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THE RELATIONSHIP BETWEEN KNOWLEDGE, ATTITUDES AND BEHAVIOUR AND INFECTION PREVENTION DURING THE POSTNATAL PERIOD AT THE KELAPA COMMUNITY HEALTH CENTRE, KELAPA DISTRICT, WEST BANGKA REGENCY IN 2025

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ABSTRACT

Postpartum infections are a major cause of maternal morbidity and mortality. Infection prevention is highly dependent on maternal behaviour during the postpartum period, which is influenced by the level of knowledge and attitudes. At the Kelapa Community Health Centre, challenges remain in optimising self-managed infection prevention by postpartum mothers. This study aims to determine the relationship between knowledge, attitudes and behaviours and postpartum infection prevention at the Kelapa Community Health Centre, West Bangka Regency, in 2025. This was a quantitative study with a cross-sectional design. The sample comprised 56 postpartum mothers, selected using a total sampling technique. The research instrument was a questionnaire that had been validated for both validity and reliability. Data were analysed using univariate and bivariate methods, employing the Chi-Square test (a = 0.05). The bivariate analysis revealed a significant relationship between knowledge (p = 0.000), attitudes (p = 0.000) and behaviour (p = 0.000) and the prevention of postpartum infections. A Cramer's V value of 0.522 indicates a strong relationship between behavioural variables and infection prevention measures. Mothers exhibiting positive behaviours were 16 times more likely to adhere to infection prevention measures than those with poor behaviours. There is a significant relationship between knowledge, attitudes and behaviour and the prevention of postpartum infections at the Kelapa Community Health Centre. It is recommended that healthcare workers enhance education for postpartum mothers regarding infection prevention through continuous counselling, as well as encourage mothers to adopt clean and healthy living behaviours during the postpartum period.

Keywords: ***Knowledge, Attitudes, Behaviour, Postpartum Infection Prevention.***

INTRODUCTION

The postnatal period is known as the postpartum period; this is the condition experienced by a woman after giving birth. Biologically, the postnatal period begins after the placenta is delivered and ends when the uterus returns to its pre-pregnancy state. The postnatal period lasts for six weeks or 42 days. During this period, a recovery process takes place, during which the mother will experience various physical and physiological changes. The postpartum period can cause a mother to feel uncomfortable at the outset. If left unchecked and not properly managed, this condition can worsen and adversely affect the mother's health (Dewi et al., 2024) .

Postpartum infections are one of the leading causes of maternal health problems and deaths worldwide. *According to the World Health Organisation*'s ' , there are approximately 295,000 maternal deaths worldwide each year, with 10 to 15 per cent of these caused by postpartum infections and sepsis. In developing countries, this figure is higher due to limited access to healthcare services and a failure to adhere to infection prevention practices.

A report *the United Nations Children's Fund* titled ' ' states that the global Maternal Mortality Rate (MMR) remains at 223 per 100,000 live births, with postpartum infections playing a major role. In Indonesia, according to data from the Ministry of Health of the Republic of Indonesia for 2024, the MMR stood at 183 per 100,000 live births in 2024. , the leading causes of

maternal deaths in 2024 were non-obstetric complications during pregnancy, with 1,351 cases, followed by hypertension during pregnancy, labour and the postpartum period, with 988 cases, and obstetric haemorrhage, with 955 cases (Ministry of Health, 2024) .

The prevention of infection during the postpartum period depends on the mother's health-related behaviour, which is influenced by her knowledge and attitudes towards infection prevention practices. A good understanding of the signs of infection, perineal wound care, personal hygiene and early mobilisation helps to foster positive attitudes, which in turn lead to effective preventive behaviour. *The World Health Organisation*'s ' emphasises in its postnatal care guidelines the importance of community-based health education and empowering mothers to recognise warning signs and practise proper hygiene. Research shows that mothers with good knowledge of infection prevention are 3.5 times less likely to develop postnatal infections than those with limited knowledge. Positive attitudes and behaviours, such as proper handwashing, breast care and genital hygiene, have been shown to break the chain of infection and reduce the incidence of postnatal complications. In the Bangka Belitung Islands *Province*, there were 98 cases of postnatal infection per 100,000 live births in 2023, with Bangka Regency accounting for 23 per cent of the province's total maternal deaths(, 2023) .

