

Original Research Paper

The experience of pregnant women in accessing maternal care during pregnancy: a qualitative study**Siti Fatimah***, Darmayanti Wulandatika, Mahfuzhah Deswita Puteri, Yustan Azidin

Bachelor of Midwifery Programme, Faculty of Nursing and Health Sciences, Universitas Muhammadiyah Banjarmasin, Banjarmasin, Indonesia

 fattimaharifin80@umbjm.ac.id

Submitted: July 4, 2024

Revised: August 10, 2024

Accepted: November 18, 2024

Abstract

Antenatal care is important in health optimization and early detection of maternal and fetal problems during pregnancy. In developing countries, access to prenatal care is still not optimal, which is indicated by the high maternal mortality rate in Indonesia of 173 per 100,000 live births. Midwives have an important role in pregnancy services by providing midwifery care that focuses on the needs of women. This study aims to determine the experience of pregnant women in South Kalimantan in accessing midwifery services during pregnancy. This study is qualitative and uses a generic exploratory approach. The research Data were taken using in-depth interviews with five pregnant women and analysed using the Collaizi framework with attention to the rigour of research data. The results of this study indicate that socio-cultural and socio-economic factors significantly impact the choice of healthcare facilities used. The existence of health policies and programs that focus on the needs of women is expected to optimize the quality of midwifery services.

Keywords: experiences; maternal healthcare; pregnant women**1. Introduction**

The maternal mortality rate is an important indicator in measuring the health status of women in a country because it relates to women's health care which is closely linked to the quality and quantity of health care. WHO showed that the global maternal mortality rate was 223 per 100,000 live births in 2020, there is a significant difference between maternal mortality rate in developed countries and developing countries (WHO, 2024). Indonesia has a maternal death rate of 173 per 100.000 live births; although the maternal mortality rate in Indonesia is lower than the maternal mortality rate in the world, but maternal mortality rate in Indonesia is higher when compared with neighbouring countries such as Malaysia with 21 per 100,000 live births and the Philipp. ines with 78 per 100,000 live births (Badan Pusat Statistik, 2020).

The Long Form Population Census Indonesia (2020) show a disparity in maternal mortality rate among Indonesian regions: the maternal mortality rate in Java and Bali is 166 per 100,000 live births, while the maternal mortality rate in Kalimantan is 216 per 100,000 live births. The maternal mortality rate in Papua, Nusa Tenggara, and Maluku is 350 per 100,000 live births (Badan Pusat Statistik, 2020). Kalimantan has the second-highest mortality rate in Indonesia. Previous research has shown that the majority of the population in Kalimantan has limited socio-economic status, strong socio-cultural influences, limited access to healthcare services, inadequate transportation facilities in the region, and low awareness of maternal healthcare services, which affects decision-making and experiences in choosing inadequate healthcare services and leads to health issues (Ajegbile, 2023; Rahman et al., 2023; Wulandari et al., 2021).



The maternal mortality rate in Indonesia occurs during pregnancy (30%), during childbirth (39%), and after delivery (31%) (Central Statistics Agency, 2020). The maternal mortality rate in South Kalimantan Province fluctuated over the past four years. This illustrates the need for better healthcare to reduce maternal mortality rates in South Kalimantan Province. In 2022, the mortality rate in South Kalimantan Province was 136 per 100,000 live births (Dinas Kesehatan Kalimantan Selatan, 2023).

Based on data from the 2022 South Kalimantan Health Profile, it showed that first antenatal visit (K1) coverage in South Kalimantan is 79.4%, while the first antenatal visit (K1) coverage in Banjarmasin City is 69.6%, which is significantly below the provincial the first antenatal visit (K1) coverage. The highest causes of maternal mortality in 2022 are other Causes (31 cases), Hypertension Disorders (23 cases) and Bleeding in pregnancy (27 cases). Efforts to reduce maternal mortality due to bleeding and hypertension continue to be carried out and be aware of other causes, one of which is by maximizing antenatal care during pregnancy (Dinas Kesehatan Kalimantan Selatan, 2023).

