Utilization of Maternity Waiting Homes in the Islands: A Study Literature

Pemanfaatan Rumah Tunggu Bersalin di Kepulauan: Studi Literatur

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ABSTRACT

The maternal mortality rate is still high in Indonesia, especially in the archipelago, and shows a low level of health. A Maternity Waiting Home (MWH) is a place or room near a health facility (hospital, health center, poskesdes) that can be used as a temporary residence for pregnant women and their companions (husband/cadre/shaman/family) for several days while waiting for delivery and a few days after giving birth. A literature review using the narrative literature review method was carried out by synthesizing and analyzing 3 scientific article search engines. Searching for manuscripts on the three search engines found 6 manuscripts that match the specified topic, namely the use of birth waiting homes for mothers in the islands. The results of the literature review showed that several factors influence the use of MWH, including distance to health facilities, travel time, socio-economic conditions of the community, completeness of MWH facilities, and community participation. Efforts to utilize this MWH are expected to increase access to health services, and the number of deliveries to incompetent health care facilities and can reduce cases of complications for pregnant women, maternity mothers, postpartum mothers, and newborns.

Keywords: Maternity waiting house, pregnant women, maternity mothers, islands

ABSTRAK

Angka kematian ibu hamil masih tinggi di Indonesia khususnya wilayah kepulauan dan menunjukkan derajat kesehatan yang rendah. Rumah Tunggu Kelahiran (RTK) adalah suatu tempat atau ruangan yang berada dekat fasilitas kesehatan (RS, puskesmas, poskesdes) yang dapat digunakan sebagai tempat tinggal sementara ibu hamil dan pendampingnya (suami/kader/dukun/keluarga) selama beberapa hari saat menunggu persalinan dan beberapa hari setelah bersalin. Sebuah kajian literatur dengan menggunakan metode narrative literature review dilakukan dengan melakukan sintesis dan analisis pada 3 mesin pencarian artikel ilmiah. Pencarian naskah pada tiga mesin pencari tersebut ditemukan 6 naskah yang sesuai dengan topik yang ditentukan, yaitu pemanfaatan rumah tunggu kelahiran bagi ibu bersalin di daerah kepulauan. Hasil kajian literatur menunjukkan bahwa terdapat beberapa faktor yang berpengaruh terhadap pemanfaatan RTK antara lain jarak ke fasilitas kesehatan, waktu tempuh, kondisi sosial ekonomi masyarakat, kelengkapan fasilitas RTK, dan peran serta masyarakat. Upaya pemanfaatan RTK ini diharapkan dapat meningkatkan akses pelayanan kesehatan, jumlah persalinan di fasilitas pelayanan kesehatan yang kompeten serta dapat menurunkan kasus komplikasi bagi ibu hamil, ibu bersalin, ibu nifas dan bayi baru lahir.

Kata kunci: Rumah tunggu kelahiran, ibu hamil, ibu bersalin, Kepulauan

INTRODUCTION

Every two minutes, somewhere in the world, a woman dies from complications of pregnancy and nearly 10,000 women die each year from problems in pregnancy and childbirth. Currently, the Maternal Mortality Rate (MMR) in Indonesia is still high. Based on the 2015 Inter-Census Population Survey (SUPAS), Indonesia's MMR was 305 per 100,000 live births⁽¹⁾. In an effort to reduce maternal mortality, every delivery must be assisted by competent health workers in health care facilities⁽²⁾. Therefore, every pregnant woman must have easy access to health services⁽³⁾.

Indonesia still faces gaps in access to health services. Riskesdas 2013 data shown that 29.6% of deliveries are carried out at home, this increases the risk of delays in obtaining health services if obstetric and neonatal complications occur ⁽⁴⁾. Ideally, pregnant women should be near a health care facility a few days before giving birth, especially in hard-to-reach areas and in high-risk obstetric cases that require referral to a hospital. However, in reality, many pregnant women are unable to access health services, among others due to geographical constraints, lack of health personnel, unsupportive culture, or lack of funds ⁽⁵⁾.

