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The relationship of supplementary feeding, breast milk (MP-ASI) to infants with the event of diarrhea

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***Abstract*---**Background: Diarrhea is one of the causes of death in toddlers, one of the factors that causes diarrhea is MP ASI. Based on the largest proportion of diarrhea sufferers at the Baros Health Center in the last 3 months of October, November, and December, there were 87 infants aged 0-12 months, 29 infants aged 12-24 months, and 31 infants aged 25-60 months. Objective: To determine the relationship between complementary feeding and the incidence of diarrhea in infants aged 3-12 months in the working area of the Baros Public Health Center, Sukabumi City. Methods: The study used a *cross-sectional* population and the total sampling was 48 infants aged 3-12 months. Data processing using *Chi-Square*. Results: The inappropriate provision of complementary feeding to infants aged 3-12 months was 26 respondents (54.2%) and the appropriate ones were 22 respondents (45.8 %), the incidence of diarrhea in infants aged 3-12 months who had diarrhea as many as 28 respondents (58.6%) and who did not have diarrhea as many as 20 respondents (41.7%). Research shows that there is a relationship between giving

complementary feeding to infants aged 3-12 months with the incidence of diarrhea with a value of 0.00 (<0.05). Conclusion: There is a relationship between the provision of complementary foods for breast milk (MP-ASI) and the incidence of diarrhea in infants aged 3-12 months in the working area of the Baros Public Health Center, Sukabumi City in 2022.

Keywords---diarrhea, MPASI, midwives.

Introduction

Diarrhea is a process of excessive defecation and is characterized by a mushy or liquid consistency, which usually occurs in children aged 0-12 months or adults. 1.9 million children under five die from diarrhea every year, which is the second-highest contributor to death for children under 5 years of age in the world with a percentage of 16%. 1.7 billion cases of diarrhea in children cause 760,000 children to die every year(D'amico, Baumgart, Danese, & Peyrin-Biroulet, 2020). The objective of this study was to determine the determinants between Community-Based Total Sanitation and the incidence of diarrhea in toddler at communities near rivers(Indah et al., 2022).

the target *of* *The Integrated Global Action Plan for the Prevention and Control of Pneumonia and Diarrhea* (GAPPD) is to reduce the death rate from diarrhea to 1 per 1000 live births in 2024 with diarrhea morbidity below 20%, which is currently still at 30%. The diarrhea morbidity rate in Indonesia in 2020 is 1,637,078 while the diarrhea morbidity rate in West Java in 2020 is 64.53 per 1000 population. The proportion of infant mortality in West Java in 2020 is 3.6/per 1000 live births (Ministry of Health, 2020).

Based on data from the Sukabumi City Health Office report in 2019, there were 79,982 and 179 infant deaths due to diarrhea, in 2020 there were 82,506 and there were 202 infant mortality rates due to diarrhea. Death due to diarrhea in the work area of the Sukabumi City Health Office is the Baros Health Center. In 2019 there were 876 and 43 infant deaths due to diarrhea, in 2020 there were 894 and 54 infant deaths due to diarrhea. (Sukabumi City Service Performance Report, 2020).

Based on the largest proportion of diarrhea sufferers at the Baros Health Center in the last 3 months, namely October, November, and December, the 0-12 month age group was 87 babies, the 12-24 month age group was 29 babies, the 25-60 month age group was 31 babies. This difference, of course, needs to be seen from several factors. (Baros Health Center Data, 2020). The arrangement of the building mass is necessary to prevent the formation of a monolith or a single group inside a parcel, which may result in a massive form and block the view of another building toward a specific item(Andiyan & Cardiah, 2021).

Factors that affect diarrhea are infectious factors consisting of two kinds of general infections, namely gastrointestinal tract infections which are the main cause of diarrhea in children and parenteral infections are infections outside the

digestive tract of food, malabsorption factors (absorption disorders) such as carbohydrate absorption disorders (in infants and children). the most common is lactose intolerance), dietary factors contract between source and host can occur through water, especially uncooked drinking water, during bathing and gargling. Contact germs in feces can be directly transmitted to other people if they are attached to the hands and then put into the mouth, for example, to hold food. Contamination of cutlery and kitchenware is also a source of transmission of diarrhea, and psychological factors such as fear and anxiety(Maryunani, 2010).

