Advances in Healthcare Research
Volume 4, Issue 1 (2026). 156-169
DOI: https://doi.org/10.60079/ahr.v4i1.717
OPEN ACCESS
e-ISSN: 2985-9808

The Relationship of Knowledge with The Practice of Postpartum Gymnastics in Postpartum Mothers in PMB Rahmawati Welahan Jepara

Ainia Fatimatuzzahro' [1*] Irawati Indrianingrum [2] Ana Zumrotun Nisak [3]

[1*, 2, 3] Universitas Muhammadiyah Kudus, Kudus, Indonesia.
Email: ainiafatimatuzz@gmail.com, irawati@umkudus.ac.id, anazumrotun@umkudus.ac.id

ARTICLE HISTORY

Submitted	:	December 19, 2025
Reviewed	:	January 20, 2026
Revised	:	February 04, 2026
Accepted	:	February 22, 2026
Published	:	February 28, 2026

Conflict of Interest Statement:
The author(s) declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

ABSTRACT

Purpose: This study aimed to determine the relationship between knowledge and the practice of postpartum gymnastics among postpartum mothers at PMB Rahmawati Welahan Jepara. It was hypothesized that greater maternal knowledge would be associated with more frequent postpartum gymnastics practice.

Research Method: This study used a quantitative analytical design with a pre-experimental one-group pretest-posttest approach. The sample consisted of 30 postpartum mothers selected using accidental sampling. Data were collected using a multiple-choice questionnaire to measure knowledge and a Likert-scale questionnaire to assess postpartum gymnastics practice. Univariate analysis was used to describe respondent characteristics and variable distributions, while bivariate analysis used Somers'd test.

Results and Discussion: Before education, most respondents had poor knowledge (76.7%), but after education, most had good knowledge (83.3%). In practice, 76.7% of mothers performed postpartum gymnastics in the good category. Statistical analysis showed a significant positive relationship between knowledge and practice ($p = 0.020$; $r = 0.696$), indicating that mothers with better knowledge tended to practice postpartum gymnastics more appropriately.

Implications: These findings highlight the importance of structured, continuous health education to improve maternal knowledge and support healthy postpartum recovery behaviors. Further studies should explore other influencing factors such as family support, motivation, and cultural beliefs.

Keywords: knowledge; postpartum gymnastics; postpartum mothers; health education; practice; postpartum recovery;.

1. Introduction

The postpartum period is a crucial stage that begins from the time the placenta is born until the reproductive organs return to normal function as before pregnancy, usually lasting for six weeks. This period plays an important role in the process of recovering the mother's physical and emotional condition after childbirth, as the body undergoes major changes (Irfana et al., 2024).

One of the common problems experienced by postpartum mothers is fatigue. According to data from the WHO published in 2022, 55% of women who have recently given birth experience levels of anxiety, fatigue and fatigue. Anxiety is one of the psychological disorders that are often experienced by mothers after childbirth. In Indonesia, around 30-80% of women experience anxiety, mild fatigue, and temporary after childbirth (Rosnani & Mediarti, 2022). Based on the Decree on Health Indicators for 2023–2026 from the Ministry of Health of the Republic of Indonesia, one of the main indicators in maternal health services is the coverage of postpartum services (KF3), which is the percentage of postpartum mothers who receive services at least three times during the period of 0–42 days after childbirth. This indicator is an important benchmark in assessing the quality of maternal health services

Advances in Healthcare Research
Volume 4, Issue 1 (2026). 156-169
DOI: https://doi.org/10.60079/ahr.v4i1.717
OPEN ACCESS
e-ISSN: 2985-9808

in each region, including Jepara Regency. The government targets to increase the coverage of postpartum services so that all mothers get optimal postpartum health monitoring, so that they can reduce the risk of complications such as bleeding, infection, and lactation disorders. With this target, each health facility is expected to be able to carry out postpartum services according to standards, both through direct visits to health workers and through health promotion programs in the community (Ministry of Health of the Republic of Indonesia, 2023).

During the postpartum period, attention to the physical and psychological condition of the mother is very important, since inadequate treatment can lead to serious complications and even death. The postpartum period is very susceptible to various health disorders, ranging from infections, bleeding, hormonal imbalances, to psychological disorders such as baby blues and postpartum depression (Fauziyah et al., 2025). Without proper intervention, the safety of the mother remains at risk in this phase. One form of effective non-pharmacological intervention is the implementation of postpartum gymnastics, because it can improve physical recovery while improving the psychological health of the mother. Postpartum gymnastics exercises are light activities designed to help the mother's body recover after childbirth.

Postpartum gymnastics has been proven to accelerate the process of restoring the size of the uterus, strengthen the pelvic floor muscles, improve blood circulation, and prevent constipation and postpartum depression. In addition, postpartum gymnastics is also useful in accelerating the healing of perineal wounds so as to increase the comfort of mothers in carrying out daily activities. Scientific evidence has shown a lot of the effectiveness of this intervention in improving maternal physical and mental health. By doing so, you can get a faster recovery without dangerous side effects. Postpartum gymnastics can even be an additional therapy to reduce postpartum anxiety. This makes postpartum gymnastics one of the steps that should continue to be promoted in midwifery services (Naharani et al., 2025).