In Indonesia, especially in the rural on island clusters, the maternal mortality rate is still high, indicating a low level of health. Yet the majority of maternal deaths are caused by preventable or treatable complications that take place during labor, delivery and the immediate 24 hours after giving birth. These complications go untreated because women have poor access to quality health services. Geographic access barriers to essential services remain a major challenge in Indonesia and contribute towards preventable maternal and newborn deaths. Currently, approximately 20% of the number of pregnant women who give birth has not been fully served in health care facilities (fasyankes), so that childbirth is felt to be unsafe and has a high risk of maternal and infant mortality. This is due to constraints in access to health care facilities (due to difficult geographical conditions) as well as social economic conditions and public education, including not having National Health Insurance (JKN) or Healthy Indonesia Card (KIS) ⁽⁶⁾.

The maternity waiting house program is listed in the Regulation of the Minister of Health of the Republic of Indonesia Number 82 of 2015 concerning technical instructions for the use of special allocation funds for the health sector and supporting facilities and infrastructure for the health infrastructure sub-sector for the 2016 fiscal year in article 5 concerning operational costs for maternity waiting homes ⁽⁷⁾.

Maternity Waiting House (MWHs) is a place or room near a health facility (hospital, puskesmas, poskesdes) that can be used as a temporary residence for pregnant women and their companions (husband/cadre/shaman/family) for several days, while waiting for delivery. arrived and a few days after delivery ⁽⁸⁾. The aims and objectives of this MWHs are to increase access to health services for pregnant women, mothers in labor, postpartum mothers and newborns in order to obtain services from health care facilities and increase the number of deliveries in competent health care facilities. So that it is expected to reduce cases of complications in pregnant women, maternity and postpartum mothers and newborns ⁽⁶⁾.

The policy for maternity waiting homes based on island clusters is one form of innovation developed by the local government with Unicef which aims to accommodate the needs of health services for pregnant women in small islands. The establishment and implementation of a maternity waiting house policy based on island clusters is one form of innovation in an effort to shorten the span of control and affordability of health services for pregnant women. The maternity waiting house is a building near a health facility as a temporary residence for pregnant women and their companions in order to get closer access to health care facilities. It is hoped that with this activity, health workers will carry out health promotions regarding maternity waiting homes in an effort to prevent delays in handling,

especially in difficult access areas and play a role in efforts to accelerate the reduction in maternal mortality ⁽⁹⁾.

The implementation of MWHs is also find so many obstacles. There are several factors that influence the utilization of MWHs, including distance to health facilities, travel time, socio-economic conditions of the community, completeness of MWHs facilities, and the participation of families and communities. The problem that arises is how to maintain the continuity of the use of MWHs in regions in Indonesia, especially in the on island clusters settings.

Many studies about maternity waiting homes in remote areas have been carried out and have been successful. However, there is still very little research that discusses the utilitization of this facility in remote areas based on on island clusters settings. Based on this background, a study on the description of the use of maternity Waiting Houses in the on island clusters needs to be carried out further to be able to describe what factors that head an important role in the use of MWHs for pregnant and maternity mothers.

METHODS

This article was written using the traditional narrative literature review method, which is a synthesis of several studies that have been published in accordance with the substance of this paper. The topic in this review was how is the Utilization of Maternity Waiting Homes in The Cluster Island Approach. The review used in this article is a thematic review that is in accordance with the purpose of writing the article ⁽¹⁰⁾. The sources of information for articles as the main subject of the research studied came from the search engines Research gate, Google Scholar, and ScienceDirect with the keywords Maternity waiting house and island area. The information obtained as data and findings is collected, analyzed, and synthesized to examine the description of the utilization of the Maternity waiting house for mothers in the rural on island clusters.

RESULTS

Study selection was conducted by author independently. The selection process was first started by reviewing the titles and abstracts of all collected literatures were performed. Literatures with unrelated title and abstract were excluded. All relevant articles were considered for full review. A Literature search was performed using electronic databases including Research gate, Google Scholar, and ScienceDirect. Initial database search yielded 883 articles. Following the initial screening by title or abstract, a full-text review was performed. The final analysis was conducted for 6 studies. Broadly speaking, the findings in the journals found that there are several factors that influence the use of MWHs, including distance to health facilities, travel time, socio-economic conditions of the community, completeness of MWHs facilities, and community participation.