Factors that influence diarrhea are risk factors for mothers and toddlers, maternal factors include age, level of knowledge, education level, employment status, and economic status, while toddler factors (children) include age, exclusive breastfeeding, measles immunization, and nutritional status(Nelson, 2011). The results showed that the highest Green Objectives (GO) weight in environmentally friendly garden management was located on protected forest land used as plantation land by 38.82%, while waste minimization was found in Crude palm oil water content of 48%(Rosyidah et al., 2022).

In general, diarrhea can be caused by various things, to make it easier to classify the causes of diarrhea into two, namely diarrhea due to infection and diarrhea not due to infection, including diarrhea due to infection including bacteria, viruses, and worms. Non-infectious diarrhea includes allergies to certain foods, food indigestion, food or drink poisoning, certain types of food and drink, nutritional deficiencies, psychological or psychiatric conditions, medications, intestinal diseases, and intestinal obstruction(Sasmiawati, 2018). To measure and educate public awareness in implementing health protocols, further research is needed(Cardiah, Andiyan, & Rahma, 2021).

In the first 3 years of life, a child will experience 1-3 times acute episodes of severe diarrhea. Infants who are not exclusively breastfed have a 60% risk of death due to infectious diseases including diarrhea. The most incidence of diarrhea attacks children aged 7-24 months, this happens because this 7-month-old baby gets additional food outside of breast milk where the risk of the participation of germs in additional food is high (especially if sterilization is lacking) and milk production begins to decrease, which also means Antibodies that enter with breast milk are reduced(Nelson, 2011)

Complementary foods for breast milk (MP-ASI) are one of the causes of diarrhea because too early administration can lead to the entry of various types of diseases. Complementary feeding is started at the age of 6 months because the digestive development system has just started, but has not been able to absorb protein(Rahayu, D and Aindrawati, 2014). The cleanliness of the food eaten by the baby, as well as the MP-ASI, gave is not by the age of the baby, such as instant food for 2 years of age which is given to babies under 1 year of age. The extension is an active procedure requiring contact between the extension worker and the individual to establish a behavior change process(Sulandjari et al., 2022).

The pattern of breastfeeding is a physiological process to provide optimal nutrition to infants. There is nothing more valuable in a child's life than getting quality nutrition early in life. Mother's milk is an ideal nutrient to support the optimal

health, growth, and development of babies. Infants are recommended to be breastfed fully (exclusively) for the first 6 months of life. Protection against infection is greatest during the first few months of life in infants who are exclusively breastfed. The longer the baby gets breast milk will provide the stronger the protective effect against various diseases, one of which is diarrhea(IDAI, 2010).

One of the risk factors for diarrhea is not exclusive breastfeeding and inappropriate complementary feeding (MP-ASI). Complementary foods for breast mi[2] (MP-ASI) that are not appropriate are given MP-ASI before the time, namely [27]the age of 6 months. Breast milk can meet the nutritional needs of infants at the age of 0-6 months, while at the age of six months and over babies need additio[1]l food or complementary foods to meet their nutritional needs(Health, 2014). The pre-and post-test data were collected using a closed questionnaire, and the results were analyzed using an independent T-test(Setiyowati et al., 2022).

The most cost-effe[15]ve way to protect children from diarrhea and all-cause mortality. Breast milk is uniquely suited to human infants, both in its composition of nutrients and non-nutritive bioactive factors that promote healthy survival and development. Based on Sansongko's 2014 research, there is a relationship between complementary feeding and the incidence of diarrhea. Giving MP-ASI at an early age is considered natural by mothers because they feel that if the baby cries it is caused by hunger and not enough breast milk. Based on Mulik's research in 2016 sta[5]d that there was a relationship between complementary [28]eding behavior and the incidence of diarrhea in infants aged 6 months-1 year in the work area of the Mangkang Health Center. The provision of MP-ASI is often watery, the porridge is too gravy so it makes the stomach full, but the provision of nutrients is less than breast milk, and the risk of diarrhea increases because the additional food is not as clean as breast milk. Based on Reni's research in 2015, ther[30]was a relationship between complementary foods for breast milk (MP-ASI) and the incidence of diarrhea in infants in the Paduan Rajawali Community Health Center, Meraksa Aji District, Tulang Bawang Regency, where MP-ASI was given so that the baby was full and not fussy(Shah, 2022).

