

The Relationship of Maternal Health Conditions on the Utilization of Maternity Waiting Homes for Maternity Motherhood

Zufrizal¹, Ida Yustina², Asfriyati²

¹Master Student in Universitas Sumatera Utara, Medan, Indonesia ²Lecturer in Universitas Sumatera Utara, Medan, Indonesia Email: zufrizal69@gmail.com

Abstract:

Maternity Waiting Homes is a regional government program that aims to reduce maternal mortality. But in reality, there are still many people who do not utilize this facility. The purpose of this study is to determine the relationship of maternal health conditions on the utilization of maternity waiting homes for maternity motherhood. This research is an explanatory survey research with cross sectional design. The study was conducted in Langkat Regency, North Sumatra. The results showed that there was a relationship between maternal health conditions and the utilization of the maternity waiting house for maternity motherhood in Langkat Regency (p = 0.027).

Keywords:

maternal health conditions; maternity waiting house; maternity motherhood

I. Introduction

Maternal Mortality Rate (MMR) is an indicator to measure maternal health status in an area. At present, maternal death is still a crucial problem in the world. Based on the results of the 2012 Indonesian Demographic and Health Survey (IDHS), MMR in Indonesia rose to 359 per 100,000 live births compared to 2007 which was 228 per 100,000 live births. AKI from the 2015 Inter-Census Population Survey (SUPAS) of 305 per 100,000 live births. The increase in MMR is a challenge for the government to achieve the 2015-2019 RPJMN target of 102 per 100,000 live births (Ministry of Health, 2015).

Maternal death can occur during pregnancy, childbirth, and the puerperium. According to WHO (1996), maternal death can be caused by obstetric complications in bleeding, sepsis, blocked labor, hypertension disorders in pregnancy and septic abortion. The statement is in accordance with the results of Fibrina's study (2007) that maternal mortality can be caused by pregnancy itself and complications that occur in pregnancy, obstetric complications, maternal health status, reproductive status, access, health service use behavior as well as socio-cultural and economic factors.

In addition, maternal mortality can also be caused by three factors of the risk of being late (3T), namely being late in the examination, being late in obtaining delivery services and arriving late to the health care facility and 4 too (4T), namely too young, too often, too old and too close (Ministry of Health, 2011). The statement is in accordance with the results of research from Fransiska (2017) that maternal deaths can be directly affected by delays in decision making, delays on the road, delays in getting treatment and obstetric complications, while the indirect effect is high-risk pregnancy, not routine in ANC examination, education and mother's job.

Britain International of Exact Sciences (BIoEx) Journal ISSN: 2686-1208 (Online), 2686-1216 (Print)

Vol. 2, No. 1, January 2020, Page: 220-230

Decreasing maternal mortality is one of the targets of the SDGs draft. In 2030 the decline in MMR globally is 70 deaths per 100,000 live births. The success of the program is measured through indicators of the percentage of births assisted by trained health workers and the percentage of births in health care facilities. But in reality, many pregnant women are unable to access health services.

Pregnant women who lacked family support amounted to 28 people (37.3%). then from 28 pregnant women (37.3%) who lacked family support, 21 people (75.0%) mentioned that their husbands / families did not always remind mothers to have their pregnancies examined, 11 people (39.3%) mentioned that husband / family does not always pay attention to maternal health during pregnancy, and 8 people (28.6%) state that the husband / family does not help the mother in seeking information about health during her pregnancy (Aritonang, 2019)

Utilization of health services is the result and process of seeking health services by individuals or groups. According to Andersen et al (2001), there are three factors that influence the utilization of health services, namely predisposing factors (demographics, social structure and health beliefs), enabling factors (health, financial and organizational policies) and need factors (environment and indications for maternal health). Andersen's model illustrates an individual determinant sequence for the utilization of health services.

Indonesia is an archipelagic country with inadequate infrastructure and transportation in remote areas is still very limited, it will be difficult to bring a woman with complications to the nearest health facility that is appropriate because of the long distance. Thus the Government created a Birth Waiting Home Program (RTK) which has an important function as a temporary shelter for pregnant women until delivery (WHO, 1996; Ministry of Health, 2009).