Utilization of the Maternity Waiting House (MWHs)

Based on the 6 studies, there are 3 studies that discuss the differences in the utilization of the Maternity Waiting House (MWHs) for pregnant women in the rural on island clusters. The results of the study stated that there were still many pregnant women who had not utilized the MWHs facilities provided by the government. Utilization of Maternity waiting homes in remote island areas is still not maximally implemented in Sumbawa Regency. This is because pregnant women prefer to wait at home alone than at waiting homes for gave birth. They choose to come directly to the Puskesmas (Primary Health Care) when there are signs of labor. In addition, there are still pregnant women who do not want to go to health facilities, preferring to call a dukun to assist with the delivery process (11).

However, in one of the studies conducted by Asriadi, et al (2021) the existence of the Maritime Maternity Waiting House (MWHs) received a very positive response from the people of Sinjai Regency, especially those living on IX Island. Previously, pregnant women who were about to give birth had to travel 2-3 hours to reach the puskesmas and hospital and not a few of them had to die in the middle of a sea voyage, now it is effective, efficient and instant ⁽¹²⁾. This is because mothers and families have a good level of knowledge about MWHs. A good level of knowledge will cause respondents to think and try to prepare themselves starting from pregnancy, determining the place of delivery and birth attendants so that they can carry out early detection and prevention in the face of childbirth.

Distance to Health Facilities

In this literature review, out of the 6 research results obtained, there are 5 studies examined the distance to health facilities for pregnant women. One of the results of the study stated that 40% of pregnant women and maternity mothers had not been served in quality health facilities, especially in remote areas where the distance from which pregnant women lived to the Maternity waiting house was very far ⁽¹³⁾.

Research conducted by Noor and Suparmi (2017) shows that the distance to the MWHs is related to the use of the MWHs, where respondents who live >25 km tend not to use the MWHs. The increase in the use of the MWHs in the community is dominated by pregnant women whose place of residence is less than 5 km. km and 6-25 km from health facilities⁽¹⁴⁾. This is not in line with the policy of the Ministry of Health of the Republic of Indonesia in 2012, where pregnant women with difficulties in accessing and having long distances to health facilities are expected to make more use of MWHs, so as to minimize the risk of complications during childbirth ⁽¹⁵⁾.

Traveling time

In this literature review of the 6 research results obtained, as many as 4 studies examine the travel time to the Maternity Waiting Home (MWHs). One study explained that the Archipelago Marine MWHs received a very positive response from the people of Sinjai Regency, especially those living on Island IX. Pregnant women who want to give birth, who previously had to travel 2-3 hours to get to the puskesmas and hospital and not a few of them had to die in the middle of the sea voyage, have now become effective, efficient and instant (12). The results of this study are in line with the results of research by Noor and Suparmi (2017) which shows that travel time is related to the use of MWHs. Respondents who have travel time to MWHs above 60 minutes tend not to use MWHs (14).

This is in line with previous findings where travel time is closely related to distance to health services. Travel time has a slightly different context from the distance to a health facility. Travel time in addition to showing the distance also shows access and transportation infrastructure from people's homes to the Puskesmas (16,17).

Socio-Economic Conditions of the Community

The community feels the existence of excellent service, because the waiting house is likened to being in the patient's private home so that they are free of charge and all facilities, food, drinks and all delivery and treatment costs do not need to be borne by the patient or the patient's family but are borne by the district government through District Health Office (12)

Completeness of MWHs Fasilitas Facilities

The provision of services in MWHs varies widely, depending on local needs and available resources. There are 2 types of services in the MWHs, namely first, MWHs without maternal and infant health care services, this MWHs only provides living facilities, namely a room containing standard equipment, a kitchen with its equipment and a bathroom; pregnant women and living companions by providing their own daily needs; second, MWHs with maternal and infant health care services, this MWHs in addition to providing lodging facilities for pregnant women and their companions, also provides counseling and health care carried out by health cadres or traditional birth attendants under the supervision of midwives or other health workers⁽¹⁸⁾. The finding that those women with a designated space had a much higher odds of facility delivery than those with no MWH or space suggests that there may be a characteristics about the facility, such as perceived supportive staff that are willing to accommodate waiting women when no space is formally available, that may influence women's decisions to deliver there.

