



## **Integrating Prevention of Pregnancy Complaints and Mental Health Promotion in Antenatal Care: Midwives' View**

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### **ABSTRACT**

*Physiological and psychological changes during pregnancy can cause various complaints, such as nausea, back pain, and sleep disturbances, as well as increase the risk of mental health disorders such as anxiety and depression. However, current antenatal services still focus more on physical aspects compared to preventing pregnancy complaints and promoting mental health. This study aims to explore the integration of education on preventing common pregnancy complaints and promoting mental health in first contact antenatal care based on the perspective of midwives. The research method used was qualitative with purposive sampling technique, involving 6 midwives as participants, conducted for 4 months, and analyzed using thematic analysis. The results of the study identified six main themes, including low coverage of first pregnancy contact (K1), suboptimal mental health education, and the need for service integration and the use of digital-based educational media. The conclusion of this study confirms that improving the quality of antenatal services requires revision of procedures, innovation in digital education, and stronger social support to improve the welfare of pregnant women.*

**Keywords:** Antenatal care, mental health, midwives, pregnancy, pregnancy education

## INTRODUCTION

Pregnancy is a transitional period that brings significant changes in a woman's life, both physically and psychologically (Bagherzadeh et al., 2021). Physiological changes during pregnancy, such as weight gain, hormonal changes, and adaptation of the cardiovascular and musculoskeletal systems, often cause pregnancy complaints such as nausea and vomiting (hyperemesis gravidarum) (Mockridge & Maclellan, 2022), constipation (Fransisca Retno Asih, 2022), back pain (Manyozo et al., 2019; Shijagurumayum Acharya et al., 2019), sleep disturbances (Sedov et al., 2021), and prolonged fatigue. On the other hand, psychological changes that accompany pregnancy can also increase the risk of mental disorders, including perinatal anxiety and depression. If not handled properly, this condition can have a negative impact not only on the mother's well-being, but also on fetal development and successful delivery (Roddy Mitchell et al., 2023; Thongsomboon et al., 2020).

Currently, antenatal services focus more on monitoring the physical health of the mother and fetus, such as blood pressure checks, early detection of pregnancy complications, and monitoring fetal growth (Pehl et al., 2020). However, the prevention of pregnancy complaints and mental health is still not a top priority in

many maternal health services (Lomonaco-Haycraft et al., 2019). Many pregnant women do not receive adequate education and support regarding strategies for managing pregnancy complaints effectively and techniques for maintaining mental health during pregnancy (Al-Mutawtah et al., 2023; Pehl et al., 2020). The lack of integration of physical and mental health aspects in antenatal services can lead to an increase in perinatal anxiety and depression rates that have the potential to affect the health of the mother and baby (Al-Mutawtah et al., 2023).

The importance of this study lies in the urgent need to develop a holistic approach in antenatal care that does not only emphasize the medical aspect, but also pays special attention to the mental well-being of pregnant women (Lomonaco-Haycraft et al., 2019; Pehl et al., 2020). Integration of guidelines for preventing pregnancy complaints and mental health can help health workers provide more comprehensive services, including education on self-management strategies, stress management, and psychological interventions that can be applied early (Asih et al., 2023; Prom et al., 2022). With these guidelines, it is hoped that pregnant women can be better prepared to face challenges during pregnancy and have a better quality of life, which will ultimately

have a positive impact on fetal health (Asih et al., 2024; Prom et al., 2022).

This study aims to explore how the integration of guidelines for preventing pregnancy complaints and mental health can be applied in antenatal care through a qualitative approach based on midwives' perspective. By understanding the experiences of pregnant women and the perspectives of health workers, this study is expected to provide deeper insights into the needs and barriers to implementing this approach in health services. The results of this study are also expected to be the basis for the development of more holistic antenatal policies and practices, so as to improve the quality of maternal health services and the overall well-being of mothers and babies.

