Parity and Mother Age Correlated to The Attitude of Post Partum Care

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ARTICLE INFO | ABSTRACT

Background: Most maternal deaths in Semarang City occurred during the postpartum period of 68.75%. The knowledge and attitude of postpartum mothers about their care are still low. Knowledge of postpartum care is essential to reduce the risk of maternal death. The research aims to analyze the determinants of knowledge and maternal attitudes toward postpartum care in Semarang City.

Method: This study was carried out with a *cross-sectional design* on 90 postpartum mothers who were selected by *simple random sampling* at three health centers. Srondol Health Center has 22 postpartum mothers, Tlogosari Kulon Health Center has 30 postpartum mothers, and Ngaliyan Health Center has 38 postpartum mothers. Data collection was carried out by interviews using a structured questionnaire that included characteristics, support of health workers, knowledge, and attitudes towards the postpartum period. The analysis uses *simple linear regression*. The research was conducted in May – June 2024.

Result: The analysis results of the relationship between age and knowledge were positively correlated; age and attitude were positively associated with P <0.0001, and the average knowledge score was 8.68 (SD1,322). Parity correlates positively with knowledge, and parity positively correlates with attitudes with *a p-value* < 0.0001. The average attitude score was 21.72 (SD1,866) with moderate relationship strength positive direction (r=0.388).

Conclusion: The conclusion is that with increasing age, good knowledge, and a good attitude towards the postpartum period. It is recommended that young postpartum mothers, low parity is recommended to be given more intensive knowledge of the postpartum period so that knowledge and attitudes are better towards the postpartum period.

1. Introduction

Maternal mortality in Indonesia is still quite high at 305 per 100,000 live births, AKI in Central Java in 2023 will reach 76.15 KH and maternal mortality cases in Semarang City will be in 2023 as many as 16 cases 68.75% occur in the postpartum period (1),(2). Mother's knowledge and attitude about the risk of postpartum is still lacking, namely 41.1%, Postpartum mothers can go through the critical period well if they have knowledge about postpartum care (3). The death of the mother is a case that needs to be paid attention to by the world (4). In developing countries, maternal mortality is higher than in developed countries due to inadequate maternal care services, high prevalence of diseases, and disparities in health services (5). One of the developing countries in sub-Africa is the country that contributes 50% [6]. In maternal mortality in the world, 46.96% of deaths are caused by direct causes, while 51.49% are indirect causes, and the rest are unknown causes or due to other causes (7). In pregnant women who have a low risk, there is a slight chance of bleeding (8). Thromboembolic factors in pregnant women are risk factors for placental previa preeclampsia postpartum hemorrhage (9). Infections in the postpartum period are common in mothers who experience preeclampsia,

eclampsia, antepartum hemorrhage, bleeding after childbirth, and postpartum psychosis (10). Bleeding is a risk factor for the postpartum period that must be considered (11).

The importance of increasing knowledge and attitudes towards the risk of postpartum to prevent maternal mortality (12). Mothers with less knowledge have a less favorable attitude toward their health, as well as postpartum mothers who lack knowledge will have a bad attitude toward the risks of their postpartum period (13). In childbirth, with surgery, it can increase the risk of infection in postpartum mothers (14). Demographic factors contribute to the emergence of the risk of postpartum (15). Mothers with good knowledge of red flags live happily with their partners and have decision-making skills. Mothers will look for health services according to the problem. Postpartum infections pose a severe risk to maternal health if not treated immediately, especially in environments with limited access to healthcare workers (16). Lack of access to adequate health services during the postpartum period hinders immediate treatment of complications that arise and can be fatal for the mother. Factors that affect the use of health services are education, age, parity, income and knowledge, and attitudes (17). The global strategy calls for increased health service utilization to immediately address health risks (18). Risk factors in the postpartum period that often occur are bleeding, preeclampsia/eclampsia, infection, and baby blues. This factor is significantly related to postpartum care (19). Education, occupation, economic status, place of residence, antenatal care status, type of delivery, delivery assistant (20),(21). This study aims to discover the determinants that affect the knowledge and attitude of postpartum mothers in postpartum care.

2. Method

The research uses a quantitative approach with a cross-sectional study design. The design of this study is very suitable for assessing several variables simultaneously and plays an essential role in providing a detailed description of the potential relationship between the variables (22). The population in this study is postpartum mothers in the Semarang City Health Center, namely the Sorndol Health Center, the Tlogosari Kulon Health Center, and the Ngaliyan Health Center, with a total of 337 postpartum mothers. The sample used the proportion of postpartum mothers in three health centers: 90 with details of the Srondol Health Center 22 postpartum mothers, the Tlogosari Kulon Health Center 30 mothers, and the Ngaliyan Health Center 38 people. Subjects were taken at the health center level using the consecutive sampling technique. The subject of the study was postpartum mothers in three Semarang City Health Centers. The Srondol Health Center was chosen because it represents the upper area of Semarang City with the social status of the middle and lower population. The Ngaliyan Health Center was selected because it represents the western part of Semarang City, which describes plantation and industrial areas; the Tlogosari Kulon Health Center was chosen because of the urban area of the trade and commerce area in Semarang City.