Family and Community Participation

Information support about the Maternity waiting house provided by the family is very important so that the maternity mother and other families understand the benefits of the Maternity waiting house. In one study, it was stated that positive information support by the family will influence the mother giving birth to decide to stay at the Maternity waiting house. This is because family support for maternity mothers and gives confidence to maternity mothers that Maternity waiting homes are needed by maternity mothers, especially for highrisk maternity mothers⁽¹⁹⁾. This is because information about the Maternity waiting house program can only be obtained if the pregnant woman is accompanied by her family to come check her pregnancy to health workers so that pregnant women get information about the Maternity waiting house from health workers⁽²⁰⁾.

The role of the family in addition to being a support can also be an obstacle in the use of MWHs. Some pregnant women, high risk, and their caregivers don't want to use the MWHs because they can't leave their toddlers in their home village and even if they have to take their toddlers with them, there is a feeling that it will be very inconvenient. Based on the results of a study in Ethiopia, there are several reasons pregnant women do not use the MWHs, including because there is no one to take care of their children at home, problems with food and the length of time they stay in the MWHs. (21).

DISCUSSION

The Maternity waiting house is a place or room that is close to health facilities that can be used as a temporary place for pregnant women and their companions for a few days while waiting for the games to arrive and a few days after giving birth⁽⁶⁾. Maternity waiting homes (MWHs) are designed to help risky pregnant women and pregnant women who live far from the health facility in improving access to obstetric care after 37 completed weeks of gestation. According to Basith's research (2018), respondents' ignorance about the benefits of puskesmas, what can be obtained from health services at puskesmas causes them not to want to take advantage of health services at puskesmas. For respondents who have high knowledge and do not use the puskesmas, this is due to the belief that they are not suitable for treatment at the puskesmas and prefer midwife and hospital health services. Knowledge about MWHs will affect people's behavior in using MWHs. Knowledge has a very important role, with knowledge it can form attitudes that will be followed by the use of a health service. the higher the knowledge of the community, especially high-risk pregnant women about MWHs, the higher the desire to use MWHs. People's ignorance about the benefits, facilities, and services provided in the MWHs causes them not to want to use the MWHs⁽²²⁾.

This study synthesized research evidence on MWH implementation, aiming to identify the benefits and barriers for MWH implementation in the Islands. Despite the limited and variable evidence, the implementation of the MWH strategy is an appropriate strategy to improve access to skilled birth attendance for women who reside in Islands and remote settings.

The low utilization of MWHs can be due to low knowledge related to MWHs. This study shows that 24.4% of respondents do not know about MWHs. This result is lower when compared to the results of the research in Kenya which showed about 66.4% of respondents did not know about MWHs. Public knowledge is very important to form a positive attitude so as to encourage the community to increase access to health facilities (23.24).

The findings of the journal review also show that there are several reasons why mothers in labor refuse to use MWHs; first, transportation costs from villages outside Adaut Village in Selaru District are relatively very expensive when measured by their income; second, very poor geography makes access to MWHs difficult; third, high risk pregnant mother and her delivery man did not want to use the MWHs because they couldn't bear to leave their toddler in their home village and even if they had to take their toddler there was a very troublesome feeling ⁽²⁵⁾. For mothers who did not use the MWHs, most of them gave birth at home accompanied by a village midwife and "mama biang" (the name for a dukun who assisted in the delivery process).