## **METHOD**

We conducted a qualitative study between September and December 2024 in one of the public health care centers in Banyuwangi. Ethics approval was granted by the STIKES Banyuwangi Health Research Ethics Committee on 18 September 2024 (370/02/KEPK-STIKESBWI/IX/2024). This qualitative study used the Focus Group Discussion (FGD) method as the main technique in data collection. The FGD was conducted by involving 6 informants consisting of midwives at the Klatak Health Center, Banyuwangi. Participants were selected

using the purposive sampling method based on a minimum work tenure of five years and their willingness to participate, as indicated by signing an informed consent form. Midwives with internship status were excluded from the study.

The FGD was conducted by researchers (FRA, NBAW, and RRD) using previously prepared discussion guidelines so that the discussion was more focused and systematic. Study participants were asked to discuss their perspective of integration of prevention of common pregnancy complaints and promotion of mental health in first contact antenatal care. Data obtained from the FGD were analyzed using the thematic analysis method. The analysis process includes several main stages, namely transcription, coding, theme categorization, and drawing conclusions.

The recordings of the FGD results were transcribed verbatim to ensure data accuracy. The transcribed data were coded to identify patterns and main themes that emerged from the FGD. Relevant themes were identified and grouped based on similarities in concepts or issues found. Furthermore, the themes obtained were further analyzed to compile recommendations and implications for the development of the first contact antenatal care model. During the analysis process, researchers met periodically to discuss and



### ***First contact antenatal care implementation***

The first contact (K1) in antenatal care (ANC) services at the Klatak Health Center is still relatively low, which has an impact on the optimization of initial examinations that are not achieved. This is due to the large number of patients who come late, namely after the first trimester. Ideally, the K1 examination is carried out in the first trimester of pregnancy, but in reality, many pregnant women only come for examinations in the second or third trimester, so that several important examinations that must be carried out in early pregnancy cannot be carried out properly.

*"The implementation of integrated antenatal care (ANC) at the Klatak Health Center follows established procedures, but the number of initial contact visits (K1) remains low, and patients perceive the process as lengthy"*

*"The first contact is often late because pregnant women come after the first trimester, so that several initial examinations are not optimally carried out."*

Unintegrated service facilities are one of the significant obstacles in the implementation of integrated ANC examinations at the Klatak Health Center. Patients often feel confused and frustrated

because they have to go back and forth between various rooms to undergo a series of examinations that can actually be done at one time or in a more coordinated area. The main problem found was the separation of facilities that should be close together or integrated to facilitate patients. For example, separate laboratories and nutrition rooms cause examinations to take longer, because patients have to move from one room to another to get the services they need. This process clearly disrupts patient comfort, prolongs service time, and increases patient anxiety or confusion, which can lead to a less than optimal service experience.

*"Patients often feel confused because they have to go back and forth to various rooms during integrated ANC services."*

*"The laboratory and nutrition counseling and other places are separate so it takes longer to complete all examination procedures."*

### ***Mental health promotion***

Mental health promotion for pregnant women at the Klatak Health Center is still limited and has not been implemented systematically. Currently, mental health promotion is more often reactive and based on responses to patient complaints, not as part of a structured and proactive service. This has implications for the low early detection of mental health problems

that pregnant women may experience, such as anxiety, stress, or depression.

*"There are no systematic steps in mental health promotion, usually only responding to patient complaints."*

*"Mental health screening has not been carried out on pregnant women, so early detection is difficult."*

There are no clear guidelines or procedures for implementing mental health promotion and screening for pregnant women. Although the mental health of pregnant women is increasingly considered important, medical personnel, especially midwives, feel that they do not have sufficient guidelines to carry out this activity systematically and effectively.

*"We need special guidelines for conducting mental health screening for pregnant women."*

The use of educational media, such as videos, leaflets, and other interactive media, is considered very effective in supporting mental health promotion for pregnant women. This media not only helps convey information in a more interesting and easy-to-understand way, but can also increase understanding and facilitate behavioral changes related to the importance of mental health during pregnancy.

*"The mental health education was screening, right, Ma'am, coincidentally*

*there is no special video for mental health."*

### ***Prevention of common pregnancy complaints***

The current educational approach is more reactive than proactive. Education is given after complaints or health problems arise, such as back pain, nausea, or other problems that are often experienced by pregnant women. This means that many pregnant women only get health information and support when they are already experiencing certain symptoms or problems, rather than before to prevent these problems from arising.