This research was conducted in May – June 2024. Data collection and validity test. This research instrument is a questionnaire on the support of health workers, knowledge, and attitudes developed by researchers, and validity tests were carried out at the Srondol Health Center, Tlogosari Kulon Health Center, and Ngaliyan Health Center Semarang City to 30 postpartum mother respondents from February to March 2024. Each health center takes ten postpartum mothers randomly. The results of the instrument validity test showed that one question was declared invalid, invalid questions were dropped out, and were represented by other questions. Research data collection was carried out by interviews using a structured questionnaire from April to May 2024. The research subjects were interviewed with a questionnaire structured knowledge, attitudes, support, and socio-demographics, including age, parity, education, employment, and education. Data analysis using IBM SPPSS statistical software version 23. Data analysis was carried out by correlation test between age variables and parity with knowledge and attitudes, then carried out by linear regression to obtain the variables that most determine knowledge and attitudes after being controlled by confounding variables. Ethical clearance is carried out by the ethics commission of Diponegoro University Semarang with number 141/EA/KEPK-FKM/2024.

3. Results

3.1. Features of The Subyek

Table 1 shows the average age of 29.14 years; the highest is 43 years, and the lowest is 20 years. The average length of education is 13.56 years, and the most prolonged education is 16 years and at least eight years. The average income is 5.97 million, while the highest income is 8 million and the lowest is 1 million. The most occupations are domestic workers 48 (53.3%), and the number of 1 child is the highest at 50 (55.6%)

Table 1. Subject Characteristics

Variable	Mean	Median	SD	Min-mak	95% CI
Age (years)	29.14		5,87	20-43	27,91–30,38
Length of Education (Years)	13.56		2,264	8-16	13,08– 13,03
Income (Millions of rupiah)	5,97		11,84	1-8	3,49 – 8,45
Health worker support		20.00	5.678	10-30	21.60- 23.98
Knowledge	8.68		1.322	3-10	8.40 – 8.95
Attitude	21.71		5.678	10-30	21.33-22.11

Occupation	f	%
Civil Servants	4	4.4
Teacher	3	3.3
Self-employed	3	3,3
Particular	20	22.2
Klontong shop merchants	1	1.1
Own business	4	4.4
Employee	7	7.8
Family workers	48	53.3
Parity		
1	50	55.6
2	23	25.6
3	13	14.4
4	3	3.3

3.2 Description of health worker support, knowledge and attitude

And the minimum value of 10 is in favor of 63 (70%), 27 (30%) is less supportive. Mean knowledge of 8.68 %, a minimum score of 3, and a maximum score of 10 with a good understanding of 76 (84.4%), poor knowledge of 14 (15.6%), an average altitude of 21.71 and a minimum score of 10 while a maximum score of 30. Good attitude 69 (76.7%), poor attitude towards postpartum risk 21 (23.3%. Where it is said that health workers support maternal welfare. The support of health workers in the needs and well-being of mothers is urgently needed and has proven to be quite effective; the support of health workers also needs to consider the physiological, psychological, emotional, and long-term information needs of mothers (23).

3.3 Knowledge Distribution and Attitudes

Table 2 describes the knowledge of the subjects, with the average knowledge score being 8.68 with SD 1.322. The majority of subjects correctly answered the danger signs of postpartum needing

help. 98.9% correctly knew the danger signs of eclampsia in the eyes, 96.7%, and the majority responded correctly to the signs of the mother experiencing psychological disorders, 95.6%. Most respondents correctly answered that the actions taken when postpartum bleeding occurred were 94.4%. While the subjects answered the questions incorrectly, it is essential to pay attention to the signs of preeclampsia/eclampsia that can be seen on the face at 44.4%, signs of bleeding at 25.6%, and actions when the postpartum mother has a fever of 20%.