Previous research has shown that prenatal care has an important role in decreasing maternal neonatal mortality (Islam & Tabassum, 2021). Every woman has unique needs during pregnancy, including the maternal healthcare that hopefully would contribute to the reduction of risk of prematurity, low birth weight, perinatal asphyxia (Veloso et al., 2019). Pregnant women in Asia who have higher education and have access to information about pregnancy and stable socio-economic status will have a higher chance of increased use of antenatal care services (Ekholuenetale et al., 2020; Islam & Tabassum, 2021). Maternal health care influences the health status of pregnant women during their pregnancy (Shee et al., 2023; Yazdani et al., 2023). Financial constraints, service satisfaction, and accessibility to prenatal services on antenatal visits influence antenatal care visit (Öztürk et al., 2022). The previous study shows that women who initiated ANC after 2 gestation age week 14 or attended <50% of recommended ANC visits had an increased risk of neonatal intensive care (Heaman et al., 2019).

This study aims to identify the experience of pregnant women in accessing maternity services during pregnancy in South Kalimantan related to pre-existing knowledge of pregnant women about maternity services during pregnancy, the support and challenges that pregnant women obtained in maternity care during pregnancy.

2. Research Method

The study uses research data taken directly from the informant through an in-depth interview using guidelines of the interview that have been evaluated by the expert judgement and piloting interview on research informant. The data collection of this research was carried out at the pregnancy facility in Primary healthcare using a private place and safe for research informants.

As for the population in this study, all pregnant mothers are in Primary healthcare. This research sample was taken using purposive sampling techniques taking into account the inclusion and exclusion criteria of the study sample. The criteria for inclusion of the sample of this study are pregnant women who come to Primary healthcare to check their pregnancy, pregnant women who have a suitable address/domain, as well as carrying the pregnancy book during the pregnancies examination.

This research uses a qualitative approach with a generic exploratory approach technique. Data on the research has been transcribed verbally and then analysed using thematic analysis with reference to the Collaizi Framework (Kiger & Varpio, 2020). The rigour of research data is carried out by considering four aspects: reliability, credibility, confirmability and transferability (Johnson et al., 2020). In addition, the researchers also triangulated the research data using documents that support the information provided by informants such as triangulations using the pregnancy book. The researcher obtained permission from the Ethics Commission of Universitas Muhammadiyah Banjarmasin.

3. Results and Discussion

3.1.Characteristics of Informants

From the research results, the following data was obtained

Table 1. Characteristics of Research Informant

Informants	Age (Year)	Gravids
INF_1	24	G3P0A0
INF_2	23	G1P0A0
INF_3	23	G2P1A0
INF_4	35	G5P4A0
INF_5	20	G6P5A0

Source: Primary Data, 2024

3.2.Result

3.2.1.Theme 1: Access in Pregnancy Planning

The findings of this study reveal that the majority of pregnant women do not plan their pregnancies well, thus highlighting the need for healthcare professionals to ensure that fertile couples have access to and the ability for pregnancy planning. The results explain how families and parents react and feel when they find out about pregnancy. The majority of the replies were accepting, confused, and perplexed. Based on the following informant data, it is known:

"I was late menstruation, used contraceptive pill use, so menstruation is regular, every 4 weeks menstruation once, most usually late 1-2 days, missed taking the schedule, in the first month is safe, pas already entered the second month really is not safe it turns out,, how can I do it again" (INF_5).

"2nd child, 2 years old, but different husband,, usually regular menstruation every month, but yesterday did not menstruate for 2 months",,, "I've been through this pregnancy, what else can I do" (INF_4)

Most of the pregnancies that women suffer are not planned. It is based on data from the following research participants:

"yesterday I injected of family planning, so when I left (out of town) with my husband, I could not remember the injection date (re-injection of contraception), because the contraceptive card was left behind, "so yesterday I did not inject, because I forgot the date, I did not dare,, " I did not use condoms either, I just passed " (INF_4).