Another study conducted by (Wright, Mendez, Bentley, & Adair, 2017) stated that diarrhea-related deficits in relative weight were significantly exacerbated in non-breastfed girls aged 6 and 8 months. Importantly, in infants <6[17]onths, breastfed and diarrhea was still associated with greater relative weight compared to those who were not breastfed and diarrhea-free. Breastfeeding appears to be a strong contributor to relative body weight in younger infants (<6 months) while diarrheal illness strongly contributes to relative weight deficits in older infants (6-12 months). These findings underscore the importance of breastfeeding to promote infant nutritional status in infants with or without diarrhea from birth to 12 months. Res[2]rch conducted by Aditya in 2012 showed that mothers in Ngaren village gave MP-ASI to infants aged 0-6 months because mothers thought that when the baby cried, it meant the baby was hungry and needed to give MP-ASI because the mother assumption that breast milk alone was not enough for the baby's needs. so that the baby will be fussy so that there is a lot of diarrhea

incidence in Ngaren village from the *chi-square* obtained *v value* 0.00 meaning that there is a relationship between complementary feeding with the incidence of diarrhea(Fakhkhari, 2022).

Based on the above background, the authors are interested in carrying out research under the title, "the relationship between complementary feeding of breast milk (MP-ASI) to infants with the incidence of diarrhea in the working area of the Baros Public Health Center, Sukabumi City in 2021(Chang, 2022).

Method

The design of this study used an analytical survey. or research that tries to explore how and why phenomena can occur(Moleong, 2007). The type of research that will be used by the researcher is quantitative analytic with bivariate analysis. The research design used a questionnaire method with a *cross-sectional*(Sugiyono, 2017).

The population in this study were all mothers who had babies in January 2022 as many as 48 mothers. The sampling method used in this research is total sampling. The inclusion criteria in this study were: (1) Mothers who have babies (2) Willing to be respondents (3) Mothers who can read and write. The exclusion criteria in this study were: (1) Mothers who cannot read and write (2) Mothers who have diarrhea with other indications of disease (3) Mothers who have babies with lactose intolerance and absorption disorders (4) Mothers who have babies with poor nutrition.

Primary data in this study were obtained from the results of a questionnaire about the provision of MP ASI. Secondary data from this study is data about the incidence of diarrhea at the Baros Public Health Center. To determine the relationship between the two variables, the Chi-square test was used with a 95% confidence degree ($p < 0.05$). If the results of the analysis obtained a p-value < 0.005, then statistically it is said to be significant or there is a relationship and if the p-value is > 0.05 then the calculation results are said to be not meaningful or there is no relationship.

Research

Results The results of research that has been conducted to determine the univariate analysis and bivariate analysis. Where univariate analysis was carried out to determine the provision of complementary feeding (MP ASI) to infants and the incidence of diarrhea in the working area of the Baros Public Health Center, Sukabumi City in 2022 to 48 respondents(M. Li, 2022).

Table 1. Frequency distribution of the description of complementary feeding of breast milk (MP-ASI) to infants aged 3–12 months

Giving MP-ASI	Total	Percentage (%)
Appropriate	22	45.8
Not appropriate	26	54.2
Total	48	100.0

Table 2. Distribution of the frequency of diarrhea in infants

Diarrhea incidence	Total	Percentage (%)
Diarrhea	28	58.3
No diarrhea	20	41.7
Total	48	100.0

Table 3.The relationship between complementary feeding of breast milk (MP-ASI) to infants and the incidence of diarrhea

Provision of MP ASI	Diarrhea				Total		P-Value
	No Diarrhea		Diarrhea				
	N	%	N	%	N	%	
appropriate	17	77.3	5	22.7	22	100	
Not appropriate	3	11, 5	23	88.5	26	100	0.00

Discussion

Based on the results of research on infants at the Baros Public Health Center, Sukabumi City, it was found that the provision of Complementary Foods for Mother's Milk (MP-ASI) to infants aged 3-12 months from 48 respondents who were not appropriate, namely 54,2% or 26 respondents while the appropriate ones are 45.8% or 22 respondents. Analysis of the research conducted that 54.2% of complementary feeding was not appropriate, including mothers who gave MP-ASI before the age of the baby was 6 months, some starting from 3 months, 4 months, and 5 months, and most mothers had given bananas to their babies, mothers gave MP ASI not according to the number of servings of baby food, most of the portions given by the mother are too many because the mother feels sorry if the baby is hungry, the texture given by the mother is not according to the age of the baby such as the age of a 6-month-old baby who has been given rather dense food because the soft one has been given at the age of 3 months, and the frequency of giving MP-ASI which is too frequent at the age of the baby, which should be given twice a day, but the mother gives it 3-4 times a day. The results of the study show that the first age of giving MP-ASI that was not appropriate was 63%, the frequency of giving the appropriate MP-ASI was 50%, the appropriate MP-ASI was 70%, the texture of giving MP-ASI was appropriate as much as 70% and the portion of MP-ASI was given. - Inappropriate breast milk as much as 70%. The results of most of the research in giving complementary foods with an inappropriate frequency, namely as much as 50%(Barberio, 2022).