Although the benefits of postpartum gymnastics have been widely disseminated by health workers and through educational media, practice in the field is still low. The Health Research and Development Agency (2023) reported that the participation of postpartum mothers in the postpartum gymnastics program has not reached 50%, especially in rural areas. This fact confirms that there is a real difference between the level of knowledge that mothers have and their daily behavior. One of the reasons for this low practice is a lack of motivation and lack of family support. This condition can slow down the recovery process and increase the potential for complications during the postpartum period. In fact, the education provided should be enough to motivate mothers to do postpartum gymnastics regularly. Therefore, the main problem is not only the limitation of knowledge, but also the weak application of information into real actions (Qothrunnada & Anisah, 2023).

Knowledge is indeed the main component that can shape health behavior, including in performing postpartum exercises. However, the increase in knowledge is not always followed by consistent changes in behavior. A study conducted at PMB Arinta Lindari in 2023 shows that the majority of postpartum mothers have a medium to high level of knowledge about postpartum gymnastics. However, only a few of them really do it regularly. This indicates that there are other factors at play, such as internal motivation, social environmental conditions, and available facilities. Health behaviors are generally formed through a combination of knowledge, attitudes, and actions. Therefore, research on the linkage of knowledge to practice is indispensable to find the right patterns of intervention. Evidence-based strategies can be a solution in optimizing maternal behavior changes (Khairunnisa & Oktavia, 2023)

Advances in Healthcare Research
Volume 4, Issue 1 (2026). 156-169
DOI: https://doi.org/10.60079/ahr.v4i1.717
OPEN ACCESS
e-ISSN: 2985-9808

Mother's understanding of postpartum gymnastics is closely related to her interests as well as the real practices she runs. A higher level of knowledge is usually followed by a stronger desire to make postpartum gymnastics a habit. Julianti & Astuti (2022) emphasized that the better a mother's knowledge, the higher her interest in routinely doing postpartum exercises. Not a few mothers are worried about making movements because they are afraid of worsening their body condition after childbirth. Cultural barriers also have an effect, as some people still view full rest as the best way to recover. This is in line with the concept of health behavior which states that knowledge is a key factor in shaping attitudes and actions. Adequate knowledge creates a positive perception of the benefits of a health behavior. As a result, the mother feels more confident to carry out the movement and is committed to doing it consistently. Thus, knowledge is the main foundation for the formation of healthy behavior. This factor is what makes improving education very relevant to improve postpartum practice.

In addition, educational activities both through counseling and information media have been proven to be able to improve the knowledge and skills of postpartum mothers. In a study conducted by Qothrunnada & Anisah (2023), it was found that postpartum maternal health education programs that teach postpartum gymnastics are able to increase mothers' understanding of how to take care of themselves after childbirth. Activities that involve direct practice encourage mothers to be more active in learning. Family participation is also a supporting factor that strengthens the success of educational programs. In this way, education not only adds insight, but also influences real behavioral change. This fact shows that educational strategies need to be intensified to expand the reach of information. Therefore, maternal empowerment through education is an important element in the success of postpartum gymnastics practice.

Based on a preliminary study with the midwife coordinator at PMB Rahmawati Welahan Jepara, it was shown that there were 157 visits to postpartum mothers in the past year. From the results of interviews with 7 respondents at the research site, it was found that 5 people did not know about postpartum gymnastics and did not practice postpartum gymnastics, 2 respondents knew about postpartum gymnastics but did not carry out postpartum gymnastics practice. Until now, the facility does not have a postpartum gymnastics program as part of midwifery services. Based on initial observations, most postpartum mothers only receive general education about postpartum care, but there have been no structured postpartum gymnastics activities. In addition, this region reflects the typical challenges of the countryside, both from social, cultural, and access to health services.

The remainder of this paper is organized as follows. Section 2 provides a literature review and hypothesis development. Section 3 presents the research method and design. Section 4 provides the results and discussion. Section 5 is Concluding Remarks and Recommendations.

2. Literature Review and Hypothesis Development

2.1 Knowledge

Knowledge is the result of an individual's cognitive process in understanding, processing, and internalizing information from various sources such as formal education, experience, mass media, and the social environment. Knowledge is not just the result of memorization, but is an understanding obtained through the process of actively thinking about the information received. In a broader context, knowledge is an important capital in the formation of behavior because it is the basis for daily decision-making. Knowledge is also an indicator of the readiness of an institution or individual to manage

Advances in Healthcare Research
Volume 4, Issue 1 (2026). 156-169
DOI: https://doi.org/10.60079/ahr.v4i1.717
OPEN ACCESS
e-ISSN: 2985-9808

information systematically, especially in supporting a rational and targeted decision-making process. This shows that knowledge functions not only in the individual realm, but also strategically in an institutional context (Ibrahim et al., 2021).

