Journal for Quality in Public Health Vol. 7, No. 1, November 2023, pp: 79-86 DOI: https://doi.org/10.30994/jqph.v7i1.480

# The Relationship Of Giving Mpasi To Babies Under 6 Months And The Incident Of Constipation And Diarrhea In Krajan Hamlet, Kalisat Village, Rembang District Pasuruan District

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Received: November 6th 2023

Accepted: November 9th 2023

Published: November 20th 2023

#### **ABSTRACT**

Infant morbidity and mortality in Indonesia is quite high, the most common cases are disorders of the digestive system, including constipation and diarrhea. The aim of this study was to analyze the relationship between giving complementary foods to babies under 6 months of age with the incidence of constipation and diarrhea in Krajan Hamlet, Kalisat Village, Rembang District, Pasuruan Regency. The research design uses a correlational analytical design with a cross sectional approach. The number of samples in this study was 32 respondents. Sampling in this study used simple random sampling technique. Data collection using questionnaires. Data analysis used the chi square statistical test with a significance level of  $\alpha = 0.05$ . Based on the research results, of the 32 respondents, the majority of respondents were given MP ASI, namely 20 respondents (62.5%), the majority of respondents did not experience constipation, namely 25 respondents (78.1%), the majority of respondents did not experience diarrhea, namely as many as 19 respondents (59.4%). The results of the chi square statistical test obtained a P value  $< \alpha 0.05$  (0.020 < 0.05), so H1 was accepted or Ho was rejected, meaning that there was a relationship between giving MP ASI to babies under 6 months of age and the incidence of constipation in Krajan Hamlet, Kalisat Village, District. Rembang, Pasuruan Regency and there is a relationship between giving MP ASI to babies under 6 months of age with the incidence of diarrhea in Krajan Hamlet, Kalisat Village, Rembang District, Pasuruan Regency with a P value  $< \alpha 0.05$ (0.000 < 0.05). The conclusion of this study is that the incidence of constipation and diarrhea is influenced by giving MP-ASI to babies aged less than 6 months so it is hoped that mothers of babies will increase their knowledge about giving proper MP-ASI to prevent constipation and diarrhea.

**Keywords:** Constipation, Diarrhea, Giving MP ASI

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## INTRODUCTION

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Mother's milk (ASI) is the perfect substance for baby growth and can accelerate the development of a baby's weight. Apart from that, breast milk contains substances that repel/prevent disease and can provide satisfaction and bring the hearts of mother and baby closer together as a means of establishing a loving relationship. Therefore, the World Health Organization (WHO) has recommended the gold standard for infant feeding, namely exclusive breastfeeding of infants from birth to 6 months of age, preceded by Early Initiation of Breastfeeding (IMD) immediately after birth, starting at 6 months of age, providing breast milk complementary foods (MP-ASI) and continue breastfeeding until the child is 2 years old (Ministry of Health, 2018).

There are still many mothers who provide additional food instead of breast milk (MP-ASI) to babies who are less than six months old. Giving MP-ASI too early has a very high risk of contamination, namely the occurrence of gastroenteritis which is very dangerous for the baby and can reduce breast milk production because the baby rarely breastfeeds (Prasetyono, 2015).

UNICEF data in 2020, the number of babies less than six months who received exclusive breast milk was 39%. Meanwhile, the 2015-2019 Sustainable Development Goals (SDGS) target for providing exclusive breastfeeding to babies aged less than 6 months is 50%. Data from the Ministry of Health of the Republic of Indonesia states that the coverage of exclusive breastfeeding for babies at the national level is 30.2% of the target that must be achieved, namely 70% (Ministry of Health of the Republic of Indonesia, 2021).

The percentage of exclusive breastfeeding coverage in East Java Province from 2020 to 2021 experienced an upward trend that was not yet significant, where in 2020 it was (56%) increasing to (56.3%) in 2021. The lowest coverage for exclusive breastfeeding was (70.1%) because there are still many mothers who provide additional food to babies aged 0-6 months (East Java Health Office Profile, 2021).

The results of a survey conducted by the Pasuruan District Health Service show that the level of giving breast milk (ASI) to babies is considered to be still low, as evidenced by data from the Health Department which states that babies who should be given breast milk from the age of 0 - 6 months in Pasuruan District still reach the figure of 80. .1% of the total number of 7735 babies were still suitable for exclusive breastfeeding from their mothers, while 25.82% of babies received additional food early. (Pasuruan District Health Service, 2022). Data from the 2022 Health Report at the Rembang Community Health Center states that the rate of complementary feeding in the Rembang Community Health Center area is 10.5%, while the number of babies receiving exclusive breast milk is 45%.