*"Education for pregnancy complaints such as back pain or nausea is often provided after the complaint arises."*

The use of educational media such as videos, leaflets, and audiovisual media in the waiting room can speed up the delivery of information to patients. By playing educational videos in the waiting room, pregnant women can obtain important information about their health independently, without having to rely entirely on examinations and IEC from midwives. This greatly helps reduce waiting times and ensures that patients continue to receive the education they need.

*"Educational videos can be played in the waiting room to help deliver information faster."*

*"Providing leaflets or educational videos can help patients understand information without relying entirely on the midwife's verbal communication."*

Some midwives feel that the use of barcodes and educational videos is an effective method for providing information to pregnant women in the waiting room. Midwives said that some pregnant women prefer barcodes because of their flexibility, while others feel that videos are more interesting because they can provide more detailed and easy-to-understand explanations. Therefore, combining these two methods can be an optimal solution to meet the diverse educational needs in the waiting room. With this strategy, users can choose the method that best suits their learning style and preferences, so that the educational experience becomes more inclusive and effective.

*"Pregnancy complaint education should be provided in the form of videos or barcodes to make it easier to access for some pregnant women who are not tech-savvy"*

*"Some pregnant women can use barcodes, so they can use barcodes and then stick them on to watch the video"*

The midwife said that utilizing patient time in the waiting room can provide additional educational benefits. One proposed approach is to conduct mental

health screening using a simple method. This step not only helps detect potential mental health problems early, but also provides added value during the waiting period which is often considered boring.

*"It is important to conduct mental health screening with a simple method while queuing to maximize patient time."*

### ***Evaluation, solutions, and innovation***

Based on the findings regarding the procedural and infrastructure constraints that have been explained previously, there are two main solutions proposed to improve the quality of ANC services at the Klatak Health Center: revision of the SOP and additional training for midwives. Both of these solutions are expected to overcome problems related to the lack of integration of services and lack of patient understanding, as well as improve the patient experience in undergoing ANC examinations.

*"Revise the standar operational procedur so that the service process is more integrated and does not make patients go back and forth between rooms."*

*"Additional training for midwives to be able to integrate mental health promotion and education into daily practice."*

### ***Operational challenges***

According to midwives, the room layout is inefficient, although the service room has been equipped with facilities such as air conditioning (AC), the less strategic layout causes confusion for patients in finding the location of the intended room.

*"Our service room is air-conditioned, but the layout is not efficient so patients are often confused about finding the room."*

*"The laboratory process is often an obstacle because of limited facilities, causing delays in diagnosis."*

The imbalance in the ratio of human resources (HR) in health services is another challenge that is often found. The results of the study showed that the number of patients exceeding the capacity of health workers resulted in insufficient service time. This condition not only affects the quality of service, but also increases the level of fatigue of health workers, which can ultimately have an impact on decreasing the efficiency and quality of interaction with patients. To overcome this problem, it is necessary to add health workers or redistribute resources more efficiently to ensure optimal service for each patient.

*"Lack of service time because the number of patients exceeds the capacity of available health workers."*

### ***Success factors***

Social support, especially from husbands, plays an important role in accompanying pregnant women during the antenatal care (ANC) process. The results of the study showed that the involvement of husbands in accompanying their wives during ANC consultations is still low. In fact, the presence of husbands not only provides emotional support that is much needed by pregnant women, but also increases their understanding of the condition of pregnancy and the roles that must be carried out. Efforts to increase husband involvement, such as through more inclusive education or providing a more flexible schedule, can be a step to overcome this problem.

*"The role of husbands is very important in accompanying pregnant women during consultations, but often husbands do not come in during the examination, just sitting waiting outside or even in the parking lot."*

*"Their husbands don't come in, at most a few husbands sometimes come in."*

Patient preferences in receiving education showed that the small group discussion approach was preferred by many patients. This discussion session allows for more personal interaction and a supportive atmosphere for asking questions and sharing experiences. In addition, this

method is considered more effective in building patient confidence to apply the information received. Therefore, health care providers are advised to adopt the small group discussion format as part of the education strategy, especially for topics that require in-depth understanding and active patient involvement.