Data from the Bangka Regency Health Office for 2024 shows that the coverage rate for complete postnatal care (KF4) was only 78.6 per cent, still below the national target of 90 per cent. Of the 856 postnatal mothers monitored, 47 cases of postnatal complications (5.5%) were identified, with 19 cases (40.4%) being postnatal infections, including perineal wounds, mastitis and urinary tract infections. The high infection rate highlights gaps in infection prevention practices at the community level (Bangka District Health Profile, 2024)

The Kelapa Community Health Centre, as one of the primary healthcare facilities in West Bangka Regency, treats an average of 560 postpartum women per year. According to data from the Kelapa Community Health Centre's medical records, in 2022 there were 3 cases of postpartum infections, which then fell to 1 case in 2023, and by the end of 2024, 2 cases of postpartum infections had been identified. For the period from January to December 2025, 557 postpartum mothers were recorded. Of this number, 5 cases of postpartum infection were identified, comprising 1 case of perineal infection, 2 cases of fever, and 2 cases of surgical wound infection (Kelapa Community Health Centre Health Profile, 2025) .

Several previous studies have shown that there is a significant link between mothers' understanding and their actual behaviour following childbirth in preventing health problems. A study by the ' at the Campaka Community Health Centre showed that mothers' levels of knowledge ($p = 0.002$), attitudes ($p = 0.002$) and behaviour ($p = 0.001$) significantly influenced the healing time of perineal suture wounds. These results indicate that appropriate wound care, based on sound knowledge and positive attitudes, has a direct positive impact on tissue recovery and helps prevent the risk of infection.

These findings are supported by the study ' , which shows that personal hygiene is significantly associated with the prevention of perineal wound infections in postpartum mothers ($p = 0.02$). The study explains that the prevention of infection during the postpartum period can be achieved through clean and healthy lifestyle behaviours, including maintaining personal hygiene, practising proper vulval hygiene, and carrying out appropriate perineal wound care. These results indicate that a mother's health behaviours during the postpartum period are a key factor in efforts to prevent postpartum infections.

This is consistent with research by the ' at the Payo Selincah Community Health Centre, which found a significant association between the knowledge ($p = 0.004$) and attitudes ($p = 0.001$) of postnatal mothers and their awareness of danger signs following childbirth. A lack of knowledge makes it difficult for mothers to recognise medical conditions that could potentially be life-threatening, whilst a positive attitude encourages mothers to seek medical help immediately when

symptoms such as infection arise. Furthermore, awareness of and adherence to postnatal health protocols are also influenced by mothers' perceptions.

Research by the ' at the Grogol Community Health Centre shows that good knowledge and attitudes are closely linked to adherence to postnatal check-ups (KF). This second factor raises awareness of the benefits of routine check-ups, thereby enabling the early detection of complications such as haemorrhage and infection. Mothers who have a good understanding and a positive attitude tend to be more disciplined in attending all postnatal check-ups, which are a vital part of preventing infections at a community level.

Against this background, the author was interested in conducting research on "The Relationship Between Knowledge, Attitudes and Behaviour and Efforts to Prevent Postpartum Infections at the Kelapa Community Health Centre in 2025".

RESEARCH METHODOLOGY

The type of research to be employed is quantitative. The study to be conducted in this research is a descriptive-analytical study, namely a study that describes each variable and then investigates the relationship between one variable and another. (This study employs a cross-sectional design with the aim of determining the relationship between knowledge, attitudes and behaviour regarding the prevention of infections during the postpartum period at the Kelapa Community Health Centre in 2025, observed over the same time period.

Study Population and Sample

1. Study Population

   The population comprises all elements or subjects of the research (e.g. humans) (Amin et al., 2024) . The population included in this study comprised all postnatal mothers at the Kelapa Community Health Centre between December and February 2026, totalling 56 respondents.

2. Research Sample

   A sample consists of subjects drawn from the population under investigation by the researcher (Ariyani et al., 2023) . As the population size was less than 100, the entire population was used as the research sample; consequently, the sampling technique employed in this study was total population sampling. The inclusion criteria for this study were as follows:

   a. Postpartum mothers (days 1–42)
   b. Respondents willing to participate (by signing *an informed consent form).*
   c. Postpartum women who are able to communicate effectively and can read and write.

   The exclusion criteria for this study were:

   a. Postpartum mothers who are experiencing severe complications or are in an emergency situation that makes it impossible to interview them.
   b. Those unwilling to participate as respondents

The data sources in this study are primary data, which are direct sources of data—that is, sources that provide data directly to the data collector, such as when completing questionnaires and during face-to-face interviews (Ariyani et al., 2023) . Primary data in this study were obtained by completing questionnaires.