RTK is a Government Program that aims to reduce the number of maternal deaths, be able to increase the coverage of deliveries by health workers, be able to increase the coverage of deliveries in health facilities and be able to handle emergency cases (Ministry of Health of the Republic of Indonesia, 2009).

Based on the background described above it is necessary to conduct research related to the use of the Birth Waiting Home. The author is interested in analyzing the relationship between maternal health conditions with the use of maternity waiting homes for mothers in Langkat, North Sumatra.

II. Review of Literature

2.1 Maternal Death

World Health Organization (WHO) in The International Statistical Classification of Disease Health Problem 10th Revision (ICD-10) defines maternal death as the death of a woman during pregnancy until 42 days after the end of pregnancy, independent of the gestational age and the location of the pregnancy inside or outside the womb is caused by pregnancy or a deteriorating body condition caused by pregnancy or an error in childbirth assistance, but does not include deaths caused by accident or neglect (WHO, 2014).

Causes of Maternal Death

Based on the definition of maternal death above, the broad causes of maternal death

Britain International of Exact Sciences (BIoEx) Journal

ISSN: 2686-1208 (Online), 2686-1216 (Print) Vol. 2, No. 1, January 2020, Page: 220-230

can be divided into direct causes and indirect causes (WHO, 2014):

- 1. The direct cause (direct maternal death). The direct cause (direct maternal death) is maternal death directly caused by obstetric complications during pregnancy, childbirth and childbirth, or death caused by an action, or various things that occur as a result of these actions carried out during pregnancy, childbirth or childbirth such as bleeding, toxemia and infection.
- 2. Indirect causes (indirect maternal death). Indirect causes (indirect maternal death) are maternal deaths caused by an illness that is not an obstetric complication, which develops or increases in weight due to pregnancy, childbirth and the puerperium.

According to the Ministry of Health (2011), indirect causes are causes that occur due to socio-economic, educational, position and role of women's influence, socio-cultural, and transportation. This is known as three late and four too. The three late ones are:

- a. Too late to recognize the danger signs and make a decision to immediately reach help.
- b. Too late to reach a health facility capable of providing childbirth assistance.
- c. Too late to get adequate help in health care facilities.

The four too are:

- a. Too young to have children (<20 years old).
- b. Too many children (children > 3 people).
- c. Too close to childbearing distance (<2 years).
- d. Too old to give birth (age> 35 years).

2.2 Childbirth

Definition of labor. Childbirth is the process of expulsion from the conception (fetus and placenta) that has been quite months or can live outside the womb through the birth canal or other ways, with help or without help (own strength) (Manuaba, 2010). What is meant by labor and birth is said to be normal in the opinion of Sumarah et al (2009) is the expenditure process that occurs in full-term pregnancy (37-42 weeks), born spontaneously with a back of the head presentation that lasts within 18-24 hours, without complications either at mother and fetus.

a. The Form of Labor

The forms of labor consist of spontaneous births, artificial deliveries and recommended deliveries (Manuaba, 2010).

- 1. Spontaneous delivery. Spontaneous childbirth is the process of birth of babies with their own mothers without the help of tools and does not hurt the mother and baby which generally lasts less than 24 hours.
- 2. Artificial labor. Artificial childbirth is a labor process that is assisted by external labor, such as extraction with fosep or caesarean section surgery.
- 3. Recommended delivery. Recommended delivery is a labor where the process is generated from outside by means of stimulation.

b. Signs of Childbirth

The signs of childbirth according to Manuaba (2010) are as follows:

- 1. His strength / muscle contraction is more frequent and regular with shorter contractions.
- 2. Signs may occur (secretions of mucus, mucus mixed with blood).
- 3. Can be accompanied by ruptured membranes.
- 4. On internal examination, cervical changes are found (cervical softening, cervical flattening, and cervical opening).

c. Important Factors in Labor

According to Manuaba (2010) and Sumarah et al (2009), important factors in labor are:

1. Power the power or power that comes from the mother's ability to perform involuntary and voluntary contractions simultaneously to expel the fetus and placenta from the uterus. Involuntary contractions are also referred to as primary forces marking the start of labor. Primary strength comes from certain trigger points found in the thickening of the muscular layer in the upper uterine segment, while secondary strength occurs as soon as the presentation reaches the pelvic floor, the nature of the contractions changes which is pushing out so that the woman feels like straining. This push down is called secondary force. This secondary force is important to push the baby out of the uterus and vagina.