2.2 Practice

Practice is a tangible manifestation of the information and understanding that a person already has. In other words, practice shows how much individual knowledge and attitudes transform into action. Practice is not always spontaneous, but is often the result of a learning process, the internalization of information, and the influence of the environment. Practice is also influenced by intention and ability to act. In this case, the behavior of postpartum gymnastics is not just a physical activity, but part of the mother's awareness and responsibility for her recovery (Pratiwi et al., 2021).

2.3 The Relationship of Knowledge and Practice

Research from Irfana et al (2024) It shows a strong positive correlation between the level of knowledge of postpartum mothers and the practice of postpartum gymnastics carried out. Mothers with good knowledge are more likely to do postpartum exercises regularly and correctly. They also have a better understanding of the benefits of postpartum gymnastics to prevent complications such as postpartum bleeding. Education about the goals and procedures of gymnastics helps mothers increase their self-awareness of the importance of postpartum physical care. This study reinforces that knowledge is the main predictor of health behavior, including in the realm of postpartum exercise.

Research results from Khairunnisa & Oktavia (2023) It shows that 73% of respondents with high knowledge also practice postpartum gymnastics correctly, both in terms of the frequency of implementation and the movement techniques used. This shows that understanding the procedures and benefits of postpartum gymnastics directly affects the quality of practice implementation. Knowledge creates mental and technical readiness in facing the postpartum period, so that mothers can carry out gymnastics consistently. This study confirms that effective educational interventions can result in healthier, more standard-compliant behaviors.

Experimental research in research Naharani et al (2025) It proves that increasing knowledge through educational interventions such as counseling and the screening of educational videos has a significant influence on improving postpartum gymnastics practices. The intervention group showed much higher engagement than the control group. Education has been proven to be able to change perceptions, build awareness, and encourage real action. These findings reinforce the theory that health behaviors can be modified through structured and sustained knowledge improvement.

3. Research Method

This study uses a pre-experimental design with a one group pretest–posttest approach, which is a research design that measures variables before and after intervention in one group of respondents. All postpartum mothers who visited PMB Rahmawati Welahan Jepara during the research period were 30 people. The sample used in this study was all postpartum mothers at PMB Rahmawaati Welahan Jepara. The number of samples used with the Rule of Thumb formula is a minimum number of samples, which is 30 samples. In this study, the sampling method used is accidental sampling. Data collection in this

Advances in Healthcare Research
Volume 4, Issue 1 (2026). 156-169
DOI: https://doi.org/10.60079/ahr.v4i1.717
OPEN ACCESS
e-ISSN: 2985-9808

study was carried out using a closed questionnaire instrument. The data collected and considered error-free will be entered into the computer for analysis using Statistical Product and Service Solution (SPSS) version 27.0 with gradual analysis, namely univariate analysis and bivariate analysis.

4. Results and Discussion

4.1 Analysis Results

4.1.1 Univariate Analysis

Respondent Characteristics

The sample in this study was 30 respondents from postpartum mothers at PMB Rahmawati. The characteristics of the respondents of this study are described based on age, education, parity, employment status and type of childbirth.

Table 1. Frequency Distribution Based on Age at PMB Rahmawati

Yes	Age	Quantity	%
1	<20 years old	0	000
2	20-35 years old	30	100.0
3	>35 years old	0	0.00
	Total	30	100.0

Source: *Data processed with SPSS, 2026*

Based on Table 1 of the results of the distribution of respondent characteristics, the majority of mothers are in the age range of 20-35 years with a total of 30 people (100%).

Table 2. Frequency Distribution Based on Parity at PMB Rahmawati

Yes	Parity	Quantity	%
1	Primipara	15	50.0
2	Multipara	15	50.0
3	Large Multipara	0	0.00
Total		30	100.0

Source: *Data processed with SPSS, 2026*

Based on Table 2 out of a total of 30 respondents, there were 15 (50%) mothers in the primipara category or mothers who had only given birth once and 15 people (50%) mothers in the multipara category or mothers who had given birth 2-4 times.

Table 3. Frequency Distribution Based on Education at PMB Rahmawati

Yes	Parity	Quantity	%
1	SD	0	0.00
2	Junior High School	2	6.7
3	High School	18	60.0
4	College	10	33.3
Total		30	100.0

Source: *Data processed with SPSS, 2026*

Based on Table 3 of the results of the distribution of respondent characteristics, most of the respondents completed education up to the high school level, namely 18 people (60%), followed by

Advances in Healthcare Research
Volume 4, Issue 1 (2026). 156-169
DOI: https://doi.org/10.60079/ahr.v4i1.717
OPEN ACCESS
e-ISSN: 2985-9808

education at the university level as many as 10 people (33.3%) and education at the junior high level as many as 2 people (6.7%).