"she said 16 weeks",,, "pregnant with 3rd child now",,, "used to use contraception, forgot to drink so confused why not menstruation, keep on the test, it turns out the line 2, no complaints, dizziness is also not" (INF_1).

After childbirth, the informant has a different view of pregnancy preparation through distance adjustment using contraceptives. This is based on the information provided by the following informant:

"tubectomy do not want, do not, if the IUD is also not brave, implant also how, can not also often lift heavy cooking so,, sticky (implant) he said if too long yes" (INF_5)

"I after giving birth do not want to use contraception, I want to have seven children, my cousin's children who take care of it" (INF_2).

"I usually give birth, even though I have been using contraception for a year, then I take it off, immediately get pregnant again,, the midwife's mother is also surprised because every year I am pregnant, so the Midwife is advised to be sterile,, it is ready to be sterilized, the husband is also ready,, can also want to install implants, said the midwife, if iud I am still afraid, afraid of conceding too, so I wrote that tubectomy is okay, because I already have six children" (INF_4).

3.2.2. Theme 2: Social Support

The findings describe the support that mothers and families gained when they learned about their pregnancy. Pregnant women get support from family, spouses, and friends. This is based on the information provided by the following informant:

"The family is okay; only yes, if pregnant, continue to be surprised, too, and pity the previous child " (INF_3).

" the husband is okay, even though the mother-in-law has enough children, but yes, the husband said that it was okay to add, he said, it was actually pregnant" (INF_Merah).

"I talked to my friend, my friend said Bring a check to the health center only",, "my friend is also pregnant, my friend also checked to the doctor, so there checked it",, "said My husband's friend, my family id is also not there, well that too mom still not taken care of for the file" (INF_2).

"my husband works, usually escorted, usually alone, if he is off (work) must be accompanied" (INF_1).

3.2.3. Theme 3: Midwifery Care

These findings illustrate the health care that mothers get during pregnancy. Health Services obtained by mothers determine the selection of the place of delivery, comprehensive obstetric services, collaboration with other health workers. This can be seen from the following informant information:

"I've been asked where I want to give birth, I want to go to the midwife again, because it's good, pay actually, the first child is also there, it depends too, the first child is different, maybe later the different children will also pay differently" (INF_1).

"if you still feel comfortable, just want to give birth near here, if you are a little tired, it feels like you want surgery" (INF_5).

"the plan is to give birth only at the midwife, the plan is to give birth in 11 months, there is a clinic here said The Midwife" (INF_5).

"I want to give birth in a hospital only, because it is borne by my husband's office " (INF_2).

Health services are closely related to the experience gained by mothers in previous pregnancies, the distance to health facilities that determine the choice of place of delivery, relationships with good midwives, long waiting in line for a while, and the availability of payment methods available. This can be seen from the following informant information:

"I went to the health center with the midwife because it was close, she wanted to be picked up (husband) but could not be contacted because she might still be busy" (INF_1).

"fifth pregnancy, had already checked, just waiting for ultrasound again, just went to the lab, now 4 months, my house is behind here, so just close, alone here, starting to conceive a first child, The Midwife is familiar" (INF_5).

"I feel more comfortable here, faster, I also caten also here, so feel better so" (INF_2).

"first check the pregnancy at the midwife, but the midwife said it was still small, it was recommended to the primary healthcare, so I could book also at the primary healthcare" ,, "yesterday I checked out, 1 month again, I checked into the primary healthcare 3 times because of the ultrasound" ,, "last Tuesday I checked, I want Wednesday but it's full so next Wednesday the midwife said, I checked the stomach but not on the ultrasound yesterday" ,, "I usually go to the midwife, because it's close too, alhamdulillah also check in the primary healthcare is free, just bring ID card and book" (inf_1).

