INTRODUCTION

Exclusive breastfeeding (ASI) is a condition when the baby only receives breast milk from his mother or foster mother for the first 6 months. The rate of exclusive breastfeeding is 37% worldwide and 54.1% in Jakarta. Infants who are not breastfed are associated with an increased incidence of infectious morbidity. Knowledge is one of the basic factors that determine a person’s reaction and decision-making when faced with a situation. Knowledge will bring up a person’s attitude to determine the behavior or action to be taken. Aim: To know the relationship between mother’s knowledge, attitudes, and behavior about exclusive breastfeeding with the level of success. Methods: Analytic observational study with a cross-sectional design conducted for 2 months in Karangmulyo Village, Kendal Regency, Central Java. The research subjects consisted of 66 mothers who had children aged 6-24 months. Assessment is carried out on the level of knowledge, attitudes, and behavior of mothers regarding exclusive breastfeeding, as well as the success rate of exclusive breastfeeding. Data analysis used the Mann-Whitney test, Chi-square, and Fischer exact. Significant p<0.05. Results: Most mothers have a good level of knowledge (n=57), attitude (n=45), and a sufficient level of behavior (n=64) regarding exclusive breastfeeding. There was no significant result in the level of knowledge (p=0.528; 0.820), attitude (p=0.339; 1.000), behaviour (p=0.342; 0.515) with the success of exclusive breastfeeding. Conclusion: There is no relationship between the level of knowledge, attitudes, and behavior on the success of exclusive breastfeeding. Keywords: Exclusive breastfeeding, knowledge, attitude, behavior

ABSTRACT

Background: Exclusive breastfeeding (ASI) is a condition when the baby only receives breast milk from his mother or foster mother for the first 6 months and no solid food or other liquids. In the worldwide, only 37% of babies are exclusively breastfed. Rates of exclusive breastfeeding range from 41% in North Africa, 44% in Asia, and the lowest in Latin America at 30%. The prevalence rate of exclusive breastfeeding in Jakarta is 54.1%, which is higher than the total value of exclusive breastfeeding in the worldwide.

Exclusive breastfeeding is known to have many health benefits, both in the short and long term for babies and their mothers. An increasing number of studies report the relationship between exclusive breastfeeding and long-term protection. Children’s cognitive development will increase with exclusive breastfeeding.

Based on the 2018 Basic Health Research (Riskesdas) data, it is known that there has been a decrease in exclusive breastfeeding as the baby ages, namely at 0 months of age as much as 81.0%, 78.4% at 1 month, 79.7% at 2 months, 79.7% at 1 month. 3 months 74.4%, 4 months 72.4%, and at 5 months only 62.2%. According to health profile data for the province of Central Java in 2020, the average exclusive breastfeeding (without complementary food) is only up to 4.5 months of age, then breastfeeding with additional food is carried out on average for babies aged 5.7 months.

Infants not being breastfed are associated with an increased incidence of infectious morbidity, as well as an increased risk of childhood obesity, type 1 and type 2 diabetes, leukemia, and sudden infant death syndrome. For mothers, failure to breastfeed is associated with an increased incidence of premenopausal breast cancer, ovarian cancer, type 2 diabetes, myocardial infarction, and metabolic syndrome.

Knowledge is one of the basic factors that determine a person’s reaction and decision-making when faced with a situation, one of which is the decision to give exclusive breastfeeding to children.
Knowledge will bring up a person's attitude which also determines the behavior or action to be taken.

LITERATURE REVIEW

Optimal exclusive breastfeeding practices will reduce child mortality, contribute significantly to children's long-term health, reduce the length of stay in children with diarrhea, respiratory infections, and otitis media, and support optimal brain development. In 2016, the Lancet estimated that 823,000 under-five deaths could be prevented each year through optimal exclusive breastfeeding practices.