Based on a preliminary study conducted by researchers in Krajan Hamlet, Kalisat Village, Rembang District, it was found that the level of exclusive breastfeeding for babies aged 0 - 6 months is low, this is because babies who should only be given exclusive breast milk from the age of 0 - 6 months are given MP ASI. Mothers' lack of knowledge about exclusive breastfeeding results in mothers not only giving breast milk, but also giving complementary foods to breast milk so that their children are full and not fussy, and often babies who are only 1 month old are given bananas or soft rice as additional breast milk.

Early provision of MP-ASI can often have a direct impact on the baby, including digestive disorders such as diarrhea, constipation, vomiting, and the baby will experience breastfeeding problems. Diarrhea is caused because baby supplementary food usually contains high concentrations of carbohydrates and sugar which are still difficult for the baby's digestive organs to digest if given too early, because the production of enzymes, especially amylase, in babies is still low, malabsorption will occur in the baby's digestion and result in digestive disorders. one of which is diarrhea. Constipation or constipation or difficulty defecating in babies usually occurs aged 0-4 months, because the baby's digestion and the formation of digestive enzymes are not yet perfect. Vomiting is caused because the digestive function of

peristalsis (waves of contraction in the walls of the stomach and intestines) in babies is not yet fully formed. Vomiting can also occur because the baby is too full so the pressure in the stomach is high. The new swallowing reflex is perfect for babies aged 6 months and over.

Another factor that is related to MP ASI is that there is still a culture in the environment, by providing complementary breast milk foods to babies such as bananas for newborns with the assumption that the baby grows up quickly and develops quickly. The existence of a culture or habit of giving complementary foods to breast milk that has been passed down from generation to generation has negative effects on the baby's health, such as constipation and diarrhea. For this reason, it is hoped that health workers can provide counseling and information about the right time to give breast milk and complementary foods to babies, not only to mothers but also to husbands and families, so that they also gain knowledge and support mothers to provide exclusive breastfeeding and do not give additional food early.

Based on the background above, researchers are interested in conducting research to determine the relationship between giving complementary foods to babies under 6 months of age with the incidence of constipation and diarrhea in Krajan Hamlet, Kalisat Village, Rembang District, Pasuruan Regency.

# **METHODS**

In this research, the type of research used is quantitative using a Correlational Analytical design and a Cross Sectional Time Approach, namely research to study the dynamics of the correlation between risk factors and effects, using an approach, observation or data collection taken only once. The population of this all mothers who have babies under 6 months of age who provide MP ASI in Krajan Village, Rembang District, Pasuruan Regency are 35 respondents. While the number of samples Some mothers who have babies under 6 months old in Krajan Hamlet, Kalisat Village, Rembang District, Pasuruan Regency, were 32 respondents. The sampling technique used is Propotional Random Sampling. Statistical Analysis using chi square and logistic regression.

## **RESULTS**

After conducting research on the Relationship Of Giving Mpasi To Babies Under 6 Months With The Incident Of Constipation And Diarrhea In Krajan Hill, Kalisat Village, Rembang District Pasuruan District, the following results were obtained:

Table 1. Frequency distribution of respondents based on baby's age, mother's

age, education, employment and parity in Krajan Hamlet, Kalisat Village, Rembang

**District, Pasuruan Regency** 

Usia Bayi	Frekuensi	Prosentase (%)		
1-2 Bulan	4	12,5		
2-4 Bulan	21	65,6		
< 6 Bulan	7	21,9		
Jumlah	32	100		
Usia Ibu	Frekuensi	Prosentase (%)		
<20 tahun	6	18,8		
21-30 tahun	24	75,0		
>30 tahun	2	6,3		
Jumlah	32	100		
Pendidikan	Frekuensi	Prosentase (%)		
SD	3	9,4		
SMP	14	43,8		
SMA	12	37,5		
PT	3	9,4		
Jumlah	32	100		
Pekerjaan	Frekuensi	Prosentase (%)		
Tidak Bekerja (IRT)	8	25,0		
Swasta	12	37,5		
Wiraswasta	9	28,2		
PNS	3	9,3		
Jumlah	32	100		
Paritas	Frekuensi	Prosentase (%)		
Primipara	13	40,6		
Multipara	17	53,1		
Grandemulti	2	6,3		
Jumlah	32	100		

Based on table 4.1, it was found that the majority of respondents aged 2-4 years, namely 21 respondents (65.6%), most of the respondents were mothers aged 21 -30 years, namely 24 respondents (75.0%), almost half of the respondents had junior high school education. namely 14 respondents (43.8%), almost half of the respondents were not working (IRT), namely 12 respondents (37.5%) and most of the respondents were multiparous, namely 16 respondents (53.1%).