Distance to Health Facilities and traveling time has an important role in MWHs Utilization. One of the Factors that infuenced a woman's decision and ability to stay at MWH during her pregnancy included distance (accessibility) and transport (absence of ambulance services to and from MWHs). Women who had long travel times to reach health facilities were more often advised to stay in MWH to overcome a geographic barrier, but geographic barriers also had an impact on MWH use ⁽²⁶⁾. This study shows that the distance to the MWHs is related to the utilization of the MWHs, where the respondent who lives is 25 km. This finding is in line with the results of research in Timor Leste which showed that there was an increase in the use of MWHs in people who were less than 5 km and 6-25 km from health facilities, while people who were >25 km tended not to use MWHs. This is not in line with the policy of the Ministry of Health where pregnant women with difficulties in accessing and having long distances to health facilities are expected to make more use of MWHs, so as to minimize the risk of complications during childbirth ⁽¹⁵⁾.

Women who had long travel tomes to reach health facilities were more often advised to stay in MWH to overcome a geographic barrier, but geographic barriers also impacted access to MWH use $^{(26)}$. The majority of MWH users came from the vicinities closer to the location of MWHs, implying that distance is a potential barrier to MWH use for women who reside in remote settings.

Socio-Economic Conditions of the Community also has important role in Utilization of MWHs. The contribution of MWHs as a crucial link for other maternal health services, as well as their availability as a way to overcome the geographic gap in access to healthcare facilities, were identified as typical enablers in the literature. Women staying at MWH have the opportunity to share experiences with other pregnant mothers, postpartum health education about family planning, infant feeding, and connecting women to the health facility and PNC services for both mothers and newborns (31).

There is also Completeness of MWHs Fasilitas Facilities that deterrents to MWH utilization that we try to capture in our study. The lack of either provision of food or help with cooking and the limited availability of water and firewood for cooking, were among other factors related to quality that affected a woman's staying in an MWH in both the global review of MWH utilization as well as the study in Zambia ⁽³²⁾. In Tanzania, a woman's previous or current experience with the health system, including whether or not she was treated with

respect during ANC or delivery, was found to be more important that the perceived quality of the facility itself ⁽³³⁾. Our study findings indicate there is something unique about facilities that provide waiting space for mothers, and this warrants further investigation.

Information support about the Maternity waiting house provided by the family so that the maternity mother and other families understand the benefits of the Maternity waiting house. Positive information support will influence the maternity mother to decide to stay in the Maternity waiting house. In addition, family support for maternity mothers and gives confidence to maternity mothers that a Maternity waiting house is needed by maternity mothers, especially for high-risk maternity mothers. This is because information about the Maternity waiting house program can only be obtained if the pregnant woman is accompanied by her family to come check her pregnancy to health workers so that pregnant women get information about the Maternity waiting house from health workers⁽²⁶⁾.

The refusal of a husband or parent to use MWH was demonstrated to be a barrier to MWH use. Pregnant women who desire to stay at MWH are expected to leave their children at home, and there is a societal view that leaving children alone at home without someone to support is a sign of a refusal of social responsibility.

CONCLUSION

The establishment and implementation of an island-based Maternity waiting house policy is one form of innovation in an effort to shorten the span of control and the affordability of health services for pregnant women. The policy for maternity waiting homes based on island clusters is one form of innovation developed by the local government with Unicef which aims to accommodate the needs of health services for pregnant women in small islands. Based on the results of a literature review, it shows that there are several factors that influence the use of MWHs, including distance to health facilities, travel time, socio-economic conditions of the community, completeness of MWHs facilities, and family and community participation.

RECOMMENDATION

It is important to emphasize the commitment and support of the government in working with the community and related sectors to maintain the sustainability of MWHs in Indonesia. Thus, the suggestion that can be given is that there is a need for encouragement from the government and health workers to mothers and families and the community to further socialize this Maternity waiting house program more massively. In addition, another suggestion that can be proposed is to include the Maternity waiting house program as a standard guideline for the management of childbirth and emergencies in the on islands clusters while still paying attention to the social and cultural aspects of the local community.