- 2. Passenger. Passenger is a fetus and placenta.
- 3. Passage. Passage is the birth canal which consists of the mother's pelvis which is the solid bone part, pelvic floor, vagina and introits (outer vaginal opening). Although soft tissue, especially the layers of the pelvic floor muscles support the release of the baby, the mother's pelvis is much more involved in labor, so the shape and size of the pelvis must be determined before labor begins.

d. Childbirth Places

One of the main factors contributing to the high MMR is the limited place of delivery. Efforts to reduce the risk of maternal death are very important by increasing childbirth by health professionals (BKKBN, BPS, Ministry of Health and DHS ICF International Measure, 2013).

Maternity Place

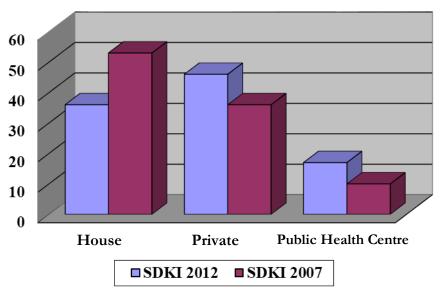


Figure 1. Place of delivery

Table 1. Percentage of Mothers Giving Birth to Children Born Alive in the Last Two Years by Birth Place and Type of Region in 2015

| by Birth Frace and Type of Region in 2019 | | |
|---|-----------------------------|--|
| Childbirth | Regional Type | |
| | City Village City + Village | |

Britain International of Exact Sciences (BIoEx) Journal

ISSN: 2686-1208 (Online), 2686-1216 (Print) Vol. 2, No. 1, January 2020, Page: 220-230

| Hospital/ Maternity Hospital | 38,35 | 18,45 | 28,40 |
|--|-------|-------|-------|
| Clinic/Midwife/Doctor's Practice | 44,23 | 31,11 | 37,67 |
| Public Health Centre/ village maternity huts | 8,22 | 14,89 | 11,55 |
| /Help Health Center | | | |
| House | 8,85 | 34,98 | 21,91 |
| Others | 0.35 | 0.57 | 0.46 |

Source: BPS (2015)

2.3 Birth Waiting Home (RTK)

A maternity waiting house is a residential facility, located near a health facility (hospital, health center, Poskesdes) that can be used as a temporary residence for pregnant women and their companions for several days, while waiting for labor to arrive and a few days after delivery (Ministry of Health of the Republic of Indonesia, 2009).

Determination of the location of the waiting house must be close to health care facilities in order to be able to bring pregnant women when they will give birth or when an emergency occurs. The recommended distance is no more than 10 minutes by foot (Ministry of Health of the Republic of Indonesia, 2009).

a. The Target of Utilizing a Birth Waiting House

The target of utilizing a birth waiting house is pregnant women with risk and high risk factors and pregnant women from difficult geographical locations. What is meant by pregnant women with high risk and risk factors is (Ministry of Health Republic of Indonesia, 2009):