Table 2. Frequency distribution of respondents based on providing complementary breast milk to babies under 6 months of age in Krajan Hamlet, Kalisat Village, Rembang District, Pasuruan Regency

No	Pemberian MP ASI	Frekuensi	Prosentase (%)
1	Ya /MP ASI	20	62,5
3	Tidak/Tidak MP ASI	12	37,5
	Jumlah	32	100

Based on table 4.2, it was found that the majority were given MP ASI, namely 20 respondents (62.5%).

Table 3. Frequency distribution of respondents based on constipation in Krajan Hamlet, Kalisat Village, Rembang District, Pasuruan Regency

No	Konstipasi	Frekuensi	Prosentase (%)
1	Konstipasi	7	21,9
2	Tidak Konstipasi	25	78,1
	Jumlah	32	100

Based on table 4.3, it was found that the majority of respondents did not experience constipation, namely 25 respondents (78.1%).

Table 4. Frequency distribution of respondents based on the incidence of diarrhea

in Krajan Hamlet, Kalisat Village, Rembang District, Pasuruan Regency

No	Kejadian Diare	Frekuensi	Prosentase (%)
1	Terjadi Diare	13	40,6
2	Tidak Terjadi Diare	19	59,4
	Jumlah	32	100

Based on table 4.3, it was found that the majority of respondents did not experience diarrhea, namely 19 respondents (59.4%).

Table 5. Cross tabulation of the relationship between giving MP ASI to babies under 6 months of age and constipation in Krajan Hamlet, Kalisat Village, Rembang District Pasuruan Regency

Pemberian MP ASI	Konstipasi				Total	
i cincerium ivii Tibi	Konstipasi		Tidak Konstipasi		_	
	N	%	N	%	N	%
Ya/MP ASI	7	35,0	13	65,0	20	100
Tidak/Tidak MP ASI	0	0	12	100	12	100
Jumlah	7	21,9	25	78,1	32	100

Based on table 4.5, it was found that of the 32 respondents, the majority of respondents who were given MP ASI and did not experience constipation were 13 respondents (65.0%).

Table 5. Cross tabulation of the relationship between giving MP ASI to babies under 6 months of age with the incidence of diarrhea in Krajan Hamlet, Kalisat Village, Rembang District Pasuruan Regency

Pemberian MP ASI	Kejadian Diare				Total		
remocrian Wir Asi	Terjadi Diare		Tidak	Tidak Terjadi Diare		_ Total	
	N	%	N	%	N	%	
Ya/MP ASI	13	65,0	7	35,0	20	100	
Tidak/Tidak MP ASI	0	0	12	100	12	100	
Jumlah	19	59,4	13	40,6	32	100	

Based on table 4.6, it was found that of the 32 respondents, the majority of respondents who were given MP ASI and experienced diarrhea were 13 respondents (65.0%)

## **DISCUSSION**

Based on table 4.2, it was found that of the 32 respondents, the majority were given MP ASI, namely 20 respondents (62.5%), while those who were not given MP ASI were 12 respondents (37.5%). Complementary food for breast milk (MP-ASI) is additional food given to babies aged 6 months to 24 months (Waryana, 2018). The introduction and provision of complementary foods for breast milk must be carried out in stages, both in form and quantity. This is intended to adjust the ability of the baby's digestive system to receive complementary foods for breast milk (Ministry of Health of the Republic of Indonesia, 2017).

The researcher's assumption is that the majority are given MP ASI at the age of under 6 months, this is due to several factors, namely the majority have low education (junior high school and elementary school), which causes a lack of maternal knowledge about the importance of exclusive breastfeeding as well as the mother's knowledge about the right time to give MP ASI., Low education will affect the mother's ability to grasp new information and material presented by health officers regarding MP ASI, some respondents with low education find it difficult to understand the material presented by health workers so they do not have sufficient knowledge about giving MP ASI which in the end influences the behavior of giving MP ASI to babies less than 6 months old. The results of this research are in line with research conducted by Eka (2017) in Mojokerto showing that there were still many respondents who were given MP-ASI for less than 6 months even though MP-ASI should be given after the baby

was 6 months old.

Based on table 4.3, it was found that of the 32 respondents, the majority of respondents did not experience constipation, namely 25 respondents (78.1%), while 7 respondents (21.9%) experienced constipation. Constipation in children is common and is always functional without any organic cause. Functional constipation is usually caused by painful bowel movements that encourage the child to push. To avoid this pain, the child will contract the anal spighter and gluteus muscles by tightening his body, moving his body back and forth and pushing when he feels he is defecating. (Susanto, et al 2021).

Previous research was conducted by Prihatin (2015), with the title "Overview of Supplemental Feeding Patterns and the Incidence of Constipation in Children Aged 6-24 Months in Pedurungan Tengah Subdistrict, Semarang, namely the incidence of constipation in the sample was 34.1% with stool types 1 and 2. A total of 57.1% The sample experienced constipation with a frequency of <3 times in one month from the time of the study.