Health services during pregnancy obtained by mothers also come from other health workers associated with collaborative care, referral due to risk factors. This can be seen from the following informant information:

"checks ultrasound, the placenta is rather big said the doctor",,, "yesterday check to the midwife too, to the doctor too, check usually 1 month, if to the doctor rarely, to know the sex" (INF_3).

"the midwife said it was okay to go to the doctor, as long as the Pregnancy book was brought",,, "my sister used to be treated by a doctor , she said the doctor was good in the city, had already contacted other doctors it was closed, which opened today this doctor alone was okay, because of the different schedule",,, "I want a good doctor",,, "if my husband is a bit possessive, if the female Doctor is asked too, just haven't been there, if I am a male or female doctor the same, the important thing is good, so the husband plans to do it join today work "(inf_2).

3.3. Discussion

The results of the study related to the experience of pregnant women in accessing obstetric services during pregnancy were described using the patient-centred access to health care framework Levesque (Cu et al., 2021) to describe health services, especially midwifery, centred on individual needs.

Quality Antenatal care is one of the pillars in safe motherhood and has an effect on improving the health of mothers and neonates (Rahimi et al., 2022). The causes of maternal mortality are more than 50% closely related to complications that occurred during the period of gestation, and 90-95% are of developing countries (WHO, 2024). Based on this study, it is known that the majority of pregnant women are still unable to plan their pregnancy effectively. This is because people have inadequate knowledge about contraceptives, which includes failing to use emergency contraception after forgetting to take birth control pills, time management re-injection visits inconsistently, and not realizing how essential it is to plan a healthy pregnancy.

Women who have good knowledge related to women's reproductive health related to careful pregnancy planning and the use of good contraception (Fikadu et al., 2022). A well-planned pregnancy has a strong effect on the prenatal visit. In addition, pregnant women who have planned their pregnancy by having 2 times more frequent chances of pregnancy check-up visits compared to mothers with unplanned pregnancies (Stanikzai et al., 2021). Due to unplanned pregnancies, pregnant women who's frequency of antenatal visits deviates from standard frequently come from families with limited incomes (Stanikzai et al., 2021).

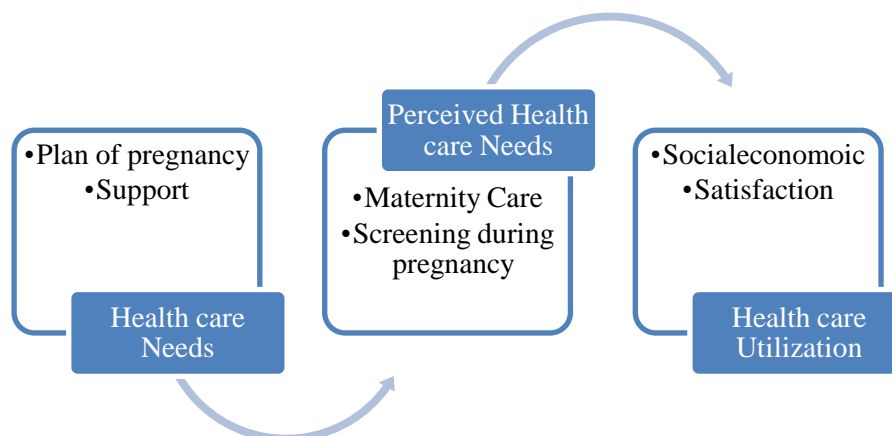


Figure 1. Patient-centered healthcare access.

Source: Patient-centred access to health care framework (Modified from (Cu et al., 2021))

The presence of support from family, friends, and husband during pregnancy will affect the psychosocial health of the mother during pregnancy. This is consistent with previous research findings that state that family support during pregnancy can improve family relationships and impact the psychosocial health of the mother (Hawkins et al., 2021). The forms of support obtained include financial support, assistance during pregnancy examination, psychological support during pregnancy and the selection of health workers, and the selection of the place of delivery. Couples have an important role to play in accessing health services during pregnancy. Pregnant women who get support from their partner will visit the ANC in a timely manner and get support in the form of transportation and financial support from their partner (Komuhangi, 2020) While family support during pregnancy can include advice during pregnancy, support, assistance in preparation for childbirth and accompany during pregnancy and childbirth examination (WHO, 2024).