- 1. Primigravida is less than 20 years or more than 35 years.
- 2. Children over 4.
- 3. Distance of the last delivery and pregnancy of at least 2 years.
- 4. Less Chronic Energy (KEK) with upper arm circumference of less than 23.5 cm or weight gain <9 kg during pregnancy.
- 5. Anemia with from hemoglobin <11 gr / dL.
- 6. Height> 145 cm, or with pelvic and spinal deformities.
- 7. History of hypertension in a previous pregnancy or before this pregnancy.
- 8. Moderate / have suffered from chronic diseases, including: tuberculosis, heart-kidney heart abnormalities, psychosis, endocrine disorders (Diabetes Mellitus, Systemic Lupus Erythematosus, etc.), tumors and malignancies.
- 9. Poor pregnancy history: recurrent miscarriage, ectopic pregnancy is interrupted, hydatidiform mole, premature rupture of membranes, infants with congenital defects.
- 10. History of childbirth with complications: labor with cesarean section, vacuum extraction / forceps.
- 11. History of puerperal with complications: postpartum bleeding, postpartum infection, postpartum blues.
- 12. Family history of suffering from diabetes, hypertension and a history of congenital disabilities.
- 13. Abnormalities of the number of fetuses: multiple pregnancy, dampit fetus, monster.
- 14. Large fetal abnormalities: fetal growth is stunted, large fetus.
- 15. Abnormalities of the location and position of the fetus: latitude / oblique, breech at gestational age> 32 weeks.

b. Home Waiting Birth Indicator

The utilization of the birth waiting house by the community can be seen through the following indicators (Ministry of Health, 2009):

Britain International of Exact Sciences (BIoEx) Journal ISSN: 2686-1208 (Online), 2686-1216 (Print)

Vol. 2, No. 1, January 2020, Page: 220-230

- 1. Percentage of pregnant women who use a home waiting for birth that comes before delivery.
- 2. The percentage of pregnant women at risk and high risk who come a few days before giving birth.
- 3. Number of pregnant women accompanied by family.
- 4. Number of maternal deaths.
- 5. Number of neonatal deaths.
- 6. Number of obstetric and neonatal complications handled.

c. The Division of the Home Waiting For Birth

Based on location and function, birth waiting houses can be divided into (Ministry of Health RI, 2009):

- 1. Home waiting village health post. Village health post waiting house is a building or room located near the village health post that is used by non-risk pregnant women.
- 2. Public health centre waiting house. Public health centre waiting house is a birth waiting house that is located close to the Public health centre which is able to provide non-risk delivery assistance and or some risks that are adjusted to the Public health centre capability itself.
- 3. Hospital waiting hospital. Hospital waiting hospital is a birth waiting house that is close to the hospital, used by pregnant women who need delivery assistance at the hospital.

Based on the types of services offered, birth waiting homes can be divided into:

- 1. Birth awaiting home without service. Birth waiting house that only provides living facilities. Pregnant women and their companions can live here, but provide their own daily needs.
- 2. Birth waiting house with service. Birth waiting house where pregnant women get services such as food and drinks, washing clothes and others (depending on local agreement). Procurement of the daily needs of pregnant women while in the waiting house can be managed by the community through the costs of the surrounding community, local government or donors.
- 3. Birth awaiting homes with additional services. Birth waiting house that provides a variety of additional activities such as providing women's skills, health counseling, increasing income and so on.

d. Birth Waiting Referral System

Birth waiting house is one of the links in the network in case reference in the context of obstetric and neonatal emergencies. The referral system will work if all of its links function well and are related to one another. The failure of a single link can lead to failure in efforts to save mothers and infants (Ministry of Health, 2009).

The referral chain can be in the form of government health service facilities or health service facilities established by the community:

- a. Government health service facilities, including Supporting Public health centre, Public health centre, General Hospital and Polri / TNI Hospital.
- b. Non-government / private health service facilities include Integrated Healthcare Center, Village health post, Doctors / Midwives of private practice, Clinics and Private Hospitals. Non-health facilities that can be used as birth awaiting houses such as shaman houses, social homes, religious guesthouses, community guesthouses, houses of figures and so on (Ministry of Health, Republic of Indonesia, 2009)

III. Research Methods

This research is an explanatory research survey with a cross sectional design that aims to explain the relationship between maternal health conditions and the utilization of the maternity waiting home for birth mothers. This research was carried out at the Center for Birth Birth Health Centers in Langkat District. The reason for choosing this location is because Langkat Regency is one of the regencies in North Sumatra Province where the maternal mortality rate is still relatively high. so the Langkat District Government issued Local Regulation No. 11 of 2013 concerning KIBBLA (Maternal, Newborn and Child Health) and Circular Letter Number 441-885-DINKES in 2015 related to childbirth should be done in health services aimed at anticipating the problem.