Based on table 4.3, it was found that the majority of respondents did not experience diarrhea, namely 19 respondents (59.4%), while 13 respondents (40.6%) experienced diarrhea. Diarrhea is a condition where feces are produced that are abnormal or not normal. Changes that occur include changes in increasing volume, dilution and frequency with or without blood mucus, such as more than 3 times/day and in neonates more than 4 times/day with or without blood mucus (Hidayat, 2018). According to (Ngastiyah, 2017) diarrhea occurs when a baby defecates thinner and more frequently than usual. A child's stool with diarrhea can contain mucus and blood, depending on the cause. Other symptoms are fever and vomiting. Sometimes, symptoms of vomiting and fever precede symptoms of diarrhea. Diarrhea can cause fluid deficiency

The results of the latest research from researchers in Indonesia show that babies who receive MP-ASI before they are 6 months old are more likely to suffer from diarrhea, constipation, coughs and colds and fever than babies who only receive exclusive breast milk. (Lituhayu, Rivanda 2018).

Based on table 4.5, it was found that of the 32 respondents, the majority of respondents who were given MP ASI and did not experience constipation were 13 respondents (65.0%). Based on data analysis using the Chi Square statistical test, it was found that the P value was  $< \alpha 0.05$  (0.020 < 0.05), so H0 was rejected and H1 was accepted, which means there is a relationship between giving complementary foods to babies under 6 months of age with constipation in Krajan Hamlet. Kalisat Village, Rembang District, Pasuruan Regency.

The results of this research are in line with research (Lusia Wananda et al, 2022) on the relationship between giving MP-ASI early and the incidence of constipation in babies 0-6 months with the calculation results showing the p value  $(0.000) < \alpha$  (0.05) meaning that Ha is accepted. and Ho is rejected. This research can be concluded that there is a relationship between providing complementary foods for breast milk (MP-ASI) and the incidence of constipation in the Peusangan Public Health Center Work Area, Bireuen Regency. According to researchers' assumptions, there is a relationship between giving Complementary Food for Breast Milk (MP-ASI) to babies 0-6 months and the incidence of constipation in Krajan Hamlet because many were given Complementary Food for Breast Milk (MP-ASI) early so that 7 children experienced constipation, the rest did not experience constipation but experienced symptoms such as diarrhea, nausea, vomiting, crying or fussiness. Mother's reason giving complementary food to breast milk (MP-ASI) to babies before the age of 6 month because their baby is hungry and keeps crying, not getting enough breastfeeding only. Apart from that, they also said that in their family Every baby born apart from breast milk is still given additional food so that the baby is healthy their nutritional needs are met.

Based on table 4.6, it was found that of the 32 respondents, the majority of respondents who were given MP ASI and experienced diarrhea were 13 respondents (65.0%) Based on data

analysis using the Chi Square statistical test, it was found that the P value was <  $\alpha$  0.05 (0.000 < 0.05), so H0 was rejected and H1 was accepted, which means there is a relationship between giving MP ASI to babies under 6 months of age and the incidence of diarrhea in Dusun. Krajan, Kalisat Village, Rembang District, Pasuruan Regency. The results of this research are in line with Nutritionani's (2020) research conducted in the Purwodadi Community Health Center Working Area which illustrates that providing food breastfeeding companion for children aged 0-24 months has a strong relationship with the incidence of diarrhea and is a risk factor for the incidence of diarrhea, because the baby does not receive exclusive breast milk, research results have given MP-ASI in the form of milk formula, baby porridge and bananas often cause diarrhea due to bacteria. According to Diarrhea in babies can also be caused by the use of milk bottles which facilitate contamination by germs, because milk bottles are difficult to clean. Using bottles for formula milk usually causes a high risk of developing diarrhea, resulting in malnutrition.

#### **CONCLUSION**

- 1. Most of the respondents in Krajan Hamlet, Kalisat Village, Rembang District, Pasuruan Regency, were given MP ASI, namely 20 respondents (62.5%).
- 2. The majority of respondents in Krajan Hamlet, Kalisat Village, Rembang District, Pasuruan Regency, did not experience constipation, namely 25 respondents (78.1%).
- 3. The majority of respondents in Krajan Hamlet, Kalisat Village, Rembang District, Pasuruan Regency, did not experience diarrhea, namely 19 respondents (59.4%).
- 4. There is a relationship between giving MP ASI to babies under 6 months of age with the incidence of constipation in Krajan Hamlet, Kalisat Village, Rembang District, Pasuruan Regency with a P value  $< \alpha 0.05 \ (0.020 < 0.05)$ .
- 5. There is a relationship between giving MP ASI to babies under 6 months of age with the incidence of diarrhea in Krajan Hamlet, Kalisat Village, Rembang District, Pasuruan Regency with a P value  $< \alpha \ 0.05 \ (0.000 < 0.05)$ .

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