \), so it can be concluded that there is an influence among each independent variable (education, occupation, income, accessibility, husband’s support and support of health workers) with the dependent variable (utilization of childbirth services in health service facilities). Health care centers are expected to improve the partnership with traditional midwife (dukun beranak) within their work area so that the dukun can become well trained and they can collaborate in every childbirth.

Keywords: utilization of health services; predisposing; public health center

INTRODUCTION

Maternal Mortality Rate (MMR) is an indicator that reflects maternal health status, particularly the risk of death for women during pregnancy, childbirth and post childbirth. Factors that influence the incidence of maternal mortality are close determinants, intermediate determinants and distance determinants (1). In 2012, MMR had a significant increase, which was up to 359 / 100,000 KH, there was a decrease in MMR in 2015 of 305 / 100,000 KH. At this rate, MMR in Indonesia is expected to achieve the Sustainable Development Goals (SDGs) target of 70 per 100,000 live births in 2030. This is the concern of the Indonesian government so that improving maternal and child health is one of the development priorities in the health sector (2).

In Southeast Sulawesi Province (Sultra), the number and MMR reported in 2017 was 149/100,000 KH, there was a decrease in 2018 of 117/100,000 KH and bounced back in 2019 by 128/100,000 KH (3). Meanwhile MMR in Konawe District in 2017 was 128/100,000 KH, decreased in 2018 to 79/100,000 KH and in 2019 the number was 23/100,000 KH. This data also shows that the number of cases is not always directly proportional to the MMR, because it is very much influenced by the population or target of each area (4).

The high MMR in some areas of Konawe District is caused by various reasons, including the detection of the risk of pregnancy is not optimal. This is due to the quality of the ANC that is not optimal, besides the delay in handling maternal emergencies which can be caused by delays in referring the patient which this is not only caused by the ANC being not optimal but also by socio-cultural factors in the community, limited infrastructure in health care facilities, transportation hindrance which means that access to health facilities is relatively long and difficult, the condition of the area is remote, and the community’s economy also contributes to maternal mortality during childbirth (4).

Utilization of health services does not go through a single process, instead many
interventions affect it. Since there is no single influence in decision making about the use of health services, many experts have come up and developed theories. This study is using theory by Anderson with a health behavior model. According to Anderson’s theory, there are 3 main categories that affect the behavior of health service utilization, namely predisposing characteristics, enabling characteristics and need characteristics (5).

Maternal mortality is closely related to birth attendants and facilities. Deliveries assisted by trained health personnel (PN), such as obstetrics and gynecology specialists (SpOG), general practitioners and midwives, carried out in health care facilities (PF) is a key factor in reducing the risk of maternal death. Therefore, the government policy in order to improve maternal and child health (KIA) has an implementation strategy, one of which is the continuous improvement of maternal and neonatal services in public and private health service facilities by encouraging all deliveries to be carried out in health care facilities. The success of this program is measured by the PF coverage indicator, replacing the PN indicator (6).

Konawe District is one of the districts in Southeast Sulawesi Province with the third lowest PF coverage after Buton and North Konawe districts. The coverage of PF in Konawe District in 2018 was 59.37% while the target coverage in Southeast Sulawesi Province was 76.18%, and in 2019 the PF coverage in Konawe District was 69.17%. The achievement of this coverage was still below the expected target in Southeast Sulawesi Province which was 80.98% (3), while the achievement of PF coverage at the UPTD Anggaberi Public Health Center increased consecutively in 2017 which was 72.6% and 76.18% in 2018 in terms of district the PF indicator at UPTD Anggaberi Public Health Center has exceeded the target in Konawe District with 59.37% however the achievement of PF at the UPTD Anggaberi Public Health Center by 80% alone has not been achieved. Seeing the phenomenon of PF coverage in the UPTD Anggaberi Public Health Center, there are still deliveries that were not carried out in health facilities, so that it can affect the outcomes of childbirth at health facilities (PF) at UPTD Anggaberi Public Health Center, Konawe District (7).

The achievement of the PF indicator at the UPTD Anggaberi Public Health Center that had not yet been achieved, often resulting in various problems or complications in the delivery process and even the death of the mother in labor. Analysis of maternal mortality proved that maternal mortality was closely related to birth attendants and delivery facilities. Various efforts were done to reduce maternal mortality. The Indonesian government through the Ministry of Health issued a policy so that every delivery is assisted by trained health personnel and that it is carried out in health care facilities (8), therefore researchers feel the need to conduct research on the factors that influence the utilization of labor (predisposing factors), supporting factors (enabling factors) and need factors in health care facilities, especially at the UPTD Anggaberi Public Health Center, Konawe District to increase PF coverage and to reduce MMR according to the objectives of the Sustainable Development Goals (SDG’s).