IV. Discussion

4.1 Research Results

a. Distribution of Maternal Health Conditions Related to Utilization of Birth Waiting Homes (RTK) by Maternity Mothers

The frequency distribution of respondents' answers about maternal health conditions related to the utilization of the maternity waiting house (RTK) by mothers in Langkat District can be seen in the following table.

Table 1. Frequency Distribution of Respondents' Answers on Maternal Health Conditions Related to Utilization of Birth Waiting Houses (RTK) by Maternity Women in Langkat District

| | | Answer Yes No | | | |
|----|---------------------------------------|---------------|------|----|------|
| No | Maternal Health Conditions | | | No | |
| | | n | % | n | % |
| 1. | Is the mother have a history of risky | 146 | 78,9 | 39 | 21,1 |
| | diseases? | | | | |
| 2. | Is the mother have difficulties | 136 | 73,5 | 49 | 26,5 |
| | experienced during pregnancy? | | | | |
| 3. | Did the mother have difficulties | 137 | 74,1 | 48 | 25,9 |
| | experience during labor? | | | | |
| 4. | Did the mother have difficulties | 91 | 49,2 | 94 | 50,8 |
| | experience during childbirth? | | | | |

Based on the above table, the results of the study show that the majority of respondents said yes about mothers having a history of risky disease (78.9%). The majority of respondents said yes about during pregnancy, mothers had experienced difficulties (73.5%). The majority of respondents said yes about the time of delivery, mothers had experienced difficulties (74.1%). Meanwhile, the majority of respondents stated that they did not know that during childbirth, women had experienced difficulties (50.8%). From the results of the respondents' answers as shown in table 16 above, the respondents who were in healthy health condition amounted to 58 people (31.4%) and respondents who were unhealthy were health conditions totaling 127 people (68.6%). The distribution of maternal health condition categories by the use of maternity waiting houses (RTK) by maternity mothers can be seen in the following table.

Britain International of Exact Sciences (BIoEx) Journal ISSN: 2686-1208 (Online), 2686-1216 (Print)

Vol. 2, No. 1, January 2020, Page: 220-230

| Tuble 2. Distribution of Variable Gategories of Material Health Conditions | | | | |
|--|-------|-------|--|--|
| Maternal Health Conditions | Total | % | | |
| Healthy | 23 | 12,4 | | |
| Unhealthy | 162 | 87,6 | | |
| Total | 185 | 100,0 | | |

Based on the above table, the results of the study showed that the majority of maternal health conditions in an unhealthy condition amounted to 162 people (87.6%), while healthy mothers were only 23 people (12.4%).

b. Distribution of Utilization of Birth Waiting Houses (RTK) by Maternity Women

The frequency distribution of respondents' answers about the utilization of the maternity waiting house (RTK) by maternity women in Langkat Regency can be seen in the following table.

Table 3. Frequency Distribution of Respondents' Answers on Utilization of Birth Waiting

Houses (RTK) by Maternity Women in Langkat District

| | | | Ans | swer | |
|----|---|-----|------|------|------|
| No | Utilization of Home Waiting Birth | Yes | | No | |
| | _ | n | 0/0 | n | % |
| 1. | I use the waiting house | 92 | 49,7 | 93 | 50,3 |
| | birth before I gave birth. | | | | |
| 2. | I used the birth waiting house after I gave | 61 | 33,0 | 124 | 67,0 |
| | birth | | | | |
| 3. | According to the mother, the services | 86 | 46,5 | 99 | 53,5 |
| | provided while she was at the maternity | | | | |
| | waiting house were good | | | | |
| 4. | While I was at home waiting for birth, I | | | | |
| | felt calmer in the face of the birthing | 43 | 23,2 | 142 | 76,8 |
| | process. | | | | |
| 5. | During my stay at the maternity waiting | 69 | 37,3 | 116 | 62,7 |
| | house, I was treated well by the village | | | | |
| | midwives. | | | | |

Based on the above table, the results of the study show that the majority of respondents stated that they did not use the waiting house for birth before I gave birth (50.3%). The majority of respondents stated that they did not use the maternity waiting house after I gave birth (67.0%). The majority of respondents stated that they were not good about the services provided while the mother was in the maternity waiting house (53.5%). The majority of respondents stated that it was not about p as long as I was in the maternity waiting house, I felt calmer in facing the birth process (76.8%).