Previous research has shown that maternal psychosocial health factors during pregnancy are very influential on fetal health (Monterrosa-Castro et al., 2023). In addition, pregnant women who do not get enough social support during pregnancy will have a greater chance of giving birth to a baby with low birth weight (LBW). Pregnant women who have symptoms of depression during pregnancy will increase the chance of having a premature birth (Jahan et al., 2021). Stress during pregnancy affects maternal health. The presence of psychological health problems during pregnancy that may have an impact on fetal growth and development disorders (Pascal et al., 2023).

In this study, midwifery care obtained by pregnant women during pregnancy was carried out comprehensively and reflected obstetric care that focuses on the needs of women. Pregnancy checks are often carried out at midwife clinics and also health centers. The choice of the place of prenatal care is based on trust and a strong bond between the mother and health workers. In addition, collaboration is also carried out with other health workers to improve monitoring of maternal health status such as collaboration with dentists for dental examinations, collaboration with laboratories for lab examinations, collaboration with nutritionists for nutritional counselling and collaboration and referral to doctors if emergency risk factors are found that are outside the authority of Midwives. In the first trimester, every pregnant woman who comes is screened and examined related to Hb, complete blood count, ultrasound examination, HIV/AIDS examination, Hepatitis B examination and fetal health examination to match the mother's gestational age. During pregnancy, it is important for pregnant women to get a comprehensive examination including HB, HIV, syphilis, urinary tract infections and a complete blood count. This is in accordance with WHO recommendations and previous studies where pregnant women should immediately check their pregnancy in the first trimester in order to get care in accordance with the needs and improve the health of the mother and fetus (Dahl et al., 2020).

Pregnant women need to consider the preparation costs required, but this is a problem because of the socio-economic problems where most of the research informants stated indirectly have financial problems in everyday life where most heads of families work in the informal sector. Economic Status is one of the important considerations in the selection of health facilities and the selection of maternity which is often associated with the cost of childbirth, the cost of prenatal care, ultrasound payments and also transportation during the examination. Available health insurance facilities most pregnant women own provide important benefits in helping financial burdens during pregnancy and childbirth. Research conducted in Ethiopia revealed that 72% of pregnant women who pay or prepare transportation costs during pregnancy checks will make ANC visits that are not in accordance with the schedule compared to mothers who do not prepare transportation costs (Yehualashet et al., 2022). Most pregnant women plan childbirth using their insurance so they can reduce costs. Health insurance provided at basic health facilities is beneficial in reducing the cost of prenatal care and improving access to health services for mothers and babies at all health facilities (Mutai & Otieno, 2021). Women are very important to get

empowerment through education and participation, which can improve the family's economic status and provide a strong financial foundation for the family (Mutai & Otieno, 2021).

During pregnancy, it is important to have a good relationship between pregnant women and midwives, cadres and other health workers. Pregnant women who have a good relationship and satisfaction with the services provided by health workers will increase confidence and support for their pregnancy so that it will improve the quality of pregnancy visits in accordance with the schedule. Pregnant women have high satisfaction with obstetric services during pregnancy related to the conditions in the facility, the attitude of midwives in providing care and the availability of time occupied while in a health facility (Yazdani et al., 2023). In addition, the availability of health facilities related to the length of waiting for examination greatly affects the satisfaction of pregnant women with health services (Baron & Kaura, 2021).

