

Midwives and prenatal yoga: An analysis of anowledge and interest in its application

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ABSTRACT

Prenatal yoga is one of the non-pharmacological interventions that has been proven to be useful in supporting the physical and psychological health of pregnant women, as well as preparing for a more comfortable delivery. This study aims to determine the relationship between midwife's knowledge and interest in the application of prenatal yoga in midwifery services in Pangkep Regency. Design an analytical cross-sectional research with a sample of 74 midwives selected through inclusion criteria. Data were collected through an online questionnaire and analyzed univariate and bivariate using Chi-Square test. Most midwives have moderate knowledge (75.7%) and high interest (62.2%), but the application of prenatal yoga is still low (66.2%). There was no significant relationship between knowledge and application ($p=0.375$), but interest was significantly related ($p=0.021$). The main barriers include lack of training (70.7%) and absence of instructors (49.3%). Conclusion: Knowledge alone is not enough to encourage the prenatal application of yoga. Increased interest, practical training, and policy support are necessary for effective integration.

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INTRODUCTION

Pregnancy and childbirth are essentially normal physiological processes, but in the last decade there has been a significant increase in the number of complications related to pregnancy and childbirth. In Indonesia, this problem is reflected in the high Maternal Mortality Rate (MMR) which reaches 189 per 100,000 live births, with the main causes including postpartum bleeding (28%), preeclampsia/eclampsia (24%), infections (15%), stuck labor (10%), and abortion complications (8%) (Ministry of Health, 2023).

Improving maternal health status and early detection of pregnancy complications is a key strategy in reducing maternal morbidity and mortality rates. A study by the WHO shows that prevention-based interventions, including regular physical activity, and pregnancy risk screening, can reduce complications such as preeclampsia, up to 30% (WHO, 2025). Studies in Indonesia have

also shown that early detection has been proven to prevent complications in pregnancy (Fauziah et al., 2023; Nuraisya, 2018).

Prenatal yoga as complementary care shows potential in improving pregnant women's health and preventing pregnancy complications. Scientific evidence consistently proves that regular prenatal yoga practice can Lower the risk of preeclampsia (Karthiga et al., 2022; Zainiyah et al., 2024). A meta-analysis study found that prenatal yoga interventions shorten the phase 1 and phase 2 delivery times and improve delivery outcomes (Corrigan et al., 2022; Rong et al., 2020). The American College of Obstetricians and Gynecologists (ACOG) recommends and classifies yoga as adjuvant therapy in the management of risky pregnancies (ACOG, 2022). The integration of prenatal yoga in evidence-based obstetric care can be a cost-effective solution to mitigate pregnancy complications

Prenatal yoga is a hatha yoga practice designed specifically for pregnant women by modifying movements (asana), breathing techniques (pranayama), and relaxation (dhyana) to make it safe and beneficial for pregnancy. In contrast to conventional yoga, prenatal yoga avoids poses that are risky to the fetus and focuses more on muscle strengthening, flexibility, and stress management (Babbar & Shyken, 2016). This activity is classified as complementary therapy in obstetrics because it supports a holistic approach to maternal health (ACOG, 2022).

The application of prenatal yoga as part of midwifery care in Indonesia still faces various challenges, despite its proven potential benefits (Dariani et al., 2023). A study by Altika revealed that only 5.7% of midwives practice yoga which integrates prenatal yoga in their clinical practice (Altika & Kasanah, 2021). Prenatal yoga has been introduced in Pangkep Regency since 2019 and can empirically reduce maternal complications and referrals. Workload, lack of time in clinical schedules, and lack of competent facilities and instructors are also barriers to the implementation of evidence-based practices such as prenatal yoga in midwifery services. Based on the description above, this study aims to find out the knowledge and interest of midwives in the application of prenatal yoga.