Data analysis utilised statistical methods, specifically Descriptive Statistics (Univariate) and Bivariate Analysis

RESULTS AND DISCUSSION

Univariate Analysis

Based on research conducted into the relationship between knowledge, attitudes and behaviour and the prevention of infections during the postnatal period at the Kelapa

Community Health Centre, Kelapa Sub-district, West Bangka Regency, in 2025, this study involved 56 mothers as respondents. The data obtained are presented in the form of a frequency distribution collected via a research questionnaire, which covered the respondents' characteristics based on age, highest level of education, occupation and parity. Based on the results of the data processing, the research analysis can be outlined as follows:

a. Frequency Distribution of Postpartum Infection Prevention

Table 1 Frequency Distribution of Mothers' Knowledge Regarding Postpartum Infection Prevention

Prevention of Postnatal Infections	Frequency	
	n	%
Practise	21	37.5
Not doing	35	62.5
Total	**56**	**100.0**

Source: SPSS V25 data analysis, 2026

Table 1 shows that 21 mothers (37.5%) practised postpartum infection prevention, whilst 35 (62.5%) did not. This indicates that, in 2025, mothers at the Kelapa Community Health Centre in Kelapa Sub-district, West Bangka Regency, had not yet implemented postpartum infection prevention optimally, whether in terms of personal hygiene, perineal wound care, or nutritional intake.

b. Frequency Distribution of Mothers' Knowledge Regarding Postpartum Infection Prevention

Table 2 Frequency Distribution of Mothers' Knowledge Regarding Postpartum Infection Prevention

Knowledge	Frequency	
	n	%
Good	32	57.1
Poor	24	42.9
Total	**56**	**100.0**

Source: SPSS V25 data analysis, 2026

Table 2 shows that 32 mothers (51.7%) had correct knowledge of the prevention of postpartum infections, whilst 24 (42.9%) had insufficient knowledge. This indicates that the majority of mothers at the Kelapa Community Health Centre, Kelapa Sub-district, West Bangka Regency in 2025 had a good understanding of the prevention of postpartum infections, as demonstrated by their ability to understand the definition, warning signs and methods of preventing postpartum infections.

c. Frequency Distribution of Attitudes Towards the Prevention of Postpartum Infections

Table 3 Frequency Distribution of Mothers' Attitudes Towards the Prevention of Postpartum Infections

Attitude	Frequency	
	n	%
Positive	32	57.1
Negative	24	42.9
Total	**56**	**100.0**

Source: SPSS V25 data analysis, 2026

Table 3 shows that 32 mothers (51.7%) had a positive attitude towards the prevention of postpartum infections, whilst 24 (42.9%) had a negative attitude. This indicates that the majority of mothers at the Kelapa Community Health Centre, Kelapa Sub-district, West Bangka Regency in 2025 held a positive attitude towards the prevention of postpartum infections, as reflected in their favourable assessments and their tendency to agree with and support infection prevention measures.

d. Frequency Distribution of Behaviour Regarding Postpartum Infection Prevention

Table 4 Frequency Distribution of Mothers' Behaviours Regarding Postpartum Infection Prevention

Behaviour	Frequency	
	n	%
Good	28	50
Poor	28	40
Total	**56**	**100.0**

Source: SPSS V25 data analysis, 2026

Table 4 shows that 28 mothers (50 per cent) exhibited good behaviour regarding the prevention of postpartum infections, whilst 28 (50 per cent) exhibited less than optimal behaviour. This indicates that mothers at the Kelapa Community Health Centre, Kelapa Sub-district, West Bangka Regency, in 2025 exhibited a balanced distribution of behaviour between the 'good' and 'less than optimal' categories regarding the prevention of postpartum infections. This situation indicates that infection prevention practices are not yet uniform; therefore, there is still a need to improve the implementation of postnatal care in accordance with recommendations, as well as to ensure consistency in maintaining hygiene and sterility.

Bivariate Analysis

A bivariate analysis was conducted to determine the relationship between the variables of mothers' knowledge, attitudes and behaviour regarding the prevention of postpartum infections.

a. The Relationship Between Mothers' Knowledge and the Prevention of Postpartum Infections at the Kelapa Community Health Centre, Kelapa Sub-district, West Bangka Regency, in 2025

Table 5: Relationship between Mothers' Knowledge and the Prevention of Postpartum Infections at the Kelapa Community Health Centre, Kelapa Sub-district, West Bangka Regency, in 2025

Knowledge	Prevention of Postpartum Infections				Total		Correlation Coefficient	p-value
	Practising		Not Practising		n	%		
	n	%	n	%				
Good	17	30.3	11	19.6	28	28		
Less	4	10.5	24	17.5	28	28	0.480	0.000
Total	**21**	**21**	**35**	**35**	**56**	**56**		

Source: SPSS V25 data analysis, 2026

Table 5 shows that, of the 56 respondents, 28 had good knowledge and 28 had poor knowledge. Among the group with good knowledge, the majority practised postpartum infection prevention—17 people (60.7 per cent)—whilst 11 people (39.3 per cent) did not. Meanwhile, amongst the respondents with insufficient knowledge, the majority did not practise postpartum infection prevention—namely 24 people (85.7 per cent)—and only 4 people (14.3 per cent) did so.