Several studies describe several factors that affect the satisfaction of pregnant women with services obtained during pregnancy such as parity, distance from health facilities, and long waiting for examination. Previous research revealed that as many as 73% of multigravid pregnant women delay the first visit of pregnancy (Tumwizere et al., 2024). Late ANC visits in multigravid mothers are closely related to proximity to health facilities, education, previous labor history and the desire to have multiple children (Tumwizere et al., 2024). The length of the examination during pregnancy also greatly affects the satisfaction of the services provided at the time of antenatal care (ANC) (Baron & Kaura, 2021; Mutai & Otieno, 2021). This is in accordance with research conducted in Nigeria which states that long waiting times for examinations make pregnant women reluctant to make subsequent repeat visits to health facilities (Abdus-Salam et al., 2021). The location where pregnant women live has a strong effect on antenatal care visits. Pregnant women who have a place to stay close to health facilities have a greater chance of visiting the ANC in accordance with the schedule compared to pregnant women who live far from health facilities (Stanikzai et al., 2021; Yehualashet et al., 2022). The satisfaction that pregnant women get during the examination greatly influences the recommendations given to other people to visit the same health facility. The health management training provided to health workers is expected to maximize the services provided and reduce the waiting time for examination (Mutai & Otieno, 2021).

This study found several important findings related to the experience of pregnant women in accessing health services, especially obstetrics during pregnancy. However, there are some limitations in this study including that sample size of the respondents came from families with low socioeconomic status that may affect the results of the study. In addition, this study was conducted in urban areas so it has not been able to represent the residence of pregnant women who come from the suburbs and rural areas.

4. Conclusion

The results of this study indicate that multiple factors influence the use of maternal health services during pregnancy. Access in pregnancy planning, social support including socioeconomic conditions and distance from health facilities, respectful midwifery care are part of the influence on pregnant women in carrying out examinations during pregnancy. This study is expected to help in making policies and strategies in obstetrics services, especially during pregnancy by considering health policies and programs that suit the needs of pregnant women, especially programs related to pregnancy planning, increasing knowledge and active role of couples about maternal and fetal health during pregnancy and related programs to increase knowledge about the importance of contraceptives. In addition, it is important to manage services in health facilities by taking into account the distance to the place of residence of pregnant women and also shorten the waiting time for examination queues.

Acknowledgement

Thank you to the Muhammadiyah University of Banjarmasin and the Indonesian Midwifery Education Association for providing the opportunity for this research to be carried out and published.