RESEARCH METHOD

This study uses an analytical cross-sectional design with a quantitative approach to analyze the relationship between midwife's knowledge and interests and the application of prenatal yoga in Pangkep Regency. The sampling technique used is purposive sampling, with the inclusion criterion being an active midwife who serves pregnant women and has at least one year of work experience. Data is collected through online questionnaires (Google Forms) distributed through a network of professions and health facilities. Validation of inclusion criteria was carried out through screening questions at the beginning of the questionnaire, and only respondents met the criteria analyzed. The potential for non-respondent bias is minimized by filtering out incomplete or inappropriate data. Of the 77 respondents, 74 met the analysis requirements after data selection. The research variables consisted of the knowledge and interests of midwives (independent) and the application of prenatal yoga (dependent), which were measured using a closed questionnaire. Data analysis included univariate (frequency distribution) and bivariate (Chi-Square test with significance $p < 0.05$) using SPSS to test the relationships between variables

RESULTS AND DISCUSSIONS

Univariate Analysis

Table 1. Midwife characteristics

Variable	n(%)	Mean \pm SD
Age		
20 - 30 years		37.31 \pm 8.74
31 - 40 years old	15(20.3)	

Variable	n(%)	Mean ± SD
41 - 50 years old	39(52.7)	
> 50 years	13(17.6)	
	7(9.5)	
Education Level		
D3	46(62.2)	1.41 ± 0.55
D4/S1	26(35.1)	
S2/S3	2(2.7)	
Length of Work		
≤ 10 years	31(41.9)	14.07 ± 9.43
11-20 years	29 (39.2)	
21 - 30 years old	8 (10.8)	
>30 years old	6 (8.2)	
Workplace		
Public Health Center	43 (58.1)	1.93 ± 1.23
Clinics	3 (4.1)	
RS	23 (31.1)	
BPM	5 (6.8)	

Most of the respondents were in the age group of 31–40 years (52.7%) The average age of the respondents was 37.31 years with SD 8.74, which shows a considerable age variation among the respondents. The majority of respondents have a Diploma 3 (D3) education level (62.2%). The most common category in the variable length of work was <10 years, namely (41.9%). The average length of work was 14.07 years with SD 9.43, which reflects a fairly wide spread of working periods, ranging from those who have just worked to those who have decades of experience and most of the respondents worked in the Health Center (58.1%).

Table 2. Characteristics of knowledge, interest and application of prenatal yoga

Variable	n(%)	Mean ± SD
Knowledge Level		2.08 ± 0.49
Low	6 (8.1)	
Medium	56 (75.7)	
High	12 (16.2)	
Interest		1.62 ± 0.49
Low	28 (37.8)	
High	46 (62.2)	
Application of Yoga		1.45 ± 0.69
Low	49 (66.2)	
Medium	17 (23)	
High	8 (10.8)	

Table 2 shows that most respondents have a moderate level of knowledge. The average value of midwife's knowledge was 2.08 (SD 0.49), which indicates that most respondents were at an intermediate level of knowledge and tended to be homogeneous. Most midwives have a high interest in prenatal yoga (62.2). The average interest score was 1.62 (SD 0.49), indicating that respondents' interest tended to be in the high category, although there was a moderate difference between categories. The application of Prenatal Yoga by midwives is mostly in the low implementation category (66.2%), (23%) is in the medium category, and only 8 people (10.8%) have a high implementation rate. The average score of prenatal yoga practice was 1.45 with SD 0.69, which indicates that in general, the practice of prenatal yoga by midwives is still relatively low, although there is a small group that has practiced it quite well.

Bivariate Analysis

Table 3. The relationship between knowledge level and application of prenatal yoga

Knowledge	Application of Prenatal Yoga			Entire	P-value*
	Low (%)	Medium(%)	High(%)		
Low	6(100)	0(0)	0(0)	6	0.375
Medium	34(60.7)	15(26.8)	7(12.5)	56	
High	9(75)	2(16.7)	1(8.3)	12	
Entire	49	17	8	74	

* Chi-square test

Based on the results of the analysis in table 3, it was found that most midwives with a moderate level of knowledge had a low rate of prenatal yoga implementation (60.7%). In the high-knowledge group, most (75%) also still have low implementation and only 1 person (8.3%) is in the high implementation category. Interestingly, all respondents who had low knowledge (100%) were also included in the low implementation category, with none in the medium or high category.

The results of the statistical test using the Chi-Square test showed that the p-value = 0.375, which is greater than the significance level of 0.05. Thus, it can be concluded that there is no statistically significant relationship between midwives' level of knowledge about prenatal yoga and the level of application of prenatal yoga in midwifery practice.