REFFERENCES

- Kemenkes RI. Profil Kesehatan Indonesia 2018 [Indonesia Health Profile 2018] [Internet]. 2019.
 207 p. Available from: http://www.depkes.go.id/resources/download/pusdatin/profil-kesehatan-indonesia/Data-dan-Informasi_Profil-Kesehatan-Indonesia-2018.pdf
- 2. Jiang H, Qian X, Chen L, Li J EE. Story Towards universal access to skilled birth attendance: the process of transforming the role of traditional birth attendants in Rural China. BMC Pregnancy Childbirth. 2016;
- 3. Hong R TR. Inequality in access to health care in Cambodia: socioeconomically disadvantaged women giving birth at home assisted by unskilled birth attendants. Asia Pac J Public Heal. 2015;
- 4. Riskesdas Kemenkes RI. Potret Kesehatan Indonesia dari Riskesdas 2018. Sehat Negeriku [Internet]. 2018; Available from: Potret Kesehatan Indonesia dari Riskesdas 2018
- 5. Joint Committee on Reducing Maternal and Pemanfatan Rumah Tunggu Kelahiran di Puskesmas Adaut Kecamatan ... (Noor Edi Widya Sukoco, Suparmi) 71 Neonatal Mortality in Indonesia. Reducing maternal and neonatal mortality in Indonesia: saving lives, saving th. 2013;1-131 p.

- 6. Dinas Kesehatan PP dan KB. Kerangka Acuan Kerja Penyediaan Rumah Tunggu Kelahiran. Kepulauan Anambas; 2019.
- 7. Indonesia MKR. Peraturan Menteri Kesehatan Republik Indonesia. 2015. p. 82.
- 8. Sukoco NEW. Kajian Keberlangsungan Rumah Tunggu Kelahiran (RTK) Dalam Upaya Menurunkan Angka Kematian Maternal Di Indonesia. Bul Penelit Sist Kesehat. 2018;21(2):114–24.
- 9. Tahir MM. Inovasi Program Kesehatan 24 Jam Dalam Mewujudkan Good Health Care Governance di Kabupaten Bantaeng. Universitas Muhammadiyah Makassar; 2017.
- 10. Small R v. Research Methods for Librarians and Educators. Mardis MA, editor. California: Libraries Unlimited; 2018.
- 11. Amelia Ramdani Hasby DFP. ANALISIS PEMANFAATAN RUMAH TUNGGU KELAHIRAN PADADAERAH TERPENCIL DI KABUPATEN SUMBAWA. JurnalKesehatandanSains. 2018;2(1):34–47.
- 12. Asriadi, Sumardi J. Efektifitas Pemanfaatan Rumah Tunggu Kelahiran (RTK) Bahari di Sinjai sebagai Wujud Inovasi Pelayanan Publik. J Gov Insight. 2021;1(1).
- 13. Jody R. Lori, Joseph Perosky, Munro-Kramer, Michelle L., Veliz2 P, Musonda G, Kaunda3 J, Carol J. Boyd, Rachael Bonawitz Biemba G, Scott TN and N. Maternity waiting homes as part of a comprehensive approach to maternal and newborn care: a cross-sectional survey. BMC Pregnancy Childbirth. 2019;19(228).
- 14. Sukoco NEW, Suparmi. Pemanfatan Rumah Tunggu Kelahiran di Puskesmas Adaut Kecamatan Selaru Kabupaten Maluku Tenggara Barat Tahun 2015. Bul Penelit Kesehat. 2015;45(1).
- 15. Kementerian Kesehatan RI. Pedoman Pelayanan Rumah Tunggu Kelahiran. Indonesia; 2012.
- 16. Atuoye KN, Dixon J, Rishworth A, Galaa SZ, Boamah SA LI. Can she make it? Transportation barriers to accessing maternal and child health care services in rural Ghana. BMC Heal Serv Res. 2015;15(1):333.
- 17. Sundu S, Mwale OG CE. Women 's Antenatal Mothers' Experience of Staying in a Maternity Waiting Home at Malamulo Mission Hospital in Thyolo District Malawi: A Qualitative, Exploratory Study. Heal Gynecol Sci Open Access. 2017;3(1):1–10.
- 18. Fitria OSRA. Gambaran Pengetahuan Tentang Rumah Tunggu Kelahiran Di Tamher Timur. J Pengabmas Masy Sehat. 2020;
- 19. Wild K, Barclay L, Kelly P MN. The tyranny of distance: Maternity waiting homes and access to birthing facilities in rural Timor-Leste. Bull World Heal Organ. 2012;90(2).
- 20. Baiquni, Willem H.Jr. Jambormias M, Mahendradata, AG. Subarsono Y. KEBIJAKAN RUMAH TUNGGU BERSALIN BERBASIS GUGUS PULAU DI PULAU SELARU KABUPATEN MALUKU TENGGARA BARAT. J Kebijak Kesehat Indones JKKI. 2018;
- 21. Tiruneh GT, Taye BW, Karim AM Betemariam WA, Zemichael F, Wereta TG E, Al. Maternity waiting homes in Rural Health Centers of Ethiopia: The situation, women's experiences and challenges. Ethiop J Heal Dev. 2016;30(1).
- 22. Basith, Z. A. and Prameswari GN. Pemanfaatan Pelayanan Kesehatan di Puskesmas'. HIGEIA (Journal Public Heal Res Dev. 2018;1(3):84–94.
- 23. RW. A. Knowledge, attitude and practice of mothers towards skilled delivery services in a maternity waiting home in Merti District, Isiolo County. Prime J Soc Sci. 2015;4(8):1140–(8):1140–1154.
- 24. Yar I, Said I YI. Knowledge and Barriers in Utilization of Maternal Health Care Services in Kano State, Northern Nigeria. Eur J Biol Med Sci Res. 2013;1(1):1–14.
- 25. Lori J R, Wadsworth A C, Munro M L, Rominski S. Promoting access: the use of maternity waiting homes to achieves a fe motherhood. Midwifery. 2013;29 (10): 1095 –102.
- 26. Harahap, R. S., Baridan, M., & Rifai, A. (2018). Faktor yang Berhubungan dengan Pemanfaatan Rumah Tunggu Kelahiran di Wilayah Kerja Puskesmas Binjai Serbangan Kabupaten Asahan. Jurnal Kesehatan Global, 1(1), 28–36.
- 27. Huru, Matje Meriaty and Kartasurya, Martha Irene and Purnami, C. T. (2014). nalisis Faktor-Faktor yang Berhubungan dengan Pemanfaatan Rumah Tunggu oleh Ibu Bersalin di Kabupaten Kupang Propinsi Nusa Tenggara Timur. Universitas Diponegoro.
- 28. Sukoco, N. E. W., & Suparmi, S. (2017). Pemanfaatan Rumah Tunggu Kelahiran di Puskesmas Adaut Kecamatan Selaru Kabupaten Maluku Tenggara Barat Tahun 2015. Buletin Penelitian Kesehatan, 45(1), 65–72.
- 29. Bakoil, M., Supriyanto, S., & Koesbardiati, T. (2014). Hubungan Jaminan Persalinan, Jarak Tempat