MP-ASI is additional food for babies, this food must be a complement and can meet the needs of babies. This shows that MP-ASI is useful for covering the lack of nutrients contained in breast milk. Thus, it is quite clear that the role of additional food is not as a companion to breast milk but to complement or accompany breast milk (Dizdar et al., 2014). Babies under 6 months of age do not yet have an optimal digestive tract, so giving MP-ASI, especially those rich in fiber such as bananas can make the intestines experience intussusception and blockage, in addition to giving solid food at an early age can also cause diarrhea. Babies who are given MP-ASI prematurely cause nutritional deficiencies because the consumption of MP-ASI can make the baby full and not drink breast milk so

the baby's nutritional needs are not met even though the nutritional content of breast milk tends to be more complex or a lot of the food made(Akinyemi, 2022). Breast milk consists of water, protein, carbohydrates, fats, vitamins, minerals, antibodies, and various enzymes which are said to reduce the baby's risk of certain diseases, such as diarrhea, upper respiratory tract infections (ARI), pneumonia, asthma, obesity, and diabetes. In addition, it can cause diarrhea. The baby's digestive system is not ready to receive MP-ASI(Magnus, 2022). The baby's intestines have not been able to process nutrients because the baby's digestive enzymes have not been produced optimally and can trigger anemia because the introduction of MP-ASI too early can affect the absorption of iron from breast milk. , which can cause the baby to become anemic. MP-ASI that is not given at the right time and amount can reduce nutritional status(Marimbi, 2010).

The texture of the food given is not appropriate, some babies still get a mashed texture when babies should be given soft food, so the process of eating is not successful, and the baby is not trained to chew properly(He, 2022). Following the theory of MP-ASI should be introduced at the age of 6 months because it is a critical period for infants to be introduced to solid foods gradually as stimulation of oromotor skills (Wira, 2016). The frequency of giving MP-ASI is appropriate to his age, but if the frequency of giving MP-ASI is not adjusted to his age, if his nutritional needs are not met, as well as the frequency of excessive food, the result is that the process of breaking down food juices is not perfect so that babies can become obese(Rohmani, 2010).

The results of the research by Istriyani, et al with the title description of breastfeeding complementary feeding in the working area of the Kalawat Public Health Center, Kolongan District, North Minahasa Regency (September 2017). The results of the study showed that the appropriate age for giving MP-ASI was 11.8% and 88.2% were not. The frequency of the appropriate complementary feeding was 92.5% and the inappropriate was 7.5%. The number of appropriate complementary feeding was 71.0% and 29.0% not appropriate. The texture of appropriate complementary feeding is 87.1% and 12.9% is not appropriate. The variation of appropriate complementary feeding was 1.1% for infants and 98.9% not appropriate(Akiyama, 2022).

The results of Hariyanti's research with the title Overview of Complementary Breastfeeding (MP-ASI) in Toddlers Age 6-24 Months at Moyudan Health Center Sleman Yogyakarta in 2017. in the Moyudan Health Center area based on the frequency and 39 number of complementary feeding showed that most of them were sufficient, namely 32 respondents (49.2%). According to the(Health, 2014), the frequency and amount of complementary feeding according to the(Health, 2014), at the age of 6-8 months the frequency of eating 2-3x / day, can be given 1-2x interlude, starting with 2-3 tablespoons/time with the number of times eating a cup of mineral water packaging (=125ml). Age 9-11 months eating frequency 3-4x/day, can be given 1-2x interlude with the number of times eating to cup (=125-175ml). Age 12-23 months eating frequency x / day, can be given 1-2x interlude with the number of times eating to 1 cup (175-250 ml)(Islam, 2022).

Based on the results of research in infants at the Baros Public Health Center, Sukabumi City, it was found that the incidence of diarrhea in infants aged 3-12

months was diarrhea as much as 58.6% or 28 respondents while those without diarrhea were 41.7% or 20 respondents. Analysis of the research conducted that 58.6% of infants who had diarrhea were over the age of 6 months as many as 46.4% and under 6 months of age as many as 53.6% and the most at the age of 5 months, several infants experienced recurrent diarrhea in infants. 2 people for 4 months, 1 person for 5 months, 3 people for 6 months and 2 people for 9 months. Infant respondents experienced diarrhea for a maximum of 3 days as many as 14 respondents (13,7%). this is due to the food factor given, especially if it is given at the age of under 6 months(Rezazadegan, 2022).