MATERIAL AND METHODS

This research method applied an analytical research with a cross sectional approach where data collection was carried out simultaneously to determine the factors (9), that influence the use of childbirth services in health care facilities at UPTD Anggaberi Public Health Center. The research was conducted in September-October 2020. The population in this study was all 103 women who had labor at the UPTD Anggaberi Public Health Center, This study used purposive
random sampling where researchers took samples based on certain considerations giving out (10) the research sample of 51 women in labor. The type of data used in this study was primary data which was obtained by interview using a structured questionnaire which is tested for validity and reliability before use, then in multivariate analysis using the Logistic Regression Test.

RESULT AND DISCUSSION

The univariate analysis in this study describes the frequency distribution of the independent variables (education, employment, family income, accessibility, husband support and support from health workers) and the dependent variable (utilization of delivery in health care facilities). Bivariate analysis is used to analyze the relationship between the independent variable and the dependent variable and multivariate analysis is used to analyze the effect of the independent variable and the dependent variable which is described in the table below:

There is a correlation between predisposing, enabling and need variables consisting of education, employment, family income, accessibility, husband support and support from health workers with the use of childbirth services in health care facilities with a p value <0.05. The next step is a multivariate analysis is carried out simultaneously to determine the magnitude of the influence of the independent variables with the dependent variables.

Based on table 2 above, it can be seen that all the independent variables in this study have a significance limit of p-value ≤ 0.25 therefore

<table>
<thead>
<tr>
<th>Variable</th>
<th>Sig.</th>
<th>Exp (B)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education</td>
<td>0.027</td>
<td>4.48</td>
</tr>
<tr>
<td>Occupation</td>
<td>0.017</td>
<td>5.156</td>
</tr>
<tr>
<td>Income</td>
<td>0.027</td>
<td>4.48</td>
</tr>
<tr>
<td>Accessibility</td>
<td>0.018</td>
<td>0.177</td>
</tr>
<tr>
<td>Health Worker’s Support</td>
<td>0.01</td>
<td>6.222</td>
</tr>
<tr>
<td>Husband’s Support</td>
<td>0.006</td>
<td>0.141</td>
</tr>
</tbody>
</table>

Table 2. Analysis of the factors that influence the use of childbirth services in health care facility at the UPTD Anggaberi Public Health Care Konawe District in 2020

Table 1. Analysis of Factors Associated with the Utilization of Childbirth services in health Care Facilities at the the UPTD Anggaberi Public Health Center, Konawe District in 2020

<table>
<thead>
<tr>
<th>Variable</th>
<th>p-value</th>
<th>Info</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education</td>
<td>0.041</td>
<td>Related</td>
</tr>
<tr>
<td>Occupation</td>
<td>0.019</td>
<td>Related</td>
</tr>
<tr>
<td>Income</td>
<td>0.041</td>
<td>Related</td>
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<tr>
<td>Accessibility</td>
<td>0.021</td>
<td>Related</td>
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<tr>
<td>Health Worker’s Support</td>
<td>0.011</td>
<td>Related</td>
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<tr>
<td>Husband’s Support</td>
<td>0.011</td>
<td>Related</td>
</tr>
</tbody>
</table>
that it can be concluded that there is an influence between each independent variable (education, employment, income, accessibility, husband’s support and support of personnel, health) with the dependent variable (utilization of delivery in health care facilities).

Discussion
Effect of predisposing characteristics on the use of labor services in health care facilities

Education
The results of statistical tests obtained p-value of 0.041 <0.05, meaning that there is a significant correlation between education and the use of childbirth services in health care facilities. The results of the logistic regression test for the education variable obtained p-value <0.05, which indicates that education has a significant effect on the use of childbirth services in health care facilities with the Exp value of 4.480 (95% CI = 1.184 - 16.945). This suggested that respondents who have higher education have 4.4 times higher opportunity to use health facilities than respondents with low education.

Based on the results of the study, in terms of the level of higher education, there were still respondents who did not take advantage of health service facilities. It’s because there were respondents who were having first time pregnancy with a normal pregnancy condition that felt comfortable choosing a house as a place of labor so that they were closer to their family and relatives. In addition, there are those who choose to give birth at home because the mothers feel that their privacy is more protected.