Table 4. Frequency Distribution Based on Job Status at PMB Rahmawati

Yes	Age	Quantity	%
1	Work	20	66.7
2	Not Working	10	33.3
Total		**30**	**100.0**

Source: *Data processed with SPSS, 2026*

Based on Table 4 of the results of the distribution of respondent characteristics, more than half of the respondents' employment status is working mothers, namely 20 people (66.7%) while non-working mothers are 10 people (33.3%).

Table 5. Frequency Distribution Based on Type of Delivery at PMB Rahmawati

Yes	Age	Quantity	%
1	Normal	30	100.0
2	SC Operations	0	0.00
Total		**30**	**100.0**

Source: *Data processed with SPSS, 2026*

Based on Table 5, all respondents performed vaginal normal childbirth with a total of 30 people (100%).

Research Variables

Table 6. Distribution of Knowledge of Postpartum Women Before and After Postpartum Gymnastics Education at PMB Rahmawati

Knowledge of Postpartum Gymnastics	Pre-test		Post-test	
	f	%	F	%
Good	0	00.00	25	83.3
Enough	7	23.3	5	16.7
Less	23	76.7	0	0.00
Total	**30**	**100.0**	**30**	**100.0**

Source: *Data processed with SPSS, 2026*

Based on Table 6, it can be seen that before being given post-test gymnastics education, most postpartum mothers had a level of knowledge in the poor category, namely 23 people (76.7%), while 7 people (23.3%) were in the sufficient category, after being given post-test gymnastics education, there was a significant change in the level of knowledge of the respondents. Most postpartum mothers were in the good category, which was as many as 25 people (83.3%), while the category of fairly decreased to 5 people (16.7%) and there were no more respondents in the less category (0%).

Based on Table 7, it is known that most postpartum mothers have practiced postpartum gymnastics in the good category, namely 23 people (76.7%). Meanwhile, as many as 4 people (13.3%) are in the adequate category, and 3 people (10%) are still in the insufficient category.

Advances in Healthcare Research
Volume 4, Issue 1 (2026). 156-169
DOI: https://doi.org/10.60079/ahr.v4i1.717
OPEN ACCESS
e-ISSN: 2985-9808

Table 7. Distribution of Postpartum Gymnastics Practice at PMB Rahmawati

Practice of Postpartum Gymnastics	Quantity	%
Good	23	76.7
Enough	4	13.3
Less	3	10.0
Total	**30**	**100.0**

Source: *Data processed with SPSS, 2026*

4.1.2 Bivariate Analysis

Statistical Test of the Relationship of Knowledge with the Practice of Postpartum Gymnastics

Table 8. Cross-Tabulation of Knowledge Level with Postpartum Gymnastics Practice

		Practice Categories			Total
		Less	Enough	Good	
Knowledge Categories	Less	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)
	Enough	2 (6.7%)	2 (6.7%)	1 (3.3%)	5 (16.7%)
	Good	1 (3.3%)	2 (6.7%)	22 (73.3%)	25 (83.3%)
Total		**3 (10.0%)**	**4 (13.3%)**	**23 (76.7%)**	**30 (100%)**

Source: *Data processed with SPSS, 2026*

Based on testing the relationship between Knowledge and the Practice of Postpartum Gymnastics in Postpartum Mothers using the Somers'd Test, the following results were obtained:

Table 9. Somers'd Test Results of the Relationship of Knowledge with Postpartum Gymnastics Practice

P-value	Correlation Coefficients	Closeness of Relationship	Remarks
0.020	0.696	Strong	Significant

Source: *Data processed with SPSS, 2026*

From the Somers'd analysis carried out, a p-value of 0.020 was obtained, which is smaller than the value of α (0.05). This shows that there is a statistically significant relationship between the level of knowledge and the practice of postpartum gymnastics in postpartum mothers. The correlation coefficient value of 0.696 indicates that the relationship between the two variables is positive with a strong relationship. This means that the higher the level of knowledge of postpartum mothers, the better the practice of postpartum gymnastics is carried out.

4.2 Discussion

4.2.1 Univariate Analysis

Mother's Age

The results showed that all respondents were in the age range of 20–35 years (100%), which was clinically and demographically categorized as healthy reproductive age. This age range is the phase of early to

Advances in Healthcare Research
Volume 4, Issue 1 (2026). 156-169
DOI: https://doi.org/10.60079/ahr.v4i1.717
OPEN ACCESS
e-ISSN: 2985-9808

intermediate adulthood, where individuals generally have optimal biological, psychological, and social maturity. This condition greatly affects the mother's ability to receive health information, understand the benefits of interventions, and make decisions related to self-care during the postpartum period.

From the perspective of cognitive development theory, individuals in early adulthood have better logical and reflective thinking capacity, so they are able to relate the information received to their health conditions. This allows postpartum mothers in this age range to more easily understand the goals, benefits, and procedures of postpartum gymnastics, then internalize them as part of daily health behaviors. Age is also related to mental readiness in facing the role of mother, including responsibility for postpartum physical recovery.