Table 4. Interest relationships and the application of prenatal yoga

Interest	Application of Prenatal Yoga			Entire	P-value*
	Low (%)	Medium(%)	Hight(%)		
Low	24(85.7)	3(10.7)	1(3.6)	28	0.021
High	25(54.3)	14(30.4)	7(15.2)	46	
Entire	49	17	8	74	

* Chi-square test

The results of the bivariate analysis showed that most respondents with low interest in prenatal yoga tended to have low standards as well, which was 85.7%. In contrast, respondents with high interest showed a better tendency to apply prenatal yoga at 15.2%. The results of the statistical test using Chi-Square test showed that p-value = 0.021 showed a significant relationship between midwives' interest in prenatal yoga and the level of application of prenatal yoga in midwifery practice.

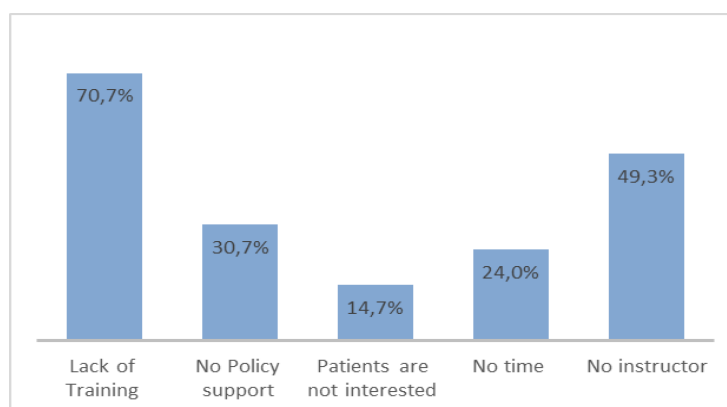


Figure 1. Barriers to the implementation of prenatal yoga

Based on the survey results, several factors were found to be obstacles in the implementation of prenatal yoga in their place of practice. The most cited barrier was lack of training (70.7%). The second obstacle is the absence of instructors (49.3%). In addition, the absence of policy support is also an obstacle conveyed by 30.7% of respondents. Time constraints are also

an obstacle for some midwives (24%). They don't have enough time to implement prenatal yoga in their ministry schedules. Meanwhile, only 14.7% stated that patients were not interested as a barrier.

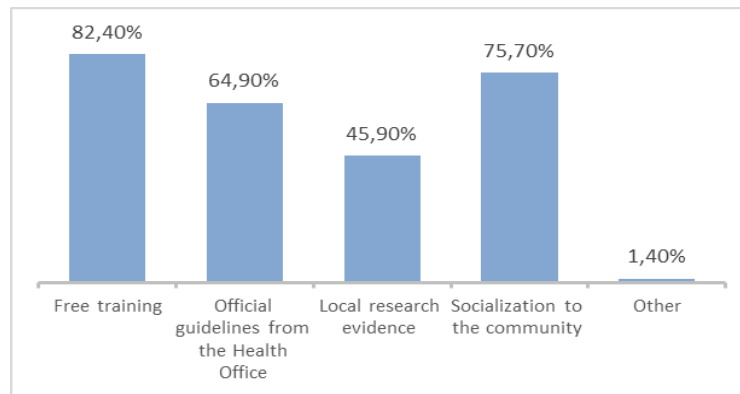


Figure 2. Need for prenatal yoga practice

Based on the results of the study, it is known that most midwives need certain support in order to be able to effectively implement prenatal yoga in midwifery services. The most needed support is free training. In addition, socialization to the community is also considered very important (75.7%). As many as 64.9% stated the need for official guidance from the Health Office, as a form of policy support and clarity of procedures in the application of prenatal yoga. As many as 45.9% of midwives considered it important to have local research evidence as a scientific basis for the application of prenatal yoga.

Level of Knowledge and application of prenatal yoga

Although most respondents had a moderate level of knowledge, the application of prenatal yoga was still low in midwifery practice. This indicates that knowledge alone is not enough to be the main determinant in practice, as there are other factors that influence implementation. Some studies show that although healthcare workers have a good knowledge of nonpharmacological interventions, their implementation in clinical practice remains low due to limited training, time, and organizational support (Downe et al., 2018; Glenton et al., 2013; Sandall J & Devane, 2016). In addition, the integration of yoga practice in midwifery services requires synergy between knowledge, skills, and institutional policies (Dariani et al., 2023).

Theoretically, the higher the knowledge, the more likely it is that one will apply that knowledge in practice. However, in this study, even though midwives were highly knowledgeable, as many as 75% of them were in the low implementation category and 25% had medium and high implementation rates. This shows that knowledge alone is not enough to warrant the practice of applying prenatal yoga. This can be caused by a variety of external and internal factors.