The results of the statistical test showed a p-value of 0.000 (<0.05), indicating a significant association between knowledge and the prevention of postpartum infections. The correlation coefficient of 0.480 indicates that the strength of the relationship between the two variables is moderate. This suggests that the better a mother's knowledge, the more effective her preventive measures against postpartum infections will be.

b. The Relationship Between Mothers' Attitudes and the Prevention of Postpartum Infections at the Kelapa Community Health Centre, Kelapa Sub-district, West Bangka Regency, in 2025

Table 6: Relationship between Mothers' Attitudes and the Prevention of Postpartum Infections at the Kelapa Community Health Centre, Kelapa Sub-district, West Bangka Regency, in 2025

Attitude	Prevention of Postnatal Infections				Total		Correlation Coefficient	p-value
	Doing		Not doing		n	%		
	n	%	n	%				
Positive	19	12	13	20	32	32		
Negative	2	9	22	15	24	24	0.522	0.000
Total	**21**	**21**	**35**	**35**	**56**	**56**		

Source: SPSS V25 data analysis, 2026

Table 6 shows that, of the 56 respondents, the majority held a positive attitude—32 people—whilst 24 held a negative attitude. Among those with a positive attitude, the majority practised postpartum infection prevention—19 people (59.4 per cent)—whilst 13 (40.6 per cent) did not. Meanwhile, amongst those with a negative attitude, the majority did not practise postpartum infection prevention—22 people (91.7 per cent)—and only 2 people (8.3 per cent) did so.

The results of the statistical test showed a p-value of 0.000 (<0.05), indicating a significant association between attitude and the prevention of postpartum infections. The correlation coefficient of 0.522 indicates that the strength of the association is moderate. This suggests that the more positive a mother's attitude, the more effective her preventive measures against postpartum infections are.

c. The Relationship Between Mothers' Behaviour and the Prevention of Postpartum Infections at the Kelapa Community Health Centre, Kelapa Sub-district, West Bangka Regency, in 2025

Table 7: Relationship between Maternal Behaviour and the Prevention of Postpartum Infections at the Kelapa Community Health Centre, Kelapa Sub-district, West Bangka Regency, in 2025

Behaviour	Prevention of Postpartum Infections	Total	Correlation	p-value

	Practising		Not Practising		n	%	Coefficient	
	n	%	n	%				
OK	16	7.9	5	13.1	21	21		
Less	5	13.1	30	21.9	35	35	0.619	0.000
Total	**21**	**21**	**35**	**35**	**56**	**56**		

Source: SPSS V25 data analysis, 2026

Table 7 shows that of the 56 respondents, the majority exhibited poor behaviour (35 people), whilst 21 people exhibited good behaviour. Among those with good behaviour, the majority (16 people, or 76.2 per cent) practised postpartum infection prevention, whilst 5 people (23.8 per cent) did not. Meanwhile, amongst respondents with inadequate behaviour, the majority did not practise postpartum infection prevention—30 people (85.7 per cent)—and only 5 people (14.3 per cent) did so.

The results of the statistical test showed a p-value of 0.000 (<0.05), indicating a significant association between behaviour and the prevention of postpartum infections. The correlation coefficient of 0.619 indicates that the strength of the association falls within the 'strong' category. This suggests that the better the mother's behaviour, the more effective the measures taken to prevent postpartum infections.

Discussion

Characteristics Based on Postpartum Infection Prevention at the Kelapa Community Health Centre, Kelapa Sub-district, West Bangka Regency, in 2025

Based on the research findings in Table 1, it is evident that the majority of mothers do not practise postnatal infection prevention, namely 35 women (62.5 per cent), whilst only 21 women (37.5 per cent) do so. These results indicate that the prevalence of postnatal infection prevention behaviour amongst mothers remains relatively low.