References

- Abdus-Salam, R. A., Adeniyi, A. A., & Bello, F. A. (2021). Antenatal Clinic Waiting Time, Patient Satisfaction, and Preference for Staggered Appointment-A Cross-Sectional Study. *Journal of Patient Experience*, 8, 23743735211060800. <https://doi.org/10.1177/23743735211060802>
- Ajegbile, M. L. (2023). Closing the gap in maternal health access and quality through targeted investments in low-resource settings. *Journal of Global Health Reports*, 7, 1–5. <https://doi.org/10.29392/001c.88917>
- Badan Pusat Statistik. (2020). *Mortalitas di Indonesia Hasil Long Form Sensus Penduduk 2020*. 78. <https://indonesia.unfpa.org/sites/default/files/pub-pdf/mortalitas-di-indonesia-hasil-long-form-sensus-penduduk-2020.pdf>
- Baron, J. C., & Kaura, D. (2021). Perspectives on waiting times in an antenatal clinic: A case study in the Western Cape. *Health SA*, 26, 1513. <https://doi.org/10.4102/hsag.v26i0.1513>
- Cu, A., Meister, S., Lefebvre, B., & Ridde, V. (2021). Assessing healthcare access using the Levesque's conceptual framework– a scoping review. *International Journal for Equity in Health*, 20(1), 1–14. <https://doi.org/10.1186/s12939-021-01416-3>
- Dahl, B., Heinonen, K., & Bondas, T. E. (2020). From Midwife-Dominated to Midwifery-Led Antenatal Care: A Meta-Ethnography. *International Journal of Environmental Research and Public Health*, 17(23). <https://doi.org/10.3390/ijerph17238946>
- Dinas Kesehatan Kalimantan Selatan. (2023). Profil Kesehatan Provinsi Kalimantan Selatan. In *Dinas Kesehatan Kalimantan Selatan*. Dinas Kesehatan Kalimantan Selatan.
- Ekhoulenetale, M., Benebo, F. O., & Idebolo, A. F. (2020). Individual-, household-, and community-level factors associated with eight or more antenatal care contacts in Nigeria: Evidence from Demographic and Health Survey. *PLoS ONE*, 15(9 September), 1–19. <https://doi.org/10.1371/journal.pone.0239855>
- Fikadu, K., Wasihun, B., & Yimer, O. (2022). Knowledge of pre-conception health and planned pregnancy among married women in Jinka town, southern Ethiopia and factors influencing knowledge. *PLoS ONE*, 17(5 May), 1–14. <https://doi.org/10.1371/journal.pone.0268012>
- Hawkins, M., Misra, D., Zhang, L., Price, M., Dailey, R., & Giurgescu, C. (2021). Family involvement in pregnancy and psychological health among pregnant Black women. *Archives of Psychiatric Nursing*, 35(1), 42–48. <https://doi.org/10.1016/j.apnu.2020.09.012>
- Heaman, M. I., Martens, P. J., Brownell, M. D., Chartier, M. J., Derksen, S. A., & Helewa, M. E. (2019). The Association of Inadequate and Intensive Prenatal Care With Maternal, Fetal, and Infant Outcomes: A Population-Based Study in Manitoba, Canada. *Journal of Obstetrics and Gynaecology Canada : JOGC = Journal d'obstetrique et Gynecologie Du Canada : JOGC*, 41(7), 947–959. <https://doi.org/10.1016/j.jogc.2018.09.006>
- Islam, M. A., & Tabassum, T. (2021). Does antenatal and post-natal program reduce infant mortality? A meta-analytical review on 24 developing countries based on Demographic and Health Survey data. *Sexual & Reproductive Healthcare*, 28, 100616. <https://doi.org/https://doi.org/10.1016/j.srhc.2021.100616>
- Jahan, N., Went, T. R., Sultan, W., Sapkota, A., Khurshid, H., Qureshi, I. A., & Alfonso, M. (2021). Untreated Depression During Pregnancy and Its Effect on Pregnancy Outcomes: A Systematic Review. *Cureus*, 13(8), e17251. <https://doi.org/10.7759/cureus.17251>