Based on the results of the barrier analysis, several factors that can explain the low implementation are: 1) Lack of Prenatal Yoga Training; Although midwives have good theoretical knowledge, the absence of training leaves them lacking the skills and confidence to teach and guide prenatal yoga directly to pregnant women. This leads to the fear of making mistakes or procedural inconsistencies. 2) The unavailability of prenatal yoga companions or instructors is also a big obstacle. Certified prenatal yoga instructors are always an absolute requirement to lead prenatal yoga classes. This condition shows a lack of competent human resources in prenatal yoga in health facilities, 3) Lack of Policy Support. In the absence of official guidance from institutions such as the Health Service or workplaces, midwives may feel hesitant or even prohibited from practicing prenatal yoga because there is no legal legitimacy or written protocol. This reflects the lack of official integration of the prenatal yoga program in the health service policy of pregnant women. 4) Limited Time and Workload; Prenatal yoga practice requires special time and

concentration. If midwives have a high workload, they will prioritize curative or administrative services over health promotions such as prenatal yoga. Overall, these data suggest that the main barriers to the implementation of prenatal yoga are structural and competency, not due to a lack of patient interest.

Midwife's interest and prenatal yoga application

Most midwives with high interest tend to practice prenatal yoga, although still in limited numbers (15.2% practice prenatal yoga). In contrast, among low-interest midwives, as many as 85.7% had never practiced prenatal yoga at all. This confirms that interest has an important contribution in encouraging practical behavior. In the context of planned behavior theory, interest (intention) is a direct predictor of action, so the higher the interest of a health worker, the more likely he is to carry out an intervention in his practice (Pasaribu & Radikun, 2021).

These findings are in line with previous research that states that the interest and motivation of health workers are key factors in the adoption of nonpharmacological interventions (Abikou et al., 2024). Midwives who have a high interest in prenatal yoga tend to be more active in seeking training and applying it in maternal services, especially if it is supported by scientific evidence and clinical guidance (Curtis et al., 2012). Research by Septiani reports that training will increase midwives' interest and application of complementary practices such as prenatal yoga (Septiani & Lestari, 2020).

Midwives' interest in prenatal yoga acts as a strong intrinsic motivation, encouraging them to be more actively seeking knowledge, engaging in training, and persistently overcoming obstacles in implementation (Savira et al., 2022) (Resubun et al., 2022). In contrast to mere knowledge that is cognitive, interest triggers deeper exploration and engagement, increasing their self-efficacy in guiding safe and effective yoga practices. It also helps explain why midwives with positive attitudes towards evidence-based practice still face barriers to implementation; high interest can be an internal driver to overcome these barriers (Azmoode et al., 2018). In addition, in the context of systemic challenges, bridging the gap from "knowing" to "doing" for the sake of more holistic services to pregnant women (Sangy et al., 2023) broader implementation, midwifery interests can serve as a force that advocates for change and seeks support amid systemic

The results of the study also showed that midwives need free prenatal yoga training. This is consistent with the main barrier previously identified, namely the lack of training. The motivation and readiness of midwives to implement prenatal yoga can be increased with training that is easily accessible and not financially burdensome. Public support and acceptance of prenatal yoga can increase the interest of pregnant women to participate in this practice. The official guidance from the Health Office is the legitimacy and legal umbrella for midwives to be able to carry out innovative services such as prenatal yoga in a safe and structured manner. It is interesting that midwives need evidence to increase confidence and confidence in integrating prenatal yoga into practice.

Overall, these results show that training support, policies, community education, and evidence-based practices are important factors that need to be met in order for the implementation of prenatal yoga to run optimally and sustainably in midwifery services.

CONCLUSION

Midwives' knowledge of prenatal yoga has not been sufficient to drive its application in practice due to barriers such as lack of training, absence of instructors, and limited policy support, although their high interest has contributed to its limited use. To promote effective and sustainable integration of prenatal yoga into midwifery services, practical steps are needed—such as developing certified training programs, collaborating with yoga instructors for regular workshops, integrating prenatal yoga into midwifery education, and encouraging policy support from health

authorities. These combined efforts can enhance both the competence and confidence of midwives in implementing prenatal yoga as part of routine maternal care.

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