The results of this study are in line with the findings of Irfana et al. (2024) who stated that postpartum mothers of healthy reproductive age tend to have a better rate of health education acceptance compared to the risk age group. However, research by Cahyani et al. (2022) shows that although age is a supporting factor, the success of postpartum gymnastics practice is still greatly influenced by the quality of education and support of health workers. This difference indicates that age is not the only determinant of behavior, but rather works alongside other factors such as knowledge, motivation, and environment. Practically, these findings show that the target of postpartum mothers aged 20–35 years is a very potential group for health promotion interventions based on postpartum exercise education. Theoretically, these results reinforce the concept of predisposing factors in the PRECEDE–PROCEED theory, where age is an initial characteristic that affects an individual's readiness to behave healthily.

Parity

The parity distribution shows a balanced proportion between primipara and multipara, each of 50%. This condition gives an idea that respondents have varying levels of childbirth experience. Primipara mothers are generally in the early adaptation phase to postpartum physical and psychological changes, so they tend to have greater information needs related to postpartum care, including postpartum exercises. In contrast, multipara mothers have had previous experiences that can affect their perception and belief in the practice of postpartum gymnastics. Conceptually, the experience of childbirth is one of the learning resources that can shape health attitudes and behaviors. Multipara mothers may have had positive or negative experiences related to previous postpartum recovery, which then affect their willingness to do postpartum exercises. However, experiences without the support of correct knowledge have the potential to apply inappropriate practices.

This result is in line with the research of Purwati and Sari (2020) which states that multipara mothers tend to be more confident in doing postpartum gymnastics because they have previous experience. However, Khairunnisa and Oktavia (2023) found that experience alone is not always directly proportional to good practice if it is not accompanied by adequate education. This shows that parity plays a supporting factor, but not a single determining factor. The practical implication of these findings is the need for a different educational approach between primipara and multiparapara. Primipara mothers need more intensive education and practice assistance, while multipara mothers need reinforcement and clarification of information so that previous experiences can be directed to practices that meet standards. Theoretically, these findings support a social learning theory that emphasizes the role of experience and knowledge reinforcement in behavior formation.

Education

Advances in Healthcare Research
Volume 4, Issue 1 (2026). 156-169
DOI: https://doi.org/10.60079/ahr.v4i1.717
OPEN ACCESS
e-ISSN: 2985-9808

The results showed that the majority of respondents had high school education (60%) and higher education (33.3%) while for junior high school education (6.7%). Education level is an important indicator in determining a person's ability to understand information, think critically, and make health decisions. Mothers with secondary to higher education tend to receive health education more easily, including information about postpartum exercises. Within the framework of knowledge theory, education plays a role as a means of increasing the cognitive capacity of individuals. Formal education not only improves the ability to read and understand information, but also forms a rational mindset and is open to changing health behaviors. Therefore, mothers with higher levels of education have a greater chance of translating knowledge into real action.

These findings are consistent with research Azizah et al. (2022) which states that the level of education affects knowledge, so a lack of preparation and understanding can hinder health behaviors. However, Wahyuni et al. (2023) emphasized that formal education alone is not enough without being accompanied by applicable and contextual health education. This difference shows that education is a basic factor that needs to be strengthened with appropriate educational interventions. The practical implication of these results is the importance of adapting educational methods and media to the mother's educational background. Theoretically, these findings reinforce the view that education is a major predisposing factor in the formation of health behaviors.

Employment Status

Most of the respondents were working mothers (66.7%). Employment status has two sides of influence on the practice of postpartum gymnastics. On the one hand, working mothers generally have wider access to information and exposure to health education resources. On the other hand, work demands and time constraints can be obstacles in the implementation of regular postpartum gymnastics.

The results of this study are in line with Cahyani et al. (2022) who stated that time constraints are one of the factors inhibiting the practice of postpartum gymnastics in working mothers. However, Naharani et al. (2025) found that working mothers can still perform postpartum exercises well if they receive flexible education and according to their conditions. Practically, these findings show the need for adaptive educational strategies, such as providing short and easy-to-do postpartum gymnastics guidelines at home. Theoretically, these results support the concept of enabling factors in the PRECEDE–PROCEED theory.

Types of Childbirth

All respondents underwent normal childbirth (100%), which medically allowed early mobilization and early implementation of postpartum exercises. This condition is an important supporting factor in the practice of postpartum gymnastics because the mother does not experience significant movement limitations.

This finding is in line with Roichana and Pratiwi (2020) who stated that mothers with normal childbirth have better physical readiness to perform postpartum exercises. Practically, these results confirm the importance of integrating postpartum gymnastics education immediately after normal delivery. Theoretically, these findings strengthen the link between physical condition and health behavior.

Advances in Healthcare Research
Volume 4, Issue 1 (2026). 156-169
DOI: https://doi.org/10.60079/ahr.v4i1.717
OPEN ACCESS
e-ISSN: 2985-9808

Knowledge of Postpartum Mothers Before and After Postpartum Gymnastics Education

The results of the analysis showed a very clear change in the level of knowledge of postpartum mothers before and after being given postpartum gymnastics education. Before the educational intervention, the majority of respondents were in the category of lack of knowledge, which was 23 people (76.7%), and there were no respondents with good knowledge. This condition shows that most postpartum mothers do not have an adequate understanding of the definition, benefits, implementation time, and basic principles of postpartum gymnastics. After being given postpartum gymnastics education, there was a significant increase in the level of knowledge. Most of the respondents were in the good category, namely 25 people (83.3%), and there were no more respondents with the lack of knowledge category. This increase shows that the education provided is able to increase the understanding of postpartum mothers effectively.

