

Original Research Report

## Feeding Supplementary Feeding on Baby Constipation in Desa Ladang Bambu

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**Abstract:** Constipation is a condition in which the stool hardens which makes it difficult to pass through the anus, and causes discomfort in the rectum. Babies who experience constipation are characterized by crying, whining in pain and the face turning red before defecation. The prevalence of constipation in Indonesia is very low, in Bali in children aged 4-6 years, the prevalence of constipation is 15.1%, while in children in West Padang District, Padang City, the constipation rate is 19.9 with the ratio between boys and girls is 1.2:1. This study aims to determine whether complementary feeding affects the occurrence of constipation in infants. This study uses a descriptive method with an exploratory approach, 30 samples with a total sampling technique, in the Desa Ladang Bambu, Medan Tuntungan, with univariate data analysis. From the results of statistical analysis obtained,  $p = 0.02$  ( $\alpha = 0.05$ ) with  $p < 0.05$  so it can be concluded that this hypothesis failed to be rejected, namely that there was a significant effect between the provision of complementary feeding on the occurrence of constipation in children in Bamboo Farm Village. It is hoped that community services will provide counseling about MP ASI, so that babies get nutrition according to their needs and avoid constipation.

**Keywords:** Complementary Feeding, Constipation, Supplementary Feeding.



## 1. Introduction

The Ministry of Health in 2019 revealed that an average of 401 newborns in Indonesia die before the age of 1 year. The data comes from the latest government survey, namely the 2020 Indonesian Health Demographic Survey (IDHS). Based on BPS data (in 2020), the under-five mortality rate per 1000 live births according to maternal age at delivery in 2017 was the majority at the age of 40-49 years (58%) and at the age <20years (40%). The prevalence of constipation in Indonesia is very low, in Bali in children aged 4-6 years, the prevalence of constipation is 15.1%, while in children in West Padang District, Padang City, the constipation rate is 19.9 with the ratio between boys and girls is 1.2 : 1 [1].

Research by the World Health Organization (WHO) in 2010 stated that 58% of children under five in the world have pneumonia associated with malnutrition, malnutrition is often associated with a lack of intake of breast milk (ASI) and early provision of complementary foods (MP-ASI). According to Setiowati [2], there are factors related to the success of exclusive breastfeeding including age, education, knowledge and work of mothers with exclusive breastfeeding and external factors include socio-cultural and economic, increased formula milk and support family.

Researchers have conducted an initial survey at the Medan Tuntungan Public Health Center using secondary data from the last health center survey so that the total number of infants was 1740 infants, 1086 infants aged 0-6 months, and the remaining infants aged > 6 months. From secondary data on 2020, researchers also obtained data on infants who were exclusively breastfed for 25% of the total babies, and the rest were given complementary feeding, thus babies who were given complementary foods were more likely to be compared to babies who received more exclusive breastfeeding.

The initial survey that was carried out by researchers at the Medan Tuntungan Health Center was by taking secondary data from the public health center in 2020 so that the infant morbidity rate caused by constipation was still high, namely 20% of the 1200 mothers who came to bring their babies to the public health center.

## 2. Literature Review

According to Brown [3], constipation is a condition in which the stool hardens making it difficult to pass through the anus, and causes discomfort or discomfort in the rectum. Constipation occurs at all ages, which is generally characterized by a low frequency of bowel movements (less than 3 times a week)

Constipation in infants occurs because the feces are not expelled, resulting in stool distension, then the reflex or desire to defecate is suppressed, so there is no desire to defecate, but water absorption from the feces still occurs, so the stool becomes hard. According to the results of a survey by Agestika [4], a child nutritionist at the Bogor Agricultural University (IPB) that the use of complementary foods for breastfeeding 49% of infants before the age of 4 months had been given formula milk, 45.1% liquid food other than formula milk and 50% solid food. formula milk, complementary food, liquid breast milk and which is given to infants less than 4 months old, tends to be of very high intensity and frequency so that it can be harmful and result in unfavorable outcomes for children, and constipation or constipation can occur [5] [6].

Breastfed babies may experience bowel movements after each feeding or only once in 7-10 days. Constipation can occur due to giving Complementary Feeding too early. The optimal age for starting complementary feeding is 6 months. Suggestions for giving Complementary Feeding can be started when the baby is trying 4-6 months. Exclusive breastfeeding for 6 months provides many benefits for babies and mothers [7] [8].