- Johnson, J. L., Adkins, D., & Chauvin, S. (2020). A Review of the Quality Indicators of Rigor in Qualitative Research. *American Journal of Pharmaceutical Education*, 84(1), 7120. <https://doi.org/10.5688/ajpe7120>
- Kiger, M. E., & Varpio, L. (2020). Thematic analysis of qualitative data: AMEE Guide No. 131. *Medical Teacher*, 42(8), 846–854. <https://doi.org/10.1080/0142159X.2020.1755030>
- Komuhangi, G. (2020). *Socio-Demographics and Late Antenatal Care Seeking Behavior : A Cross Sectional Study among Pregnant Women at Kyenjojo General Hospital , Western Uganda*. 69–86. <https://doi.org/10.4236/ojn.2020.101004>
- Monterrosa-Castro, Á., Romero-Martínez, S., & Monterrosa-Blanco, A. (2023). Positive maternal mental health in pregnant women and its association with obstetric and psychosocial factors. *BMC Public Health*, 23(1), 1–13. <https://doi.org/10.1186/s12889-023-15904-4>
- Mutai, K. T., & Otieno, G. O. (2021). Utilization of focused antenatal care among expectant women in Murang'a county, Kenya. *Pan African Medical Journal*, 39. <https://doi.org/10.11604/pamj.2021.39.23.26339>
- Öztürk, R., Ergün, S., & Özyazıcıoğlu, N. (2022). Effect of antenatal educational intervention on maternal breastfeeding self-efficacy and breastfeeding success: a quasi-experimental study*. *Revista Da Escola de Enfermagem*, 56, 1–8. <https://doi.org/10.1590/1980-220X-REEUSP-2021-0428>
- Pascal, R., Casas, I., Genero, M., Nakaki, A., Youssef, L., Larroya, M., Benitez, L., Gomez, Y., Martinez-Aran, A., Morilla, I., Oller-Guzmán, T. M., Martín-Asuero, A., Vieta, E., Crispi, F., Gratacos, E., Gomez-Roig, M. D., & Crovetto, F. (2023). Maternal Stress, Anxiety, Well-Being, and Sleep Quality in Pregnant Women throughout Gestation. *Journal of Clinical Medicine*, 12(23). <https://doi.org/10.3390/jcm12237333>
- Rahimi, B. A., Mohamadi, E., Maku, M., Hemat, M. D., Farooqi, K., Mahboobi, B. A., Mudaser, G. M., & Taylor, W. R. (2022). Challenges in antenatal care utilization in Kandahar, Afghanistan: A cross-sectional analytical study. *PloS One*, 17(11), e0277075. <https://doi.org/10.1371/journal.pone.0277075>
- Rahman, F. F., Haris, F., & Irawati, K. (2023). Equate access to primary health care in rural Kalimantan: what essential health services should be available locally? *Journal of Holistic Nursing Science*, 10(2). <https://doi.org/10.31603/nursing.v0i0.8460>
- Shee, A. W., Frawley, N., Robertson, C., McKenzie, A. M., Lodge, J., Versace, V., & Nagle, C. (2023). Accessing and engaging with antenatal care: an interview study of teenage women. *BMC Pregnancy and Childbirth*, 21(1), 1–15. <https://doi.org/10.1186/s12884-021-04137-1>
- Stanikzai, M. H., Wafa, M. H., Wasiq, A. W., & Sayam, H. (2021). *Magnitude and Determinants of Antenatal Care Utilization in Kandahar City , Afghanistan. 2021*.
- Tumwizere, G., K. Mbonye, M., & Ndugga, P. (2024). Determinants of late antenatal care attendance among high parity women in Uganda: analysis of the 2016 Uganda demographic and health survey. *BMC Pregnancy and Childbirth*, 24(1), 32. <https://doi.org/10.1186/s12884-023-06214-z>
- Veloso, F. C. S., Kassar, L. de M. L., Oliveira, M. J. C., Lima, T. H. B. de, Bueno, N. B., Gurgel, R. Q., & Kassar, S. B. (2019). Analysis of neonatal mortality risk factors in Brazil: a systematic review and meta-analysis of observational studies. *Jornal de Pediatria*, 95(5), 519–530. <https://doi.org/10.1016/j.jped.2018.12.014>
- WHO. (2024). *Maternal mortality*. <https://www.who.int/news-room/fact-sheets/detail/maternal-mortality>
- Wulandari, R. D., Laksono, A. D., & Rohmah, N. (2021). Urban-rural disparities of antenatal care in South East Asia: a case study in the Philippines and Indonesia. *BMC Public Health*, 21(1), 1–9. <https://doi.org/10.1186/s12889-021-11318-2>

- Yazdani, N. S., Haider, K. A., Khan, A., Jaffar Zaidi, S. A., Rajani, A., Nisar, I., Jehan, F., & Hoodbhoy, Z. (2023). Pregnant Women's Experiences with Midwifery-Led Antenatal Care Services in Peri-Urban Communities in Karachi, Pakistan. *Patient Related Outcome Measures, Volume 14*(May), 127–136. <https://doi.org/10.2147/prom.s404476>
- Yehualashet, D. E., Seboka, B. T., Tesfa, G. A., Mamo, T. T., & Seid, E. (2022). Determinants of optimal antenatal care visit among pregnant women in Ethiopia: a multilevel analysis of Ethiopian mini demographic health survey 2019 data. *Reproductive Health, 19*(1), 61. <https://doi.org/10.1186/s12978-022-01365-2>