The low uptake of these preventive measures may be due to several factors, such as a lack of knowledge, behaviour, attitudes, and the limited information mothers receive regarding postnatal care. According to the ' ' , health behaviour is influenced by predisposing factors such as knowledge, behaviour and attitudes, as well as enabling factors such as the environment and access to information. If mothers do not have sufficient understanding, the likelihood of them failing to take preventative measures will be higher.

(WHO, 2023) states that the postpartum period is a time of high susceptibility to infection. Infections during the postpartum period can occur as a result of poor personal hygiene, improper wound care, and a lack of health monitoring following childbirth. Therefore, the adoption of preventive measures—such as maintaining genital hygiene, caring for perineal wounds correctly, washing hands before and after care, and meeting nutritional needs—is vital for reducing the risk of infection.

The results of this study indicate that there are still many mothers who are not adequately preventing postnatal infections. This is a key concern for healthcare workers, particularly at the Kelapa Community Health Centre in Kelapa Sub-district, West Bangka Regency, who should step up education and counselling for postnatal mothers. It is hoped that the education provided will not only improve knowledge but also encourage behavioural change among mothers in maintaining personal hygiene, caring for perineal wounds, and meeting their nutritional needs independently.

Characteristics Based on Knowledge of Postpartum Infection Prevention at the Kelapa Community Health Centre, Kelapa Sub-district, West Bangka Regency, in 2025

Table 2 shows that 32 mothers (51.7%) had accurate knowledge of the prevention of postpartum infections, whilst 24 (42.9%) had insufficient knowledge. In this study, the level of knowledge was measured based on the mothers' understanding of the definition of postpartum infections, as well as the signs and symptoms of such infections during the postpartum period. These results indicate that the majority of mothers have a reasonably good understanding of the basic concepts of postpartum infections, although there are still some mothers with insufficient knowledge.

These findings are consistent with the view (Notoatmodjo, 2010) that knowledge is a key factor influencing mothers' behaviour in preventing postpartum infections. Mothers with good knowledge tend to be better able to recognise warning signs and understand the importance of infection prevention, and are therefore more likely to take appropriate preventive measures.

According to the WHO (2023), mothers' knowledge of postnatal care is vital in preventing infections, as postnatal infections are one of the leading causes of maternal mortality that can be prevented through proper hygiene and care practices.

This is supported by a study (Baby et al., 2025), which found that knowledge of postnatal care was significantly associated with a moderate correlation ($p = 0.001$; $r = 0.432$).

The findings of this study are also consistent with the research by Hilin, Hanifa and Hidayani (2024), which demonstrated a significant association between the level of knowledge and the respondents' health behaviours, with a p-value of 0.000 ($p<0.05$). Good knowledge enhances an individual's ability to understand health risks and determine appropriate actions, thereby influencing the preventive behaviours they adopt. These findings reinforce the results of this study, which indicate that knowledge is a key factor in shaping preventive measures against infection during the postpartum period.

Based on the above findings, it can be concluded that the majority of mothers at the Kelapa Community Health Centre, Kelapa Sub-district, West Bangka Regency, in 2025 have a good understanding of postpartum infections, particularly in terms of their definition, signs and symptoms. However, the fact that some mothers still lack sufficient knowledge highlights the need for improved education so that all mothers are able to recognise the risks of infection and take optimal preventive measures.

Characteristics Based on Attitudes Towards the Prevention of Postpartum Infections at the Kelapa Community Health Centre, Kelapa Sub-district, West Bangka Regency, in 2025

Table 3 shows that 32 mothers (51.7%) had a positive attitude towards the prevention of postnatal infections, whilst 24 (42.9%) had a negative attitude. In this study, attitudes were measured based on the mothers' views or assessments of infection prevention efforts, as well as their propensity to act (agree or disagree) regarding the recommended preventive measures. These results indicate that the majority of mothers hold favourable views and are inclined to support measures to prevent postpartum infections, although there are still some mothers with less supportive attitudes.

These findings are consistent with the view (Notoatmodjo, 2014) that an attitude is an individual's internalised response to an object, involving factors such as opinion and emotion; thus, a positive attitude will encourage an individual to adopt healthier behaviours.

According to the WHO (2023), a mother's attitudes and behaviour regarding hygiene and self-care during the postpartum period play a crucial role in preventing infections, which, as , are one of the main causes of maternal morbidity and mortality.

The findings of this study are also supported by research (Maryani et al., 2025), which found a p-value of 0.001 ($p < 0.05$) from the chi-square test; it can therefore be concluded that there is a relationship between the attitudes of postnatal mothers and postnatal danger signs in the catchment area of the Payo Selincah Community Health Centre, Jambi City, in 2025.