The majority of respondents stated that they were not treated as long as I was at the birth house, I was treated well by the village midwives (62.7%). The majority of respondents stated that they could not recover my physical condition after giving birth at the maternity waiting home (54.6%). From the results of the respondents' answers as seen in table 18 above, the respondents who used RTK were 35 people (18.9%) and respondents who did not use RTK were 150 people (81.1%). The distribution of the use of RTK categories by women in Langkat District can be seen in the following table.

Britain International of Exact Sciences (BIoEx) Journal

ISSN: 2686-1208 (Online), 2686-1216 (Print) Vol. 2, No. 1, January 2020, Page: 220-230

| Table 4. Distribution of | Variables in the Us | e of Birth Waiting | Homes (RTK) |
|---------------------------------|---------------------|--------------------|-------------|
| | | | |

| Tubic II Biotilibutio | if of variables in the ose of Birth vitating | Tromes (Terre) |
|-----------------------|--|----------------|
| Use of RTK | Total | 0/0 |
| Utilization | 17 | 18,9 |
| Not Utilization | 168 | 81,1 |
| Total | 185 | 100,0 |

Based on the above table, the results of the study showed that the majority of respondents did not use RTK totaling 168 people (81.1%), while respondents who used only 17 people (18.9%).

4.2 Discussion

Relationship between Maternal Health Conditions and Utilization of Birth Waiting Home (RTK) by Maternity Mothers. Based on research on 185 respondents obtained 162 people in unhealthy conditions (87.6%). Chi-square test results obtained p value = 0.027, meaning that there is a significant relationship between health insurance and the utilization of birth waiting homes (RTK) by women in Langkat District.

The results of this study are in line with research by Vermeiden et al (2018) that women who have experienced complications in previous labor who use birth awaiting are more likely. Likewise with the Quarterly research (2018) that there is an influence on the condition of pregnancy with the use of RTK. Similarly, research by Napirah (2016) also shows that there is a significant relationship between perception of health and the utilization of health services in the working area of Tambarana Health Center, Poso Pesisir Utara District, Poso Regency.

The results of this study are also in line with the results of Wahyuni's research (2012) which shows that there is a significant relationship between perceptions of illness and the utilization of health services in Sumber Rejo Health Center, Balikpapan City, East Kalimantan Province.

The condition of pregnancy is a condition experienced by the mother during pregnancy that causes changes in the physical, and psychological. The perception of the condition of pregnancy is one of the socio-psychological factors of consumers that enables a person to utilize health services. Lots of changes occur during both the first, second and third trimesters (Quarter, 2018).

According to Hidayati (2009) in the Quarter (2018), in several pregnancy visits pregnant women submit complaints that cause maternal concerns during pregnancy and childbirth later. Complaints experienced in the first trimester such as vaginal discharge, start / vomiting, vaginal discharge, headache, fatigue. In the second trimester such as constipation, varicose veins, itching, joint pain and in the third trimester such as shortness of breath, leg cramps, insomnia, swelling.

According to Andersen (1973) in the Quarter (2018), an individual's assessment of health is an individual's perspective in observing symptoms of illness, illness levels and concerns about health which makes it very important and requires individuals to seek better health services or influence someone in utilizing services health.

Based on the results of the study showed that the utilization of the maternity waiting house was higher in mothers who had perceptions of pregnancy conditions with complaints.

Pregnant women who are going to give birth assess many complaints that are felt during pregnancy, so there are concerns about the effects caused or something that will pose a risk during childbirth (Quarter, 2018). Thus, the government introduced birth waiting houses as a strategy to increase access to skilled nursing aimed at reducing maternal mortality rates, by bringing mothers close to childbirth facilities. Therefore, one of the targets of RTK is intended for pregnant women with high risk and risk factors (Kemenkes RI, 2009).