*“Many patients feel more comfortable if education is provided during a small mother’s class or small group.”*

## **Discussion**

The results of this study indicate that integrated antenatal care (ANC) services have a number of obstacles that need to be addressed immediately. One of the main findings is the low rate of first contact (K1), which is caused by the delay in visits by pregnant women after the first trimester. Long procedures and non-integrated facilities are the main obstacles that cause service times to feel long. This study aligns with previous research, which identified barriers to antenatal care, including long waiting times and a high workload. Other challenges include limited health resources, a lack of medical personnel training, restricted access, suboptimal service coordination, and patient stigma or discomfort with certain services.(Escañuela Sánchez et al., 2022; Penman et al., 2023). However, in this

study, similar obstacles were found, namely the lack of facility integration causing long service times. Mental health promotion, although important, has not been implemented proactively. Currently, only responsive steps are taken, such as handling patients with real mental health complaints. This is consistent with research by Handa et al. (2024) which states that the mental health of pregnant women is often overlooked in primary care (Handa et al., 2024). This study emphasizes the importance of community-based mental health screening. In addition, preventing pregnancy complaints requires a more preventive approach. Education must be delivered before complaints arise, by utilizing modern technology such as barcodes or educational videos.

A BMC Pregnancy and Childbirth article examined how pregnant women use digital media to obtain information. The results showed that pregnant women highly value the information and support they receive from online sources and apps. They also like fast access to information and expect the role of health workers (midwives) through digital platforms. This suggests that digital media can play an important role in improving maternal understanding and support during pregnancy. Although digital education is a modern trend, traditional approaches such as flipcharts are still relevant. Specific data on the

effectiveness of flipcharts in pregnancy education are limited, but providing informational flipcharts has been effective in improving the quality of life of women with prolapse and also significantly improving nutritional knowledge in adolescents (Caagbay et al., 2020; Raikar et al., 2020). Flipcharts can be used to visually explain pregnancy symptoms and provide easy-to-understand preventive measures.

Operational barriers, such as inefficient facility layouts and shortages of health workers, are significant challenges that must be addressed. Patient-friendly facility layouts can improve patient satisfaction (Ibrahim & Puspitasari, 2023). Therefore, revising the room layout is an important step that is recommended. The efficiency of service flows can be improved by integrating facilities, revising procedures, and optimizing patient waiting time for additional education. The involvement of husbands as the main supporter in the ANC process is also an important aspect that needs to be improved. This is in line with the findings of Sapta et al. (2023), which emphasized that family support, especially husbands, increases pregnant women's compliance with the ANC schedule (Sapta Wati et al., 2023).

### ***Implications for policy and practice***

The results of this study highlight the importance of digital innovation in health services, so that it can be a reference for developing modern educational media in ANC services in Indonesia. Overall, the results of this study provide a comprehensive condition of the improvements needed to improve ANC services. By overcoming obstacles and implementing suggested innovations, ANC services can be more effective, efficient, and focused on patient needs, including physical and mental health aspects.

### ***Strengths and limitations***

This qualitative study has the strength in in-depth exploration through Focus Group Discussion (FGD) with experienced midwives, resulting in six main themes that are relevant to the preparation of the SOP for the first contact antenatal care model. However, the number of participants was limited (6 midwives) and did not involve pregnant women, so the perspective of service recipients was not explored. In addition, the study was only conducted in one location (Klatak Health Center, Banyuwangi), which limits the generalization of the findings. The potential for bias in FGD also exists, especially if some participants are more dominant in the discussion. In addition, thematic analysis is subjective, depending

on the researcher's interpretation in grouping themes and categories.