Diarrhea is one of the most common health problems in infants. Some cases of diarrhea in infants can heal by themselves. However, babies are also at risk of dangerous complications if their diarrhea is not treated quickly and appropriately, various causes of diarrhea in infants can be caused by various things, including Gastroenteritisandintestinal infections due to viruses, bacteria, and parasites, Food poisoning, especially in infants who already consume complementary foods, consume too much fruit juice, allergies to certain foods or drugs, intolerance to the cow. Babies who have started consuming complementary foods and are experiencing diarrhea are advised to avoid oily, high-fiber, high-sugar, and cow's milk foods. This is because these types of foods and beverages can worsen the symptoms of diarrhea in infants(Gayawan, 2022).

Pathophysiology Diarrhea is the basic mechanism that causes diarrhea, namely osmotic disturbances (food that cannot be absorb will cause osmotic pressure in the intestinal cavity to increase so that there is a shift of water and electrolytes into the intestinal cavity, excessive intestinal contents resulting in diarrhea), besides that it causes impaired secretion due to diarrhea(Pan, 2022). Toxins in the intestinal wall increase then diarrhea occurs, and Hyperperistaltic Intestinal Motility Disorders will result in reduced opportunities for the intestine to absorb food, causing diarrhea. On the other hand, decreased intestinal peristalsis will cause bacteria to overgrow which can then cause diarrhea(Ariani, 2016).

Diarrhea is the discharge of stool that is not normal and liquid, it can also be defined as bowel movements that are abnormal and liquid with more frequency than usual. Babies are said to have diarrhea when they have defecated more than 3 times, while neonates are said to have diarrhea when they have defecated more than 4 times(Lia Dewi, 2010). These foods or drinks can increase the occurrence of increased intestinal peristalsis resulting in a decreased opportunity to absorb food which then causes diarrhea. This is corroborated by the theory of (Lia Dewi, 2010) which states that the process of diarrhea can be caused by various factors including infection factors, food factors, allergic factors, psychological factors, and other factors(K. Li, 2022).

The results of Aditya's research with the title of the relationship between giving MP-ASI with the incidence of diarrhea in infants in Ngaren village in 2012 showed that mothers in Ngaren village gave MP-ASI to infants aged 0-6 many babies experienced diarrhea as much as 86.6% because mothers gave MP-ASI is plentiful and provides early MP-ASI so that the incidence of diarrhea in Ngaren village is high for infants under 6 months of age.

The results of the study by Sasongko, A with the title "the relationship between complementary feeding and the incidence of diarrhea in infants in Pedan District, Klaten Regency in 2012", the results of the study stated that the majority of diarrhea events in infants in Ngaren Village, Pedan District, Klaten Regency did not experience diarrhea. in infants under 6 months of age(Khun, 2022).

Bivariate analysis statistical test results obtained P_{value} = 0.00 means P_{value}<0.05 then H_0 rejected and the hypothesis is accepted, this shows that there is a relationship between breastfeeding Complementary Foods and the incidence of diarrhea in infants in the working area of the Baros Public Health Center, Sukabumi City. In 2021. Based on the analysis of researchers from infants who were given early complementary feeding, only 6 people did not experience diarrhea out of 21 babies who were given early complementary feeding, this is because the baby's immune system is quite high, hygienic and clean food and places to eat must be considered again that adequate maternal nutritional intake will increase milk production for their babies the more often mothers give breast milk to their babies, the more milk will be produced, breast milk alone is actually enough for babies 0-6 months but most mothers are worried that their breast milk is not enough for their babies so that the mother gives early MP-ASI which causes the baby to have diarrhea, because the baby's digestion is not ready to accept it When it comes to foods other than breast milk, mothers should pay attention to the mother's nutritional intake first and eliminate the worry that breast milk alone is not enough, thus exclusive breastfeeding will be successful and babies aged 0-6 months are protected from diarrhea, from the results of the study there are babies who are suitable but experienced diarrhea at the age of 3 months and 4 months this was caused because the mother gave formula milk to replace breast milk and some were not appropriate but did not have diarrhea at the age of 7, 10 and 11 months due to non-compliance with MP ASI only in the frequency of food and food interludes so it was not too risky to cause diarrhea.