The results of this study are in line with Meyvi Dwi Putri (2015), that there is a correlation between the level of education and the use of health workers childbirth assistance. The results of the chi-square analysis obtained p value = 0.022 (p <0.05). This means that the higher the level of education, the higher the utilization of childbirth assistance by health workers. 86.0% of respondents with a high level of education preferred delivery assistance by health worker personnel (11).

According to (5), the higher a person’s education, the more materials, materials or knowledge a person has. Education is needed to obtain information, for example things that support health, so that it can improve health and quality of life. The higher a person’s education level will affect access to information and understanding of a problem that will affect their behavior, especially health behavior. Understanding of childbirth, the dangers / complications of childbirth, handling medical treatment will motivate and direct mothers to give birth in health facilities with competent health personnel and supported by better media equipment with the aim of maintaining the health of the mother and the fetus she is carrying.

Based on the findings, low maternal education is caused by a lack of public awareness to pursue higher education. This is due to the low economic ability of mothers to get higher education. Related to the choice of place of delivery that is in accordance with the health conditions of the mother and fetus, for example giving birth at a midwife or hospital. Meanwhile, mothers who have low education do not have information about the choice of place of delivery, so they tend to choose a place of delivery that is comfortable for the mother even though they do not know the health condition of the mother and fetus, namely at home.

Occupation
The results of statistical tests obtained a p-value of 0.019 <0.05, meaning that there is a significant relationship between work and the use of childbirth services in health care facilities. The results of the logistic regression test for work variables obtained p value <0.05, which indicates that work has a significant effect on the use of delivery in health care facilities with the
acquisition of an Exp value of 5,156 (95% CI = 1,344 - 19,779) meaning that respondents who work have the opportunity to take advantage of health facilities. 5.1 times higher than the unemployed respondents. Respondents who work and take advantage of childbirth services in health care facilities because they get information about the importance of giving birth to be assisted by health workers, either from electronic media or from colleagues.

Respondent professions in this study were more dominated by state civil servants who took advantage of childbirth services in health care facilities because they get information about the importance of giving birth to be assisted by health workers. Respondents who work and take advantage of childbirth in health care facilities because they get information about the importance of giving birth to be assisted by health personnel, one of them if there are complications that can be handled immediately This information is obtained either from health workers themselves, husbands, family, electronic media or from work colleagues. While respondents who do not work and utilize health service facilities are influenced by the awareness of respondents who feel safer and more comfortable with hygiene and health if they give birth to health workers.

Respondents who do not work and do not use health workers as birth attendants because respondents feel that they lack the cost of giving birth with health workers and respondents do not have health insurance to give birth at a health facility and there are respondents who give birth with their own mothers because the mother is a traditional birth attendant. While respondents who work and do not use health workers as birth attendants are influenced by the parents of the respondent’s family so that they still trust the parents to assist with childbirth.

The results of this study are not in line with Desi Fitrianeti (2017), that work has not a relationship with the use of childbirth assistance by health workers. The results of the chi-square analysis obtained the value of $p = 0.68$ ($p < 0.05$). This means that the higher the job, the higher the utilization of delivery assistance by health workers. Respondents who work using delivery assistance by health workers are 67.9% (12).

According to (13), maternal work is a daily routine activity carried out by a mother with the intention of earning income. Any work of any kind, whether it requires muscular strength or reason, is a burden to the performer. working mothers will generate money and increase their family income so that they are free to choose birth attendants. This shows that the greater the frequency of mothers who do not work with less knowledge than mothers who work with a good level of knowledge (13). In this study, respondents who have a profession more predominantly at the Anggaberri Primary Health Care, it is proven that more respondents choose to give birth at health facilities. However, this still needs to be improved because it is still found that 25.5% of working and non-working mothers do not use health facilities and prefer to give birth at home even though they are assisted by midwives and some are assisted by traditional birth attendants. Midwives must continue to promote or provide counseling to mothers, especially during the third trimester ANC visit that giving birth in a health facility is cleaner and safer than if the mother chooses to give birth at home.