## CONCLUSION

This qualitative study shows that the implementation of the first contact antenatal care model still faces various challenges, including low first antenatal visits (K1), lack of service integration, and less than optimal promotion of mental health and prevention of pregnancy complaints. The results of the Focus Group Discussion (FGD) with midwives produced six main themes that reflect the need for revision of SOPs, increased education with digital media, and more efficient integration of health services. In addition, success factors such as social support from husbands and preferences for education in small groups were also identified as important aspects in improving the experience of pregnant women. Although this study provides in-depth insights into improving antenatal care, limitations in the number of participants and location coverage make the results not widely generalizable. Therefore, further research with a wider scope and a participatory approach involving pregnant women is needed to improve this antenatal care model. Therefore, strengthening policy enforcement, improving resource allocation, and enhancing collaboration

between health facilities and community stakeholders are crucial to optimizing the implementation of first contact antenatal care.

## THANK YOU

We acknowledge the support and contributions from all participants and midwifery department of STIKES Banyuwangi. This project is funded by STIKES Banyuwangi for the research, authorship, and/or publication of this article.

## BIBLIOGRAPHY

- Al-Mutawtah, M., Campbell, E., Kubis, H.-P., & Erjavec, M. (2023). Women's experiences of social support during pregnancy: a qualitative systematic review. *BMC Pregnancy and Childbirth*, 23(1), 782. <https://doi.org/10.1186/s12884-023-06089-0>
- Asih, F. R., Danti, R. R., & Nuristy Brilliant Ainindyahsari Winarna. (2024). Using prevention guidance of common physiological symptoms in pregnancy: a qualitative study. *Jurnal Kebidanan Dan Keperawatan Aisyiyah*, 20(1), 39–53. <https://doi.org/10.31101/jkk.3403>
- Asih, F. R., Danti, R. R., & Winarna, N. B. A. (2023). A Non-Randomized Controlled Trial of Prevention Guidance of Common Physiological Symptoms in Pregnancy for Self-Efficacy in Pregnant Women. *Jurnal Aisyah: Jurnal Ilmu Kesehatan*, 8(4). <https://doi.org/10.30604/jika.v8i4.2516>
- Bagherzadeh, R., Gharibi, T., Safavi, B., Mohammadi, S. Z., Karami, F., &

- Keshavarz, S. (2021). Pregnancy; an opportunity to return to a healthy lifestyle: a qualitative study. *BMC Pregnancy and Childbirth*, 21(1), 751. <https://doi.org/10.1186/s12884-021-04213-6>
- Caagbay, D., Raynes-Greenow, C., Dangal, G., Mc Geechan, K., & Black, K. I. (2020). Impact of an informational flipchart on lifestyle advice for Nepali women with a pelvic organ prolapse: a randomized controlled trial. *International Urogynecology Journal*, 31(6), 1223–1230. <https://doi.org/10.1007/s00192-020-04228-1>
- Escañuela Sánchez, T., Linehan, L., O'Donoghue, K., Byrne, M., & Meaney, S. (2022). Facilitators and barriers to seeking and engaging with antenatal care in high-income countries: A meta-synthesis of qualitative research. *Health & Social Care in the Community*, 30(6). <https://doi.org/10.1111/hsc.14072>
- Fransisca Retno Asih. (2022). Prevalensi Konstipasi Pada Ibu Hamil. *Oksitosin : Jurnal Ilmiah Kebidanan*, 9(1), 59–66. <https://doi.org/10.35316/oksitosin.v9i1.1652>
- Handa, A., Gaidhane, A., & Choudhari, S. (2024). Shedding light on maternal mental health in LMICs: a cornerstone of maternal and child health care. *Discover Mental Health*, 4(1), 55. <https://doi.org/10.1007/s44192-024-00111-3>
- Ibrahim, M. M., & Puspitasari, S. C. (2023). The Effect of Health Center Facilities on Patient Satisfaction in Ambulatory Installations. *Consilium Sanitatis: Journal of Health Science and Policy*, 1(3), 127–136. <https://doi.org/10.56855/jhsp.v1i3.419>
- Lomonaco-Haycraft, K. C., Hyer, J., Tibbits, B., Grote, J., Stainback-Tracy, K., Ulrickson, C., Lieberman, A., van Bekkum, L., & Hoffman, M. C. (2019). Integrated perinatal mental health care: a national model of perinatal primary care in vulnerable populations. *Primary Health Care Research & Development*, 20, e77. <https://doi.org/10.1017/S1463423618000348>
- Manyozo, S. D., Nesto, T., Bonongwe, P., & Muula, A. S. (2019). Low back pain during pregnancy: Prevalence, risk factors and association with daily activities among pregnant women in urban Blantyre, Malawi. *Malawi Medical Journal: The Journal of Medical Association of Malawi*, 31(1), 71–76. <https://doi.org/10.4314/MMJ.V31I1.12>
- Mockridge, A., & MacLennan, K. (2022). Physiology of pregnancy. *Anaesthesia & Intensive Care Medicine*, 23(6), 347–351. <https://doi.org/10.1016/j.mpaic.2022.02.027>
- Peahl, A. F., Novara, A., Heisler, M., Dalton, V. K., Moniz, M. H., & Smith, R. D. (2020). Patient Preferences for Prenatal and Postpartum Care Delivery. *Obstetrics & Gynecology*, 135(5), 1038–1046. <https://doi.org/10.1097/AOG.00000000000003731>
- Penman, S. V., Beatson, R. M., Walker, E. H., Goldfeld, S., & Molloy, C. S. (2023). Barriers to accessing and receiving antenatal care: Findings from interviews with Australian women experiencing disadvantage. *Journal of Advanced Nursing*, 79(12), 4672–4686. <https://doi.org/10.1111/jan.15724>
- Prom, M. C., Denduluri, A., Philpotts, L. L., Rondon, M. B., Borba, C. P. C., Gelaye,