Mother's knowledge and attitudes are significantly related to exclusive breastfeeding behaviour. Mothers with good knowledge are 14.8 times more likely to give exclusive breastfeeding than mothers with good knowledge. These results are similar to the findings of studies from Ethiopia, Nepal, and Tanzania. This impact can be partly explained by increased knowledge of mothers about the benefits of breastfeeding for themselves and their babies and the risks of not breastfeeding thereby increasing the likelihood that mothers will breastfeed. Previous studies have shown that mothers with good knowledge are 2.6 and 2.7 times more likely to give exclusive breastfeeding compared to those with good knowledge and negative attitudes towards exclusive breastfeeding.

Mother's good knowledge and positive attitude play an important role in the breastfeeding process. A previous study reported that mothers with high knowledge of exclusive breastfeeding were 5.9 times more likely to practice exclusive breastfeeding than mothers with low knowledge of exclusive breastfeeding (OR 5.9; 95% CI 2.6, 13.3; p<0.001). Scores of higher breastfeeding knowledge (OR 1.09; 95% CI 1.04-1.14), attitude (OR 1.04; 95% CI 1.00, 1.09), and practice control (OR 1, 11; 95% CI 1.02, 1.20) was associated with a higher prevalence of exclusive breastfeeding.

A positive mother's attitude towards breastfeeding is associated with longer breastfeeding and a greater chance of successful breastfeeding. Mothers with a positive attitude towards breastfeeding tend to exclusively breastfeed their babies. The results of this study indicate that some mothers have a positive attitude towards exclusive breastfeeding such as starting complementary foods after six months and the belief that exclusive breastfeeding is beneficial for children and better than artificial feeding. This turned out to also be a difference of opinion by the majority of mothers who disagreed with the fact that giving colostrum to newborns right away and within one hour is important, exclusive breastfeeding is enough for children up to six months, to feed their babies for the first six months, breastfeeding increases the bond between mother and baby, breastfed babies are healthier than breastfed babies, and formula feeding is more of a hassle than breastfeeding. The results of this study indicate that mothers have the lowest level of attitudes about exclusive breastfeeding.

Based on these theories, it can be concluded that knowledge, attitudes, and behaviour are entities that in this study are related to the success of exclusive breastfeeding.

METHODS

Analytic observational study with a cross-sectional design conducted for 2 months in Karangmulyo Village, Kendal Regency, Central Java. The research subjects consisted of 66 mothers who had children aged 6-24 months. The study exclusion criteria included mothers or children with special conditions that prevented exclusive breastfeeding. Assessment is carried out on the level of knowledge, attitudes, and behaviour of mothers regarding exclusive breastfeeding by using a questionnaire from previous research that is similar and has been validated, as well as the success rate of exclusive breastfeeding namely when the baby is only given breast milk during the age of 0-6 months without any additional food or support on a daily basis. Level of knowledge, less (score 19-75), sufficient (score 76-132), and good (score 133-190). Attitude level, less (score 9-35), enough (score 36-62), and good (score 63-90). Behaviour level, less (score 18-71), moderate (score 72-125), and good (score 126-180). Data analysis used the Mann-Whitney test, Chi-square, and Fischer exact. Significant p<0.05

RESULTS

Based on the assessment conducted on 66 research subjects, it was found that 26 subjects (39.4%) underwent exclusive breastfeeding, while 40 subjects (60.6%) did not undergo exclusive breastfeeding.
The level of knowledge in the Exclusive Breastfeeding group obtained an average of 147.15 with a standard deviation of 14.51, the median value was 153 with the smallest value being 103 and the largest value being 160. There were 4 subjects with a sufficient level of knowledge and 22 subjects with a good level of knowledge. The level of knowledge in the non-exclusive breastfeeding group obtained an average of 147.43 with a standard deviation of 20.96, and the largest value of 160. There were 1 subject with less knowledge, 4 subjects with a sufficient level of knowledge, and 35 subjects with a good knowledge level. There was no significant relationship or significant difference (p=0.342; 0.515) at the level of knowledge for the exclusive breastfeeding and non-exclusive breastfeeding groups.