Table 2. Subject knowledge

No	Statement of knowledge	Correct answer n (%)	Wrong Answer n (%)
1	Danger signs of postpartum mothers in a condition that requires help	89 (98.9)	1 (1)
2	Bleeding red flags	67 (74,4)	23 (25,6)
3	What to do if you experience bleeding	85 (94,4)	5 (5,6)
4	Danger signs of pregnancy poisoning (preeclampsia/eclampsia)	76 (84,4)	14 (15,6)
5	Signs of pregnancy poisoning/preeclampsia seen on the face	50 (55,6)	40 (44,4)
6	Visible signs of pregnancy poisoning from the hands	80 (88,9)	10 (11,1)
7	Danger signs of pregnancy poisoning that mothers feel in the eyes	87 (96,7)	3 (3,3)
8	Early signs of infection after childbirth	84 (93,3)	6 (6,7)
9	If you have a fever, what do you do	72 (80)	18 (20)
10	Signs that the mother has a psychological disorder	86 (95,6)	4 (4,4)
Total	**knowledge**	**Mean ± SD 8,68± 1,322**	

3.4 Distribution of Subjects' attitudes and support of health workers

Table 2 Describes the subjects' attitudes; the average attitude score was 21.72, with SD 1,886. The majority of subjects answered firmly that when the mother had a fever for more than two days, they did not go to health services 30.0%, and the majority responded that they strongly agreed that the pale condition did not go to health services 24.4%. The subject stated that he strongly disagrees when he feels weak immediately to improve health services. 76,7%. The head is very dizzy, so immediately check the health service; most subjects do not understand 60% of the information. Most subjects disagreed that their swollen faces would be examined at healthcare facilities, 52%.

Table 3. Subject Attitudes and Support of Health Workers

No	Statement of attitude	Strongly disagree n (%)	Disagree n (%)	Agree n (%)	Strongly agree n (%)
1	If I feel weak, I will immediately check with a health service	69 (76,7)	21 (23,3)	0	0
2	Mother did not go for a check-up even though she felt a high body for more than two days	1(1,1)	2 (3,3)	59 (65,6)	27 (30,0)
3	If full breasts are found, the mother does not check with the health service	2 (2,2)	34 (27,8)	47 (55,2)	7 (7,8)
4	I will check myself at a health care center if my breasts feel swollen	24 (26,7)	44 (48,9)	22 (24,4)	0
5	I will check myself at a health care center if my breasts are red	33 (36,7)	54 (60,0)	3 (3,3)	0

No		TP	S	SL	
6	I felt very dizzy, so I will immediately check with the health service	54 (60)	35 (38,9)	0 (0)	1 (1,1)
7	Even though I was pale, I didn't check in at the health care site	0	8 (8,9)	60 (66,7)	22 (24,4)
8	If my face is swollen, I will check it at a health service place	40 (44,4)	46 (51,1)	4 (4,4)	0
9	If my feelings are uncertain, I'll keep quiet	27 (30)	6 (6,7)	57 (63,3)	0
10	I will check at the health care center if my vision is blurry	44 (48,9)	44 (48,9)	2 (2,2)	0
	Total Attitude	Mean ± SD 21.72± 1.866			

No	Health Worker Support	TP	S	SL
1	Midwives recommend paying attention to the danger signs of postpartum	14 (15.6%)	40 (44.4%)	36 (40%)
2	Midwife explains the danger signs of postpartum	11 (12.2%)	42 (46.7%)	37 (41.1%)
3	Midwife visits home for examination	30 (33.3%)	37 (41.1%)	23 (25.6%
4	A midwife explains the signs and symptoms of postpartum bleeding	15 (16.7%)	40 (44.4%)	35 (38.9%)
5	Midwives explain the danger signs of postpartum infection	15 (16.7%)	40 (44.4%)	35 (38.9%)
6	Midwives explain the correct way to breastfeed	12 (13.3%)	37 (41.1%)	41 (45.6%)
7	The midwife gave me enough time when I consulted	4 (4.4%)	42 (46.7%)	44 (48.9%)
8	Midwives ask about health problems during the postpartum period	12 (13.3%)	43 (47.8%)	35 (38.9%)
9	My midwife advised me to eat nutritious food	2 (2.2%)	42 (46.7%)	46 (51.1%)
10	Midwives provide quick response when I need medical assistance	2 (2.2%)	44 (48.9%)	44 (48.9%)
	Total support from Health worker	Mean ± 12.88 SD 5.045		

3.5 Relationship between knowledge determinants and postpartum risk attitudes

Table 4 shows that there is a significant relationship between age and attitude, has a positive relationship with P<0.0001, there is a significant relationship between parity with knowledge and attitude with P < 0.0001, and has a positive relationship with knowledge r (0.382) and attitude r (0.346), respectively.