These findings are also supported by research by Hutabarat, Dewi and Hidayani (2024), which demonstrated a significant association between attitudes and health prevention

behaviours among pregnant women, with a p-value of 0.008 (p<0.05). The study explains that individuals with positive attitudes tend to be more receptive to health information and more likely to translate it into concrete actions. This is consistent with research findings showing that postnatal mothers with positive attitudes are more likely to take steps to prevent infection than those with negative attitudes.

Based on the findings presented above, it can be concluded that the majority of mothers at the Kelapa Community Health Centre in Kelapa Sub-district, West Bangka Regency, in 2025 held a positive attitude towards the prevention of postpartum infections, particularly in terms of accepting and agreeing with the importance of preventive measures. However, the fact that there are still mothers with negative attitudes highlights the need for improved education and persuasive approaches so that mothers not only understand but are also willing to consistently implement preventive measures.

Characteristics Based on Behaviour Regarding the Prevention of Postpartum Infections at the Kelapa Community Health Centre, Kelapa Sub-district, West Bangka Regency, in 2025

Table 4 shows that 28 mothers (50 per cent) exhibited good behaviour regarding the prevention of postpartum infections, whilst 28 (50 per cent) exhibited less than optimal behaviour. These results indicate that the mothers' behaviour falls within a balanced category between good and less than optimal. In this study, behaviour was measured based on the postnatal care practices carried out by mothers in accordance with healthcare workers' instructions, as well as their consistency in maintaining hygiene and sterility during the postnatal period. These results indicate that not all mothers consistently apply correct care practices in their daily lives.

This is in line with the view of experts (Notoatmodjo, 2014) that behaviour is the result of the interaction between predisposing factors (knowledge and attitudes), supporting factors, and motivating factors. This suggests that even though mothers may possess good knowledge and attitudes, they may not necessarily be able to fully translate these into actual behaviour.

According to the WHO (2023), clean and healthy living behaviours—including maintaining hygiene and providing appropriate care during the postnatal period—are a key measure in preventing infections that could affect the mother's health.

The findings of this study are also supported by research (Tupah et al., 2024), which found, based on 30 respondents, that 22 mothers (73.3%) possessed good knowledge, 22 mothers (73.3%) had a positive attitude, and 23 mothers (76.7%) exhibited good behaviour. The results of the *Chi-square* test for the knowledge category yielded *a p-value* of 0.002 ($p < 0.05$); for the attitude category, the p-value was 0.002 ($p < 0.05$); whilst for behaviour, the p-value was 0.001 ($p < 0.05$). Conclusion: There is a relationship between knowledge, attitudes and behaviour regarding perineal wound care and the duration of perineal suture healing within the catchment area of the Campaka Community Health Centre (UPTD Puskesmas Campaka) in 2023.

Based on the findings outlined above, it can be concluded that, in 2025, mothers at the Kelapa Community Health Centre in Kelapa Sub-district, West Bangka Regency, still exhibit sub-optimal behaviour regarding the prevention of postpartum infections. The balance between good and less-than-ideal behaviour indicates a gap between knowledge and attitudes on the one hand, and actual practice in the field on the other. Therefore, efforts are needed to improve education that focuses not only on providing information, but also on guidance and monitoring, so that mothers are able to consistently apply postnatal care in their daily lives.

Characteristics Based on the Relationship Between Knowledge and the Prevention of Postpartum Infections at the Kelapa Community Health Centre, Kelapa Sub-district, West Bangka Regency, in 2025

Based on Table 5, the results of the chi-square test analysis indicate that there is a relationship between knowledge and the prevention of postpartum infections, with a p-value of $0.000 < 0.05$; it can therefore be concluded that there is a significant relationship between the

variable of knowledge and the prevention of postpartum infections. Meanwhile, the correlation coefficient of 0.620 indicates that the strength of the relationship between knowledge and the prevention of postpartum infections falls into the 'strong' category.

The cross-tabulation results show that, of the 56 postpartum mothers with correct knowledge, 17 (10.5%) took preventative measures and 11 (17.5%) did not. Conversely, amongst postpartum mothers with insufficient knowledge, 4 mothers (10.5 per cent) took preventative measures and 24 mothers (17.5 per cent) did not. This indicates that mothers with good knowledge are more likely to take measures to prevent infection than postpartum mothers with insufficient knowledge.