The level of behaviour in the Exclusive Breastfeeding group obtained an average of 105.96 with a standard deviation of 10.145, a median value of 104 with the smallest value of 88, and the largest value of 116. There were 26 subjects with sufficient behaviour levels. The level of behaviour in the non-exclusive breastfeeding group obtained an average of 101.45 with a standard deviation of 14.90, a median value of 102 with the smallest value of 53, and the largest value of 125. There were 2 subjects with less behaviour and 38 subjects with sufficient behaviour. There was no significant relationship and significant difference (p=0.342; 0.515) at the level of behaviour for the exclusive breastfeeding and non-exclusive breastfeeding groups.

DISCUSSION

The rate of exclusive breastfeeding in this study was 39.4%. Based on the WHO classification, the percentage of exclusive breastfeeding in this study was at an adequate level (12%-49%). In the two groups, most of the research subjects did not work.
(54.20% and 63.72%). There is a positive relationship between mothers who do not work and exclusive breastfeeding practices. This is associated with mothers who don't work can stay longer with their children, thus allowing more frequent practice of exclusive breastfeeding. However, working mothers face several challenges in maintaining exclusive breastfeeding such as conflicting commitments at work, limited support at work, and a lack of breastfeeding facilities. Mothers from low socio-economic groups are also more likely to practice exclusive breastfeeding than mothers from middle-income families. A possible explanation is that people with low incomes have limited resources to afford alternative baby foods, so breastfeeding is the only option for them. The other factor is age that known to be a factor associated with smooth breastfeeding. Older age generally decreases physiological functions, one of which is the production of breast milk. This is supported by interviews with mothers regarding the obstacles during exclusive breastfeeding, stating that breast milk that is not smooth/low production is the most common obstacle that mothers complain about in their efforts to breastfeed their children.

In both research groups, most of the research subjects were dominated by a good level of knowledge. In the non-exclusive breastfeeding group, there was 1 subject with a low level of knowledge. In the exclusive breastfeeding group, the percentage of high knowledge was higher than in the non-exclusive breastfeeding group (69% versus 67%). Substandard breastfeeding / low production is the most common obstacle complained of by mothers in their efforts to breastfeed their children.

Research conducted by Rana MDM, et al found that maternal age ≥21 years 13.84 times (adjusted odds ratio (AOR) = 13.84, 95% CI: 7.394–25.904; p<0.001) more likely to have high knowledge about exclusive breastfeeding and (AOR = 0.084, 95% CI: 0.050–0.143; p<0.05) are less likely to practice exclusive breastfeeding compared to mothers aged ≤20 years. Working mothers were 9.99 times (AOR = 9.992, 95% CI: 4.485–22.260, p<0.05) more likely to practice exclusive breastfeeding than housewives. Mothers who gave birth at home (AOR = 0.208, 95% CI: 0.111–0.389; p<0.05) were less likely to practice exclusive breastfeeding than mothers who gave birth in a hospital. High family monthly income (AOR = 0.092, 95% CI: 0.050–0.168, p<0.05) is less likely to practice exclusive breastfeeding.