**Effect of enabling characteristics with utilization of delivery in health service facilities**

**Income**

The results of statistical tests obtained a p-value of 0.041 <0.05, which means that there is a significant relationship between income and the use of labor services in health care facilities. The results of the income variable logistic regression test showed p value <0.05, which indicates that income has a significant effect on the use of
childbirth services in health care facilities with the value of \( \text{Exp (B)} = 4,480 \) (95% CI = 1,184 - 16,945). This means that respondents who are high income earners are 4.4 times more likely to use health facilities than respondents with low income. Respondents who have high incomes take advantage of childbirth services in health care facilities because they are well informed about the importance of giving birth be assisted by health personnel and are able to pay the cost of labor. Respondents who have low incomes and do not take advantage of health service facilities because they feel they cannot afford to pay for childbirth and do not have a health insurance card. Next up are respondents who have low incomes and take advantage of health service facilities because they have health insurance to help with the cost of childbirth and the respondents get a lot of information about deliveries in health facilities.

The results of this study are in line with Meyvi Dwi Putri (2015), who states that there is a correlation between family income and the use of childbirth assistance by health workers. The results of the chi-square analysis obtained p value = 0.037 (p <0.05). This means that the higher the family income, the higher the utilization of delivery assistance by health workers. As much as 82.1% of respondents who had a family income of ≥ IDR 1,020,000 took advantage of delivery assistance by health personnel (11).

Research (11), argues that family income is important in meeting primary (primary) and secondary needs, families with good economic status will be more easily fulfilled their needs than families with low economic status. Financial preparation is very necessary in preparation for the process of pregnancy, childbirth and childbirth and the complications that may occur. Family income affects the use of health services, in this case the choice of place of delivery (11).

Based on the findings, in terms of income, the dominant respondents have higher education and choose to give birth in health facilities. However, this still needs to be improved because it is still found that 25.5% of mothers with high or low income do not use health facilities. Midwives must continue to promote or provide counseling to mothers, especially during the third trimester ANC visit, that supplies before entering the delivery stage should be prepared such as obstetrician, health insurance and management of a certificate of poverty for respondents with low income.

**Accessibility**

The results of statistical tests obtained a p-value of 0.021 <0.05, which means that there is a significant relationship between accessibility and the use of childbirth services in health care facilities. The results of the logistic regression test for the accessibility variable obtained p value of <0.05, which indicates that accessibility has a significant effect on the use of childbirth services in health care facilities with the value of \( \text{Exp (B)} = 0.177 \) (95% CI = 0.042 - 0.746), meaning that respondents who have affordable access has a 0.1 times higher chance of using health facilities compared to respondents whose access is not limited.

The results of this study are not in line with (12), who finds that there is not a significant or prominent correlation (p <0.10) between access to health services and the use of adequate delivery facilities. This means that the factor of access to health services by women who give birth has an influence in deciding the use of adequate delivery facilities in the delivery process (12).

Transportation is the main obstacle to childbirth in health facilities. The inaccessible distance to health services has resulted in people choosing to seek delivery assistance that is closer to home because of the distance and travel time choosing birth with a traditional birth attendant, and giving birth at home due
to the lack of transportation facilities. The ease of accessing service places, access to health facilities and transportation is one of the considerations for families in making decisions about finding health services (14).

This research shows that in terms of accessibility, the dominant respondents who had affordable access chose to give birth at a health facility. However, this still needs to be improved because it is still found that 25.5% of mothers who have affordable or unreachable access do not take advantage of health facilities so that midwives must provide good communication to mothers about the availability of means of transportation when entering. For people who are less fortunate, access can be reached by using transportation facilities belonging to the Primary Health Care so there is no reason for mothers not to take advantage of home delivery.

The influence of need characteristics on the utilization of delivery in health service facilities

**Health Worker’s Support**

The results of statistical tests obtained a p-value of 0.011 <0.05, meaning that there is a significant relationship between the support of health workers and the use of childbirth services in health care facilities. The results of the variable logistic regression test for the support of health personnel obtained p value <0.05, which indicates that the support of health workers has a significant effect on the use of childbirth services in health care facilities with the value of Exp (B) = 6.222 (95% CI = 1.540 - 25.136). This means that respondents who stated that the support of health workers was good had the opportunity to use health facilities was 6.2 times higher than those who stated that the support of health workers was lacking. Based on the results of interviews with respondents, it was found that there’s midwife’s behavior which was not supportive or did not provide information about the importance of childbirth services in health facilities, there were still home childbirth assisted by health workers. This requires guidance to midwives by the head of Public Health Services. Health workers play major role as a supporting factor for the success of using childbirth services in health facilities.