These results are in line with research Wigati et al. (2021) which states that the level of knowledge is the main factor that affects compliance in maternal behavior. And from the research of Naharani et al. (2025) that providing education through counseling and demonstration of postpartum gymnastics can significantly increase maternal knowledge. Education that is delivered systematically and adjusted to the needs of postpartum mothers helps the process of remembering and understanding information, so that knowledge is easier to internalize. Theoretically, this increase corresponds to the concept of behavior change which states that knowledge is the initial stage in the formation of health behaviors. Effective education serves as a cognitive stimulus that encourages individuals to understand the importance of a health action, in this case postpartum exercises.

Practice of Postpartum Gymnastics

The results showed that most of the respondents had practiced postpartum gymnastics in the good category, namely 23 people (76.7%), while 4 people (13.3%) were in the adequate category and 3 people (10%) were in the poor category. This shows that most postpartum mothers at PMB Rahmawati have been able to apply postpartum gymnastics in their daily lives after receiving education. Good practice of postpartum gymnastics reflects that the mother not only knows the information theoretically, but is also able to implement it in the form of real actions. Factors that support this practice include normal childbirth conditions, healthy reproductive age, and increased knowledge gained through education.

These results are in line with the research of Purwati and Sari (2020) which states that postpartum mothers with a good understanding tend to do postpartum exercises regularly and according to recommendations. In addition, the support of health workers in the form of education and mentoring also plays an important role in increasing maternal compliance in performing postpartum exercises. However, there are still respondents with less practice showing that there are other factors that can be obstacles, such as fatigue, time constraints, family support and lack of motivation. This is in accordance with the PRECEDE–PROCEED theory which states that health behaviors are influenced by predisposition, probability, and reinforcing factors.

4.2.2 Bivariate Analysis

Statistical Test of the Relationship of Knowledge with the Practice of Postpartum Gymnastics

The results of the Somers'd test showed a p-value of 0.020 ($p < 0.05$), which means that there is a statistically significant relationship between the level of knowledge and the practice of postpartum

Advances in Healthcare Research
Volume 4, Issue 1 (2026). 156-169
DOI: https://doi.org/10.60079/ahr.v4i1.717
OPEN ACCESS
e-ISSN: 2985-9808

gymnastics in postpartum mothers. The correlation coefficient value of 0.696 indicates that the relationship is positive and strong, which indicates that the increase in knowledge is followed by an improvement in the quality of postpartum gymnastics practice. This strong relationship shows that knowledge has a central role in encouraging the practice of postpartum gymnastics. Postpartum mothers who have good knowledge tend to comprehensively understand the benefits of postpartum exercises, such as accelerating uterine involution, improving blood circulation, improving muscle tone, and preventing postpartum complications. This understanding forms a positive belief and attitude towards postpartum gymnastics, so that mothers are more encouraged to carry it out independently and sustainably.

Good knowledge also helps mothers in reducing fear and worry about postpartum gymnastics movements. Mothers who understand that postpartum gymnastics are done gradually and adjusted to the condition of the body will feel safer and more confident in carrying out each movement. This shows that knowledge plays a role not only as a source of information, but also as a psychological factor that increases the self-efficacy of postpartum mothers.

The results of this study are in line with the research of Irfana et al. (2024) and Khairunnisa & Oktavia (2023) who stated that knowledge is the main factor influencing the practice of postpartum gymnastics. In the study, it was explained that postpartum mothers with a high level of knowledge were more likely to perform postpartum exercises regularly than mothers with low knowledge. Knowledge is the basis for the formation of internal awareness and motivation in maintaining health during the postpartum period. However, the results of this study are different from the findings of Roichana and Pratiwi (2020) who stated that the practice of postpartum gymnastics is more influenced by cultural factors and community habits than by the mother's knowledge alone. In some social environments, there is still a belief that postpartum mothers should limit physical activity and rest more, so postpartum gymnastics is considered unnecessary or even risky. As a result, even though mothers have good knowledge, the practice of postpartum gymnastics remains low.

In addition, research by Cahyani et al. (2022) also shows that physical fatigue, time constraints, and lack of family support are the main obstacles to the practice of postpartum gymnastics. This shows that knowledge alone is not necessarily enough to encourage practice if it is not supported by enabling and reinforcing factors. The support of husbands, families, and health workers has an important role in creating a conducive environment for mothers to do postpartum exercises.