Good exclusive breastfeeding practices can prevent 13.8% of all deaths among infants aged less than 2 years and 11.6% of deaths among children under 5 years. Morris C, et al who conducted research related to factors influencing attitudes towards exclusive breastfeeding found that exclusive breastfeeding was influenced by age, religion, parental status, and breastfeeding status, but not by household income. Nuampa S, et al also added several personal factors related to exclusive breastfeeding for six months, including being a housewife (AOR 2.848; 95% CI 1.512, 5.367), perception of the adequacy of family income (AOR 2.502; 95% CI 1.362, 4.594) ), work from home/business (AOR 2.071; 95% CI 1.074, 3.995),
intention to breastfeed (AOR 1.162; 95% CI 1.116, 1.210), and mother's age (AOR 0.932; 95% CI 0.882, 0.986). From the qualitative interviews, mothers who can exclusively breastfeed explain four reasons underlying exclusive breastfeeding: 1) having to save money, 2) being able to spend all the time with the baby and breastfeeding, 3) partner support is invaluable, and 4) the opportunity to avoid beliefs hindering exclusive breastfeeding. Mothers with higher socioeconomic status and who are unemployed or work from home are more likely to breastfeed exclusively. Healthcare providers can provide tailored programs for breastfeeding mothers, based on socioeconomic status, employment status, mother's age, and social network. Optimal exclusive breastfeeding output can be increased through increased support resources, intensive programs, and partner involvement, especially for mothers who face financial difficulties and work outside the home.27

In addition to the factors that make it possible to carry out exclusive breastfeeding, several other factors can hinder the implementation of exclusive breastfeeding. Research has revealed that maternal factors such as the mother's occupation, higher education level, smoking during pregnancy, partner violence or lack of partner support, health problems, breast complications during breastfeeding, and use of birthing aids have a negative impact on the duration of exclusive breastfeeding. In addition, younger mothers, especially teenage mothers, those who have had a caesarean section, as well as those who experience postpartum depression or feel they are under-produced, report a shorter duration of exclusive breastfeeding.28

In both research groups, most of the research subjects were dominated by moderate behaviour levels. In the non-exclusive breastfeeding group, there were 2 subjects with less behaviour. The percentage level of behaviour obtained higher values in the exclusive breastfeeding group compared to the non-exclusive breastfeeding group (100% versus 95%).

Although in general mothers had a positive attitude towards exclusive breastfeeding, 42% (n = 79), mothers did not practice exclusive breastfeeding for their babies. These mothers do not practice exclusive breastfeeding because they misunderstand certain signs of a child wanting to eat or drink water, think that breast milk is not sufficient to meet the nutritional needs of children, and misunderstand exclusive breastfeeding advice from health professionals. Research in Pekanbaru found that only 36.1% of mothers practiced exclusive breastfeeding. Most of the respondents thought that their milk was lacking and felt that their baby was still hungry. Therefore they gave formula milk, namely 77.0%, and bananas, namely 61.6%, while 35.8% of them gave 2 kinds of solids for their babies before the age of six months. Mother's age, education level, and family income are significantly correlated with exclusive breastfeeding practices. Information, values, and emotional support from the community were also identified as important aspects for the success of exclusive breastfeeding practices (p<0.001).29

Qualitative research conducted by Afiyanti Y, et al. stated that the failure of the breastfeeding experience was mostly caused by mothers who believed that they were producing inadequate milk. The belief that the mother's milk production was insufficient was the starting point for the participants' decision to wean their babies. All participants decided to provide additional food to their babies because they felt that the milk produced was not sufficient for the baby's needs. Some mothers feel that their milk production is less than usual, the baby is getting bigger and needs more milk, and the baby is getting hungry.30

CONCLUSION
Most mothers have a good level of knowledge and attitude regarding exclusive breastfeeding as well as a sufficient level of behaviour regarding exclusive breastfeeding. There is no relationship between the level of knowledge, attitudes, and behaviour on the success of exclusive breastfeeding.

ETHICAL CLEARANCE
A research ethics permit was obtained from the Health Research Ethics Commission (KEPK) Faculty of Medicine UNDIP with no. 393/EC/KEPK/FK-UNDIP/XI/2022.

CONFLICT OF INTEREST
The author declares that there is no conflict of interest in this research.
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AUTHOR CONTRIBUTIONS
Conceptualization, Alnaora, Nurul; methodology, Alnaora, Ari; data analysis, Alnaora, Ari; data collection, Alnaora; source of funds, Alnaora; wrote the original draft, Alnaora; review and edit, Alnaora, Nurul, Ari, Nahwa; supervision, Alnaora, Nurul, Ari.

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