This research is in line with Fitri Mutia (2017), showing that the variable support for health workers has a significant effect on the use of health facilities for mothers who give birth at Public Health Services of Kuta Panjang, Gayo Lues District, p = 0.014 <0.05. The variable of support for health workers is the variable with the greatest influence on the utilization of health facilities for mothers who give birth compared to other variables. The variable of support for health workers has a value of Exp (B) = 9.949 (95% CI = 1.809 - 33.086) meaning that respondents who state that support for health workers are likely to use health facilities are 9.9 times higher than respondents who stated that support for health workers is lacking (15).

The importance role of health workers in efforts to reduce maternal mortality in Indonesia, which is supported by health facilities is in accordance with government policies that encourage efforts to reduce maternal mortality, which is to increase access and quality of health services through strategic improvements to equitable, affordable and equitable health services with a focus on improving utilization of health facilities, by establishing partnerships with the public and private sector (16). The support of health workers for mothers to choose to give birth at a health facility is already good at the Anggaberi Primary Health Care. It is evident that most of the respondent choose to give birth at a health facility. However, this still needs to be improved because there were still 25.5% of mothers who choose to give birth at home even though the midwives were assisted and others were assisted by traditional birth attendants. Midwives must continue to promote or provide
counseling to mothers, especially during the third trimester ANC visit that giving birth in a health facility is cleaner and safer than if the mother chooses to give birth at home. It is hoped that the support of health workers can change the inaccurate knowledge, perceptions and attitudes of mothers about childbirth in health facilities so that in the future all mothers who give birth can be assisted by midwives in health facilities which will reduce morbidity and infection rates in mothers and babies.

**Husband and Family Support**

The results of statistical tests obtained a p-value of 0.011 <0.05, meaning that there is a significant relationship between the support of health workers and the use of childbirth services in health care facilities. The results of the variable logistic regression test for the support of health workers obtained p value <0.05, which indicates that the support of health workers has a significant effect on the use of childbirth services in health care facilities with the value of Exp (B) = 0.141 (95% CI = 0.035 - 0.564) This means that respondents who receive support from their husbands and families have the opportunity to use health facilities 0.1 times higher than respondents who do not have support from their husbands and families.

This fact is because the influence of kinship in the family in the study area is still very strong, indicated by if a woman is going to give birth, relatives from all over will come to the family, they become the main source of information, provide assessment, and consent to the facility where the mother receives childbirth services.

The results of the above research are in line with the research Fitri Mutia (2017), the research shows that the husband’s support variable has a significant effect on the use of health facilities for mothers who give birth at Public Health Services of Kuta Panjang, Gayo Lues District, p = 0.030 <96 0.05. The husband’s support variable has an Exp value. (B) = 7,190 (95% CI = 1,246 - 30,806), means that for respondents who stated that their husbands provide support, the opportunity to use health facilities is 7.1 times higher than respondents who do not get support from their husbands (15).

Social and material support has a big influence in determining the selection of a helper and place of delivery. Maternity women who receive family support tend to choose health personnel and facilities for delivery assistance compared to those who do not receive family support. The mother’s decision in planning and choosing a place of delivery also depends on the support provided by her husband. Husband’s support is an important factor in the process of pregnancy and childbirth, a mother with a good husband’s support will further motivate her to plan a safe delivery, because one of the factors that can affect the mother’s psychology is the place of delivery (11).

This study found that the husband’s support played a decisive role in determining the mother to give birth in a health facility or in a non-health facility. In most people in the Anggaberi Primary Health Care, the husband or male is the head of the family whose opinion must be heard, and used as a reference in making decisions. As in deciding the place of delivery, the wife will follow the wishes of her husband where to give birth. Suppose a husband wants a mother to give birth at a health facility, then the mother must give birth at a health facility, and vice versa if the husband decides to give birth at home, the mother must give birth at home. However, this does not necessarily apply to all people in the Anggaberi Primary Health Care.

**CONCLUSION AND RECOMMENDATION**

Factors that influence the utilization of childbirth in health facilities at Anggaberi Primary Health Center are education, occupation, family income, accessibility, husband’s support and support from health workers. It is expected
that the Public Health Center can increase partnerships with traditional healers in the work area so that the dukuns are trained and can collaborate at every labor. The midwife can assist with medical births, while the dukun can help in the field of culture that has been traditionally practiced and believed by the community.

REFERENCES


15. Fitri M. Faktor-Faktor yang Mempengaruhi Pemanfaatan Fasilitas Kesehatan Bagi Ibu Bersalin di Wilayah Kerja Puskesmas Kuta Panjang Tahun 2017. e-Skripsi Inst Kesehat Hels [Internet]. 2017; Available from: http://repository.helvetia.ac.id/id/eprint/1397