V. Conclusion

From this study it can be concluded that there is a relationship between maternal health conditions and the utilization of the maternity waiting house (RTK) by mothers in Langkat District (p = 0.027). Maternal health is the only factor that has a significant relationship with the use of maternity waiting homes by mothers in Langkat District. Therefore, the researcher concludes that the maternal health condition is one of the factors related to the utilization of the maternity waiting house by mothers in Langkat Regency.

References

- Abdulkadir, R.W. (2015). Knowledge, attitude and practice of mothers towards skilled delivery services in a maternity waiting home in Merti District, Isiolo County. *Prime J Soc Sci*, 4(8), 1140–54.
- Adriana, N. (2014). Akese pelayanan kesehatan berhubungan dengan pemanfaatan faslitas kesehatan persalinan yang memadai di Puskesmas Kawangu Kabupaten Sumba Timur. *Public Health and Preventive Medicine Archive (PHPMA)*, 2(5), 135-139.
- Andersen, R.M., Rice, T. H., and Kominski, G. F. (2001). Changging the U.S. Health care system, key issues in health services, policy, and management (Second Edition). San Francisco: Jossey-Bass A Wiley Company.
- Anggraeni, S. (2012). Analisis faktor-faktor yang berpengaruh terhadap pemanfaatan pelayanan kesehatan (PKPR) di wilayah Puskesmas Kabupaten Tanah Laut Kalimantan Selatan. [Tesis, Universitas Diponegoro]. Diakses dari http://eprints.undip.ac.id
- Aritonang, Dor,. Related Knowledge and Support Family Mother Pregnant Women Attitudes about Prenatal Care (ANC). Budapest International Research in Exact Sciences (BirEx) Journal 58-63
- Azwar, Azrul. (1996). Menjaga mutu pelayanan kesehatan. Jakarta: Sinar Harapan.
- BKKBN, BPS, Kementerian Kesehatan, dan Measure DHS ICF International. (2013). Survei demografi kesehatan Indonesia 2012. Jakarta: BKKBN.
- Badan Pusat Statistik. (2015). Profil kesehatan ibu dan anak. Jakarta: Badan Pusat Statistik.
- Bakoil, M. K. (2017). Pengembangan model akses rumah tunggu persalinan pada pertolongan persalinan. [Tesis, Universitas Airlangga]. Diakses dari http://repository.unair.ac.id/64566.
- Bhuta, Z. A., Darmstadt, G. L., Haws, R. A., Yakob, M. Y., & Lawn, J. E. (2009). Delivering interventions to reduce the global burden of stillbirths: improving service supply and community demand. *BMC Pregnancy and Childbirth*, 9(1).
- Birmeta, K., Dibaba, Y., and Woldeyohanes, D. (2013). Determinants of maternal health care utilization in Holeta Town, central Ethiopia. *BMC Health Services Research*, 13, 256.
- Fajriah, R.. (2013). Perilaku ibu dalam pemanfaatan rumah tunggu kelahiran di desa Nilo Dingin Kecamatan Lembah Masurai Kabupaten Merangin Provinsi Jambi. [Thesis, Universitas Diponegoro]. Diakses dari http://eprints.undip.ac.id/53609/
- Furi, L.T., & Megatsari, H. (2014). Faktor yang mempengaruhi ibu bersalin pada dukun bayi dengan pendekatan WHO di Desa Brongkal Kecamatan Pagelaran Kabupaten Malang. J Promkes, 2(1), 7.

Britain International of Exact Sciences (BIoEx) Journal ISSN: 2686-1208 (Online), 2686-1216 (Print)