Table 4. The relationship of determinant factors to knowledge and attitudes

Research variables	Knowledge		Attitude	
	Koefisien korelasi	p	Koefisien korelasi	p value
Age	0.113	0.287	0.371	0.0001*
Parity	0.382	0.0001**	0.346	0.001**

Length of Education	0.194	0.067	0.008	0.943
Income	0.55	0.623	0.163	0.126
Support for health workers	-0.121	0.257	-0.234	0.026

The relationship between age and attitude shows a moderate relationship (r = 0.371). It has a positive pattern, meaning that the older the age, the more the mother's attitude in detecting the risk of the postpartum period. The coefficient value with a determination of 0.138 means that the mother's age affects the attitude by 1.38%, and other variables influence the remaining 98.62% of the mother's attitude. The results of the statistical test found that there was a significant relationship between the mother's age and attitude p= 0.0001.

4. Discussion

The results of relationship analysis state that when a person's age has a level of maturity and strength, it will make a person more mature in thinking and doing work (24). The older a person is, the more knowledge he has because he can learn from his past experiences (25). This shows that if the mother's age is mature, her knowledge will increase, and her attitude will be more favorable compared to mothers whose age is immature in understanding the risks of the postpartum period (26).

The higher a person's level of education, the more information they receive the more knowledge and technology they have (27). Postpartum mothers' education can affect their attitudes. The length of a mother's education shows an increased understanding of the risks of the postpartum period. The achievement of a long period of education will improve knowledge and attitudes (28). The length of education is the main thing in the mother's knowledge and attitude because with education, the mother knows the risks of postpartum, and if self-detection of the risk of postpartum is not carried out, it can result in worsening the health of the postpartum mother (29).

The relationship between parity and knowledge showed a weak relationship (r = 0.129) and had a positive pattern, meaning that the more often the mother gave birth, the more understanding of postpartum risk increased, the value of the coefficient with a determination of 0.017 suggested that maternal parity affected knowledge by 1.7% and the remaining 98.3% of maternal knowledge was influenced by other variables.

The relationship between parity and maternal attitude is moderate (r = 0.388). It has a positive pattern, meaning that the more often the mother gives birth, the more her attitude toward self-detection of postpartum risk; the coefficient value with a determination of 0.15 means that maternal parity affects attitudes by 1.5%. Other variables influence the remaining 98.5% of maternal attitudes. The results of the statistical test found that there was a significant relationship between parity and maternal attitudes in self-detection of postpartum risk (p= 0.0001). Most postpartum mothers gave birth to 1 child, with 50 respondents (55.6%). The results of this study stated that the knowledge of the risk of postpartum is better for mothers with many children, so mothers with many children have a better attitude in detecting the risk of postpartum (30).

The study results show that information communication and education during the postpartum period are essential for mothers (31). Providing education to mothers improves knowledge and attitudes so that postpartum mothers can carry out self-detection of postpartum risks. One of the respondents' hopes is that health education about the dangers of the postpartum period can be carried out for mothers (17). Postpartum mothers who receive less attention will increase the risk of postpartum, which can result in maternal death. Postpartum care is an effort to provide care to the mother that can prevent death. The study's results stated that the factors significantly related to postpartum care were age, parity, occupation, economic status, place of residence, antenatal care status, type of childbirth, and childbirth assistants (32).

Further research is needed to explore the impact of postpartum risk education on the quality of maternal health. In-depth studies can help identify effective educational strategies for postpartum

mothers; the lack of studies suggests more comprehensive research. Proper education is needed to increase understanding and preparedness in accompanying postpartum mothers. Without adequate education about the risks of the postpartum period, it can threaten the health of postpartum mothers. From the study's results, age factors parity can affect the mother's knowledge and attitude toward the risks of postpartum that can occur in every postpartum mother. For mothers and families to better understand the dangers of postpartum risks, it is necessary to educate mothers about postpartum health.

Research Limitations

The research limitations have not been differentiated between mothers exposed to maternal classes or not. Mothers who have been exposed to mother's class activities may have different knowledge and attitudes towards the risks of postpartum. Likewise, mothers who are not exposed to information will have different expertise and attitudes.

Implication

In young postpartum mothers, more intensive education must be carried out about the danger signs of the postpartum period. For mothers with low parity, more education needs to be carried out to increase knowledge about the risks of the postpartum period.

5. Conclusion

The study concludes that the older the age, the more the mother's knowledge and attitude in detecting the risk of postpartum increases. The multiparity of knowledge and attitude is getting better. The importance of providing postpartum risk education to mothers to increase knowledge and attitudes in self-detection of postpartum risks, especially for mothers with young age and low parity. Mothers with good knowledge can recognize their health risks immediately and go to health services for medical treatment. The maternal mortality rate can be suppressed by increasing knowledge and attitudes in the community about the dangers of the postpartum period. Advice on maternal knowledge about the risks of postpartum is essential for mothers, especially in young mothers and in the early pregnancy of the first child.

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