- B., & Byatt, N. (2022). A Systematic Review of Interventions That Integrate Perinatal Mental Health Care Into Routine Maternal Care in Low- and Middle-Income Countries. *Frontiers in Psychiatry*, 13. <https://doi.org/10.3389/fpsyt.2022.859341>
- Raikar, K., Thakur, A., Mangal, A., Vaghela, J., Banerjee, S., & Gupta, V. (2020). A study to assess the effectiveness of a nutrition education session using flipchart among school-going adolescent girls. *Journal of Education and Health Promotion*, 9(1), 183. [https://doi.org/10.4103/jehp.jehp\\_258\\_18](https://doi.org/10.4103/jehp.jehp_258_18)
- Roddy Mitchell, A., Gordon, H., Atkinson, J., Lindquist, A., Walker, S. P., Middleton, A., Tong, S., & Hastie, R. (2023). Prevalence of Perinatal Anxiety and Related Disorders in Low- and Middle-Income Countries. *JAMA Network Open*, 6(11), e2343711. <https://doi.org/10.1001/jamanetworkopen.2023.43711>
- Sapta Wati, D., Ekasari, W. U., & Putra, R. N. L. (2023). Effect Of Husband's Support On Pregnant Women's Compliance With Antenatal Care At Purwodadi 1 Community Health Center. *Jurnal Profesi Bidan Indonesia*, 3(2), 9–21. <https://www.pbijournal.org/index.php/pbi/article/view/61>
- Sedov, I. D., Anderson, N. J., Dhillon, A. K., & Tomfohr-Madsen, L. M. (2021). Insomnia symptoms during pregnancy: A meta-analysis. *Journal of Sleep Research*, 30(1), 1–10. <https://doi.org/10.1111/jsr.13207>
- Shijagurumayum Acharya, R., Tveter, A. T., Grotle, M., Eberhard-Gran, M., & Stuge, B. (2019). Prevalence and severity of low back- and pelvic girdle pain in pregnant Nepalese women. *BMC Pregnancy and Childbirth*, 19(1). <https://doi.org/10.1186/S12884-019-2398-0>
- Thongsomboon, W., Kaewkiattikun, K., & Kercharoen, N. (2020). Perceived Stress and Associated Factors Among Pregnant Women Attending Antenatal Care in Urban Thailand. *Psychology Research and Behavior Management*, Volume 13, 1115–1122. <https://doi.org/10.2147/PRBM.S290196>