The results of a study conducted by (Wright et al., 2017) stated that the diarrhea-related deficit in relative weight was significantly exacerbated in non-breastfed girls aged 6 and 8 months. Importantly, in infants <6 months, breastfed and diarrhea was still associated with greater relative weight compared to those who were not breastfed and diarrhea-free. Breastfeeding appears to be a strong contributor to relative body weight in younger infants (<6 months) while diarrheal illness strongly contributes to relative weight deficits in older infants (6-12 months). These findings underscore the importance of breastfeeding to promote infant nutritional status in infants with or without diarrhea from birth to 12 months.

The results of research conducted by (Begum & Absar, 2016) stated that the average age of children was 11.6 with SD ±5.29 months, ranging from 1 month to 23 months where exclusive breastfeeding was 53.3%, breast milk plus formula milk was 39 months. ,3%, exclusive formula milk 9.4%; single attacks of diarrhea occurred in 72.7%, 40.7%, and 28.6% of children in exclusive breastfeeding, breast milk plus formula, and exclusive formula milk, respectively. Frequent attacks of diarrhea occurred in children 27.3%, 59.3%, and 71. The results of (Astari & Kusumastuti, 2013) with the results of the study that there was a relationship between formula feeding and the incidence of diarrhea in infants

aged 0-6 months showed a significant relationship. significant (p= 0.000 OR 14.1 CI = 2.9 - 66.4). Giving formula milk to infants aged 0-6 months has a relationship with the incidence of diarrhea, and infants who are given formula milk have a 14.1 times risk of exposure to diarrhea, compared to infants who are not fed formula milk. Based on the results of the analysis in this study, shows that respondents who give formula milk to their babies are at risk of having diarrhea. The occurrence of diarrhea in formula-fed infants is because infants under 6 months of age have an immature digestive system, and the age of the baby contributes to the reduced frequency of defecation, which is an indication of the growing water-conserving capacity of the intestines.

(Gullian Klanian, Durán Casanova, Isla Esquivel, Suárez Wegan, & Alarcón Sánchez, 2011) analyzed the level of risk of diarrhea in infants and that those who received partial breast milk nutrition had a higher likelihood of developing diarrhea compared to infants who were fully breastfed in the first 2-6 months of life, the occurrence of feeding behavior other than Breastfeeding in infants is also caused by early weaning, the number of babies suffering from diarrhea caused by stopping breastfeeding, both babies when they are 1-4 months old or 5-6 months old.

Research by (Sasongko & Huriah, 2012) with the title "The Relationship Between Complementary Breastfeeding and the Incidence of Diarrhea in Infants aged 0-6 months in Pedan District, Klaten Regency. Ngaren, Pedan District, and Klaten Regency are in a good category. The incidence of diarrhea at the age of 0-6 months in Ngaren Village, Pedan District, Klaten Regency was in the majority case group that did not experience diarrhea with a p-value of 0.001. This study was (Pranata et al., 2020), which stated that there was a significant relationship between complementary feeding and the incidence of diarrhea. The results of the analysis were obtained (p-value = 0.000).

The incompatibility of giving MP-ASI to infants greatly affects the process of child growth and development. In addition, the incompatibility of giving complementary feeding to infants also affects the fulfillment of the needs of toddlers which can cause disease in toddlers, one of which is diarrhea. Most of the respondents with inappropriate complementary feeding experienced the incidence of diarrhea, 23 respondents. The results of the study supported by WHO (2013) stated that the provision of MP-ASI aims to increase the energy and nutrients needed by infants because breast milk cannot meet the needs of infants continuously, thus additional food is given to fill the gap between the total nutritional needs of children. with the amount obtained from breast milk, but if the complementary feeding is too early it can result in many babies experiencing diarrhea. The problem of growth disorders in early childhood that occurs in Indonesia is strongly suspected to be related to the number of babies who have been given complimentary feeding since the age of one month, even before. The results of this study can be concluded that the accuracy of giving MP-ASI has a higher risk of babies getting diarrhea, therefore it is important to know the impact of giving MP-ASI to avoid toddlers getting diarrhea and reduce morbidity for toddlers due to diarrhea.

Conclusion

Most of the babies in the working area of the Baros Public Health Center, Sukabumi City in 2022 34ceived MP ASI that was not appropriate for the baby's age. Most of the babies in the working area of the Baros Health Center in 2022 had diarrhea. There is a relationship between complementary feeding and the incidence of diarrhea in infants in the working area of the Baros Public Health Center, Sukabumi City.

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