The difference in the results of the study shows that the relationship between the knowledge and practice of postpartum gymnastics is contextual and influenced by various factors. In this study, the strong relationship between knowledge and practice is suspected to be due to the relatively homogeneous characteristics of respondents, all of whom are of healthy reproductive age, undergo normal childbirth, and receive direct education from health workers. This condition allows mothers to be more physically and psychologically prepared in applying the knowledge they have into real practice.

Theoretically, the findings of this study reinforce the concept that knowledge is a predisposing factor in the formation of health behaviors. In the PRECEDE–PROCEED model, knowledge becomes the initial basis that influences attitudes and intentions, which are further manifested in the form of actions or practices. Postpartum mothers who understand the benefits and procedures of postpartum gymnastics will have a stronger internal motivation to make postpartum gymnastics part of postpartum self-care, so that the practice of postpartum gymnastics can be carried out consistently and sustainably.

Advances in Healthcare Research
Volume 4, Issue 1 (2026). 156-169
DOI: https://doi.org/10.60079/ahr.v4i1.717
OPEN ACCESS
e-ISSN: 2985-9808

5. Concluding Remarks and Recommendation

Based on age characteristics, all respondents in this study were in the healthy reproductive age range of 20-35 years as many as 30 people (100%), while there were no respondents aged <20 years or >35 years (0%). This shows that the majority of postpartum mothers are at a biologically and psychologically mature age, so they have good potential in receiving health information and applying it in postpartum care behavior.

Based on parity characteristics, respondents were evenly divided between 15 primary (50%) and 15 multipara (50%) respondents, and there were no multipara grande respondents (0%). This condition shows that respondents have diverse childbirth experiences, both mothers who have given birth for the first time and mothers who have had previous childbirth experiences. Based on the characteristics of the type of delivery, all respondents (100%) underwent normal delivery. This condition allows mothers to perform postpartum exercises earlier and with minimal risk than mothers with operative delivery.

Based on the characteristics of the education level, the majority of respondents had a high school education level of 18 people (60%), followed by higher education as many as 10 people (33.3%), and junior high school as many as 2 people (6.7%), and there were no respondents with elementary education (0%). This relatively medium to high level of education supports the ability of respondents to understand health information, including postpartum exercise education.

Based on the characteristics of employment status, most of the respondents were working mothers as many as 20 people (66.7%), while mothers who did not work were 10 people (33.3%). Employment status can affect access to information and social experiences of mothers, but also has the potential to be a challenge in the consistency of the implementation of postpartum gymnastics due to time constraints.

Based on the characteristics of the type of delivery, all respondents in this study underwent vaginal normal delivery as many as 30 people (100%), and there were no respondents with cesarean delivery (0%). This condition allows mothers to perform early mobilization and postpartum exercises faster than mothers with operative delivery.

The results of the analysis of the level of knowledge of postpartum mothers about postpartum gymnastics showed that there was an increase in the level of knowledge of postpartum mothers after being given postpartum gymnastics education.

The practice of postpartum gymnastics in postpartum mothers shows a better tendency along with increasing levels of knowledge. Mothers who have a good understanding of the benefits and how to do postpartum gymnastics tend to be more capable and more confident in practicing it independently.

The relationship between Knowledge Level and Postpartum Gymnastics Practice from the results of the Somers'd test showed a p-value of 0.020 (< 0.05) with a correlation coefficient of 0.696, which means that there is a significant, positive, and strong relationship between the level of knowledge and the practice of postpartum gymnastics. The higher the level of knowledge of postpartum mothers, the better the practice of postpartum gymnastics is carried out. These findings confirm that knowledge is an important predisposing factor in shaping postpartum maternal health behavior.

Statement of Use of Generative AI

During the preparation of this work, the author used generative artificial intelligence tools to support the scientific writing process. Grammarly was used to check grammar, refine writing style, and improve

clarity in scientific writing. All interpretations, analyses, and conclusions presented in this study are the sole responsibility of the author.

References

Ariyani, A. (2016). The relationship between knowledge and the practice of postpartum gymnastics at the Gajahan Health Center. In Thesis. https://digilib.uns.ac.id/dokumen/detail/54879/Hubungan-antara-pengetahuan-dengan-praktik-senam-nifas-di-puskesmas-gajahan

Azizah, N., Nisak, A. Z., & Wigati, A. (2022). Information Communication and Student Education Skills in Overcoming Lactation Problems in Postpartum Mothers. Journal of Nursing and Midwifery Sciences, 13(2), 556–560.

Health Research and Development Agency, K. K. R. I. (2023). Riskesdas National Report 2023. https://www.litbang.kemkes.go.id

Cahyani, P. D., Setyowati, S., & Nuraini, N. (2022). Factors Related to the Practice of Postpartum Gymnastics in Postpartum Women at the Surabaya Regional Health Center. Journal of Public Health (UM Surabaya), 13(1), 54–61. https://journal.um-surabaya.ac.id/index.php/JKM/article/view/13727

Fauziyah, N., Asiyah, N., Indrianingrum, I., Kudus, M., Kudus, M., & Kudus, U. M. (2025). The Effect of Bengkung Use on Abdominal Circumference Reduction in Postpartum Women. 3(2), 422–437.