This is in line with the view (Notoatmodjo, 2014) that knowledge is a cognitive factor underpinning the formation of health behaviour. Individuals with good knowledge are better able to understand the importance of disease prevention, and are therefore motivated to take appropriate action to maintain their health. In the context of this study, postpartum mothers with good knowledge tend to be better able to implement infection prevention measures during the postpartum period.

According to Green and Kreuter (2022), knowledge is one of the predisposing factors that plays a key role in shaping health behaviour. These predisposing factors include cognitive aspects that form the basis for an individual's attitudes and actions. Individuals with good knowledge tend to have a greater awareness of health risks and are therefore better able to take appropriate preventive measures. In this study, postpartum mothers with good knowledge showed a tendency to practise infection prevention more effectively than those with less knowledge.

This is supported by a study (Baby et al., 2025) which found that knowledge of postnatal infection prevention was significantly associated with a moderate correlation ($p = 0.001$; $r = 0.432$).

Based on the data presented, it can be concluded that knowledge plays an important role in shaping behaviour regarding the prevention of postpartum infections. Mothers with good knowledge tend to better understand the importance of maintaining personal hygiene, caring for perineal wounds, and recognising the warning signs of infection, and are therefore better able to take appropriate preventive measures.

However, there are still mothers with insufficient knowledge who do not practise infection prevention effectively. This indicates that a lack of knowledge can act as a barrier to the adoption of healthy behaviours, thereby potentially increasing the risk of postpartum infections. Therefore, healthcare workers must play an active role in providing ongoing education, counselling and support so that mothers' knowledge can be enhanced, leading to improved behavioural change.

Characteristics Based on the Relationship Between Attitudes and Postnatal Infection Prevention at the Kelapa Community Health Centre, Kelapa Sub-district, West Bangka Regency, in 2025

Based on Table 6, the results of the Chi-square test indicate that there is a relationship between attitude and the prevention of postpartum infections, with a p-value of $0.000 < 0.05$. This means that there is a significant relationship between the attitude variable and the prevention of postpartum infections. Meanwhile, the correlation coefficient of 0.522 indicates that the strength of the relationship between attitude and the prevention of postpartum infections falls into the moderate category.

The cross-tabulation results show that, of the 56 postpartum mothers, 19 respondents with a positive attitude took measures to prevent infection, whilst 13 did not. Conversely, amongst postpartum mothers with a negative attitude, only 2 mothers took preventative measures, whilst 22 mothers did not take any preventative measures. This indicates that postpartum mothers with

a positive attitude are more likely to take infection prevention measures than those with a negative attitude.

This is in line with the view (Notoatmodjo, 2014) that attitudes are an individual's internalised response to a stimulus that can influence health behaviour. Positive attitudes will encourage individuals to act in accordance with their values and beliefs, including in preventing infections during the postpartum period.

According to Green and Kreuter (2022), attitudes are among the predisposing factors that play a role in shaping an individual's health behaviour. A positive attitude enhances an individual's readiness to make decisions regarding appropriate health actions. In this study, postpartum mothers with a positive attitude tended to have a greater awareness of the need to maintain hygiene and health during the postpartum period, and consequently took more measures to prevent infection.

The findings of this study are also supported by research (Maryani et al., 2025), which found a p-value of 0.001 ($p < 0.05$) from the chi-square test; it can therefore be concluded that there is a relationship between the attitudes of postnatal mothers and postnatal danger signs in the catchment area of the Payo Selincah Community Health Centre, Jambi City, in 2025.

Based on the data presented, it can be concluded that attitude is an important factor influencing the behaviour of postpartum mothers in preventing infection. Mothers with a positive attitude tend to be more compliant in practising clean and healthy living behaviours, such as maintaining personal hygiene, caring for wounds, and following the advice of healthcare workers.

However, there are still mothers with negative attitudes who do not practise infection prevention effectively. This suggests that a lack of acceptance of, or belief in, the importance of prevention can be a barrier to behavioural change. Therefore, healthcare workers need to make efforts to foster positive attitudes among mothers through education, counselling and persuasive approaches, so that mothers not only understand but are also willing to apply preventive measures consistently.

Characteristics Based on the Relationship Between Behaviour and the Prevention of Postpartum Infections at the Kelapa Community Health Centre, Kelapa Sub-district, West Bangka Regency, in 2025

Based on Table 7, the results of the Chi-Square test analysis indicate that there is a relationship between behaviour and the prevention of postpartum infections, with a p-value of $0.000 < 0.05$. This means that there is a significant relationship between behavioural variables and the prevention of postpartum infections. Meanwhile, the correlation coefficient of 0.619 indicates that the strength of the relationship between behaviour and the prevention of postpartum infections falls into the 'strong' category.