Vol. 2, No. 1, January 2020, Page: 220-230

- Gusmidarti, E. (2016, 17 Oktober). Tiga Bulan Operasi Rumah Tunggu Kelahiran Kasih Ibu UPT Puskesmas Alai Baru 2 Pasien. Diakses 15 Agustus 2019 dari: http://pelitariau.com/berita/detail/9642/3-bulan-oprasi-rumah-tunggu-kelahiran-kasih-ibu-upt-puskesmas-alai-baru-2-pasien
- Hakimi, M. (2010). *Ilmu kebidanan : patologi dan fisiologi persalinan*. Yogyakarta : Yayasan Essentia Medika.
- Huru, M. (2014). Analisis faktor-faktor yang berhubungan dengan pemanfaatan rumah tunggu oleh ibu bersalin di Kabupaten Kupang Propinsi Nusa Tenggara Timur. [Tesis, Universitas Diponegoro]. Diakses dari: http://eprints.undip.ac.id/42954/
- Jodi, R. L., Anna, C. W., Michelle, L. M., and Sarah, R. (2013). Promoting access: the use maternity waiting homes to achieve safe motherhood. *Midwifery*, 29(10), 1095-102.
- Kementerian Kesehatan RI. (2009). *Pedoman pelayanan rumah tunggu kelahiran*. Jakarta: Kementerian Kesehatan.
- Lemeshow, S., Hosmer Jr, D. W., & Klar, J. (1990). Adequacy of Sample Size in Health Studies. England: John Wiley and Sons Ltd.
- Lori, J. R., Wadsworth, A. C., Munro, M. L., & Rominski, S. (2013). Promoting access: the use of maternity waiting homes to achieve safe motherhood. *PMC Journal*, 29(10), 1095-102.
- Mardiyah, U.L. (2013.) Faktor yang berhubungan dengan pemanfaatan pelayanan antenatal oleh ibu hamil di wilayah kerja Puskesmas Tempurejo Kabupaten Jember. *eJournal Pustaka Kesehatan*, 2(1).
- Oktarina, M. (2016). *Buku ajar asuhan kebidanan persalinan dan bayi baru lahir* (Cetakan I, Edisi I). Yogyakarta: Deepublish.
- Pemerintah Kabupaten Langkat. (2016). Pemkab. Langkat Upayakan Penurunan Angka Kematian Ibu Melahirkan dan Bayi Baru Lahir. Diakses 21 Agustus 2019 dari : http://www.langkatkab.go.id/berita/528/pemkab-langkat-upayakan-penurunan-angka-kematian-ibu-melahirkan-bayi-baru-lahir
- ______. (2017). *Profil kesehatan kabupaten Langkat 2016*. Kabupaten Langkat : Dinas Kesehatan.
- Pratiwi, A. A. 2014. Faktor yang berhubungan dengan pemanfatan pertolongan persalinan oleh tenaga kesehatan di wilayah kerja Puskesmas Barebbo Kabupaten Bone. (Jurnal Elektronik) diakses 22 Juni 2018; http://repository.unhas.ac.id
- Sugiyono. (2014). Statistika untuk penelitian (Cetakan 14). Bandung: Alfabeta.
- Sumarah, Widyastuti, Y., Wiyati, N. (2009). Perawatan ibu bersalin (asuhan kebidanan pada ibu bersalin) (Cetakan Keempat). Yogyakarta: Penerbit Fitramaya.
- Vermeiden, T., Braat, F., Medhin, G., Gaym, A., van de Akker, T., Stekelenburg. (2018). Factors associated with intended use of a maternity waiting home in Southern Ethiopia: a community-based cross-sectional study. *BMC Pregnancy and Childbirth*, 38.
- Wahyuni, N.S. (2012). Faktor-faktor yang berhubungan dengan pemanfaatan pelayanan kesehatan di Puskesmas Sumber Rejo Kota Balikpapan Provinsi Kalimantan Timur Tahun 2012. Depok Univ Indones.
- WHO. (1996). Maternity waiting homes: a review of experiences. Geneva: WHO.
- _____. (2003). *Maternal mortality in 2000*. Geneva: Department of Reproductive Health and Research.
- _____. (2014). Trends in maternal mortality: 1990 to 2013, Estimate by WHO, UNICEF, UNFPA, The World Bank and the United Nations Population Division. Geneva: WHO Press.
- Yar, I., Said, I., Yar, I.S. (2013). Knowledge and barriers in utilization of maternal health care services in Kano State, Northern Nigeria. *Eur J Biol Med Sci Res*, 1(1), 1–14.