Hendrawan, A. K., & Hendrawan, A. (2020). Overview of Fishermen's Knowledge Level about Occupational Health and Safety. Journal of Science. https://openjurnalsystem.amn.ac.id/index.php/saintara/article/view/90

Ibrahim, S. S., Mobulango, I., & Yazni, Y. (2021). Measuring the readiness of the implementation of knowledge management in higher education institutions. Journal of Information Networks. https://ejurnal.ung.ac.id/index.php/jji/article/view/11797

Indonesia, K. K. R. (2023). Health Indicator Decree 2023–2026. Ministry of Health of the Republic of Indonesia. https://id.scribd.com/document/637194803/SK-Indikator-Kesehatan-2023-2026

Indriana, N., & Swandari, M. T. K. (2021). The Relationship of Knowledge Level with Medication Compliance in Hypertensive Patients at X Cilacap Hospital. Journal of Opium Husada. https://scholar.archive.org/work/y3m6qzizpfakxjnjk4rdtkrgdq/access/wayback/http://jurnal.umus.ac.id/index.php/jophus/article/download/266/jophus

Irfana, I., Sukmawati, S., & Ramadhani, S. (2024). Knowledge and Attitudes of Postpartum Mothers on the Benefits of Postpartum Gymnastics to Prevent Postpartum Bleeding. Scientific Journal of Obstetrics and Health (JIBI), 2(2), 52–60. https://doi.org/10.36590/jibi.v2i2.1263

Isabella Kristiani Sihaloho. (2022). Overview of the Knowledge of Postpartum Mothers in Postpartum Gymnastics at the Katarina Simanjuntak Clinic, Dusun IV A Sei Mencirim Deli Serdang in 2022. 7(2), 68–80.

Julianti, U. F., & Astuti, E. N. (2022). The relationship between maternal knowledge and interest in postpartum exercises. Journal of Jomparnd Midwifery, 1(2). https://doi.org/10.57218/jkj.Vol1.Iss2.413

Khairunnisa, K., & Oktavia, E. (2023). The Level of Knowledge of Postpartum Mothers About Postpartum Gymnastics at PMB Arinta Lindari in 2023. HumanTech: Indonesian Multidisciplinary Scientific Journal. http://journal.ikopin.ac.id/index.php/humantech/article/view/3826

Naharani, A. R., Febri Wahyuningsih, R., Diii, P., Faculties, K., Health, I., & Slawi, U. B. (2025). The Relationship Between The Knowledge of Postpartum Mothers About Postpartum Gymnastics and The Implementation Of Nifas Gymnastics. BHAMADA Journal of Health Science and Technology 16(1), 51–56. http://ejournal.bhamada.ac.id/index.php/jik

Pratiwi, E. Y., Sari, R. P., & Mustofa, A. (2021). The Relationship of Knowledge and Attitude with the Practice of Postpartum Exercise. Journal of Health, 9(2), 143–149. https://jurnal.unimus.ac.id/index.php/jurkes/article/view/8977

Purwati, N. M., & Sari, M. A. (2020). The Relationship between Knowledge Level and Postpartum Mothers' Practice in Performing Postpartum Exercises. Journal of Health Sciences, 11(1), 22–27. https://ejournal.poltekkes-smg.ac.id/ojs/index.php/jik/article/view/690

Volume 4, Issue 1 (2026). 156-169
DOI: https://doi.org/10.60079/ahr.v4i1.717
OPEN ACCESS
e-ISSN: 2985-9808

Qothrunnada, D. Z. Z., & Anisah, R. L. (2023). Increasing Knowledge of Postpartum Maternal Health in Postpartum Mothers through Postpartum Gymnastics Education. Scientific Journal of Nursing and Health Alkautsar (JIKKA), 2(1), 18–26.

Roichana, S., & Pratiwi, Y. A. (2020). The Relationship of Postpartum Gymnastics, Early Mobilization, and Postpartum Tradition to the Involution Process in Postpartum Mothers. Indonesian Journal of Midwifery (JIKI), 7(4). https://doi.org/10.33221/jiki.v7i04.444

Rosnani, R., & Mediarti, D. (2022). Overview of post-partum mother adaptation: A healthy lifestyle needs. Journal of Professional Nursing Science, 1(3). https://doi.org/10.55048/jpns.v1i3.59

Wahyuni, R. A., Pramudito, P., & Syafitri, S. (2023). The Effect of Counseling on the Improvement of Postpartum Gymnastics Practice in Central Java. Journal of Nutrition and Health, 14(2), 101–110. https://ejournal.ikm.ac.id/index.php/jgk/article/view/412

Wigati, A., Nisak, A. Z., & Azizah, N. (2021). Incidence of Anemia Based on Pregnant Women's Compliance in Consumption of Fe Tablets. Indonesia Journal of Midwifery, 5(1), 1–7.

Corresponding author
Ainia Fatimatuzzahro' can be contacted at: ainiafatimatuzz@gmail.com