The cross-tabulation results show that, of the 56 postpartum mothers, 16 of those with good behaviour took measures to prevent infection, whilst 5 did not. Conversely, amongst postpartum mothers with poor behaviour, only 5 took preventive measures and 30 did not. These results indicate that behaviour plays a very important role in the prevention of postnatal infections. Mothers with good behaviour tend to be able to implement preventive measures effectively and consistently, such as maintaining personal hygiene, caring for perineal wounds correctly, and following the advice of healthcare professionals.

This is in line with the view (Notoatmodjo, 2014) that health behaviour is the result of a learning process influenced by an individual's knowledge and attitudes. Good behaviour is reflected in the concrete actions an individual takes to maintain their health, including efforts to prevent infections during the postnatal period.

(Green & Kreuter, 2022) emphasise an ecological approach to health behaviour. In this context, good behaviour indicates that an individual has the necessary readiness and sufficient support to engage in health-promoting activities to the fullest extent. Postnatal mothers who

demonstrate good behaviour tend to pay greater attention to personal hygiene and wound care, and to follow the advice of healthcare professionals, thereby helping to prevent infections.

The findings of this study are also supported by research (Tupah et al., 2024), which found, based on 30 respondents, that 22 mothers (73.3%) possessed good knowledge, 22 mothers (73.3%) had a positive attitude, and 23 mothers (76.7%) exhibited good behaviour. The results of the *Chi-square* test for the knowledge category yielded *a p-value* of 0.002 ($p < 0.05$); for the attitude category, the p-value was 0.002 ($p < 0.05$); whilst for behaviour, the p-value was 0.001 ($p < 0.05$). Conclusion: There is a relationship between knowledge, attitudes and behaviour regarding perineal wound care and the duration of perineal suture healing within the catchment area of the Campaka Community Health Centre (UPTD Puskesmas Campaka) in 2023.

Based on the data presented, it can be concluded that behaviour is a highly influential factor in the prevention of postpartum infections. Mothers who exhibit good behaviour are better able to apply preventive measures consistently, thereby minimising the risk of infection.

However, there are still mothers whose behaviour is less than ideal and who do not practise infection prevention optimally. This indicates a gap between knowledge, attitudes and practice in the field. Therefore, sustained efforts are required from healthcare workers through education, counselling and direct monitoring to ensure that mothers not only understand and agree with, but are also able to consistently apply preventive behaviours in their daily lives.

CONCLUSION

Based on the results of research conducted into the relationship between knowledge, attitudes and behaviour and the prevention of postpartum infections at the Kelapa Community Health Centre in Kelapa Sub-district, West Bangka Regency, it can be concluded that:

a. Based on the research findings, it was found that there is a significant relationship between knowledge, attitudes and behaviour and the prevention of postpartum infections, with each variable showing a p-value of 0.000 (<0.05). The correlation coefficients indicate that knowledge ($r = 0.480$) and attitudes ($r = 0.522$) have a moderate strength of association, whilst behaviour ($r = 0.619$) has a strong strength of association. This suggests that the better a mother's knowledge, attitudes and behaviour, the more effective her preventive measures against postpartum infections will be.
b. Based on the research findings, it was found that 28 respondents had good knowledge and 28 had poor knowledge. Respondents with good knowledge were more likely to practise preventive measures (17 people) than those who did not (11 people), whilst the majority of respondents with poor knowledge did not practise preventive measures (24 people). The results of the analysis indicate a significant association between knowledge and the prevention of postpartum infections, with a p-value of 0.000 (<0.05) and a correlation coefficient of 0.480, indicating a moderate strength of association.
c. Based on the research findings, it was found that the majority of respondents had a positive attitude—namely 32 people—with those holding a positive attitude being more likely to practise preventive measures (19 people) than those who did not (13 people), whilst the majority of respondents with a negative attitude did not practise preventive measures (22 people). The results of the analysis indicate a significant association between attitude and the prevention of postpartum infections, with a p-value of 0.000 (<0.05) and a correlation coefficient of 0.522, indicating a moderate strength of association.
d. Based on the research findings, it was found that the majority of respondents exhibited poor behaviour—namely 35 people—with those exhibiting good behaviour being more likely to practise preventive measures (16 people) than those who did not (5 people), whilst the majority of those exhibiting poor behaviour did not practise preventive measures (30 people). The results of the analysis indicate a significant association between behaviour and the

prevention of postpartum infections, with a p-value of 0.000 (<0.05) and a correlation coefficient of 0.619, indicating a strong association.

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