- Tinggal, Waktu Tempuh dan Kebiasaan Masyarakat Terhadap Pemanfaatan Tempat Persalinan di Kabupaten Timor Tengah Selatan. 487–496.
- 30. Gezimu W, Bitewa YB, Tesema MT, Wonde TE. Intention to use maternity waiting home and associated factors among pregnant women in Gamo Gofa zone, Southern Ethiopia, (2019). PloS one. 2022;16(5):e0251196. pmid:33983992
- 31. Larson E, Hermosilla S, Kimweri A, Mbaruku GM, Kruk ME. Determinants of perceived quality of obstetric care in rural Tanzania: a cross-sectional study. BMC Health Serv Res. 2014;14:483.
- 32. Kebede KM, Mihrete KM. Factors infuencing women's access to the mater- nity waiting home in rural Southwest Ethiopia: a qualitative exploration. BMC Pregnancy Childbirth. 2020;20(1):296.
- 33. Van Lonkhuijzen L, Stekelenburg J, van Roosmalen J. Maternity waiting facilities for improving maternal and neonatal outcome in low-resource countries. Cochrane Database Syst Rev. 2012;10:CD006759.
- 34. Getachew B, Liabsuetrakul T, Gebrehiwot Y. Association of maternity waiting home utilization with women's perceived geographic barriers and delivery complications in Ethiopia. Int J Health Plann Manag. 2020;35(1):e96–107.