## 3. Methodology

The type of research used is observational with a case control approach. The population in this study is in the case group, namely mothers who have and in the control group, namely mothers who have babies without constipation. Babies with constipation in the Desa Ladang Bambu, Medan Tuntungan, as many as 30 respondents. Sampling is in the case group using the total sampling technique.

## 4. Finding and Discussion

### 4.1. Case Group

Table 1 show distribution of respondents based on demographic data characteristics of mothers who have babies in Desa Ladang Bambu, Medan Tuntungan (N= 30).

Table 1. Distribution of Respondents (Case Group) Based on Demographic Data Characteristics of Mothers Who Have Babies in Desa Ladang Bambu, Medan Tuntungan (N= 30)

No	Category	Frequency	Percentage (%)
1	Age		
	< 20 Years	3	10.0
	20-35 Years	24	80.0
	>35 Years	3	10.0
2	Education		
	Elementary	1	3.3
	MiddleSchool	7	23.3
	High School	19	63.3
	Undergraduate	3	10
3	Occupation		
	Housewife	15	50.0
	Entrepreneur	12	40.0
	Civil Worker	3	10.0
<b>Total</b>		30	100%

From the Table 1, it can be seen that of the 30 respondents. The majority were aged 20-35 years, namely 24 people (80.0%). the majority of respondents had high school education as many as 19 people (63.3%). and the majority of respondents worked as housewives. namely as many as 15 people (50.0%).

According to Notoadmodjo [9] that a person's age affects his life. From the results of the study. The majority aged 20-35 years as many as 24 people (80.0%). it was concluded that there was a gap between theory and reality in which maternal age affected the level of knowledge of the provision of Complementary Feeding to infants.

According to Hidayat [10], education has an important role in determining human quality. From the research results. The majority of respondents have high school education namely 19 people (63.3%). The level of community education is associated with the ability to absorb and receive information in the health and family sector. The higher a person's education, the better they receive information. Then it was concluded that there was a gap between theory and reality where mother's education affected the mother's level of understanding of the provision of complementary feeding to infants [11] [12].

Occupational status will affect the mother's knowledge and ability to care for her baby. From the results of the study. The majority of respondents were IRT as many as 15 people (50.0%). it was possible that mothers did not receive much information about exclusive breastfeeding for infants aged 0-6 months. According to Mubarak [13] it is stated that the work environment can make a person gain experience and knowledge both directly and indirectly. Work will also affect income. While income will affect a person's attitude and behavior [14] [15].

#### 4.2. Controlled Group

Tabel 2 shows the distribution of respondents based on demographic data characteristics of mothers who have babies in Desa Ladang Bambu. Medan Tuntungan (N= 30)

Based on the Table 2, it can be seen that of the 30 respondents. The majority were aged 20-35 years as many as 20 people (67.7%). the majority had high school education as many as 20 people (67.7%). the majority worked as IRT as many as 15 people (50%).

From the results of the study, the majority were aged 20-35 years as many as 20 people (67.7%). This is in accordance with the opinion of Diyah Amelia et al [16]. That a person's age affects his life. Then it was concluded that there was a match between theory and reality where the age of the mother affected the level of knowledge of the provision of complementary feeding to infants.

The majority of high school education is as many as 20 people (67.7%). Someone who is highly educated is getting better at receiving information [15]. And education is one of the efforts to develop personality and abilities both inside and outside school which lasts a lifetime. It can be concluded that

there is a match between theory and reality where mother's education affects the mother's level of understanding of the provision of complementary feeding to infants.

Table 2. Distribution of Respondents (Controller Group) Based on Demographic Data Characteristics of Mothers Who Have Babies in Desa Ladang Bambu. Medan Tuntungan (N= 30)

No	Category	Frequency	Percentage (%)
1	Age		
	< 20 Years	4	13.3
	20-35 Years	20	67.0
	>35 Years	6	20.0
2	Education		
	Elementary	0	0.0
	MiddleSchool	4	3.3
	High School	20	67.7
	Undergraduate	6	20.0
3	Occupation		
	Housewife	15	50.0
	Entrepreneur	10	33.3
	Civil Worker	5	16.7
<b>Total</b>		30	100%

Occupational status will affect the mother's knowledge and ability to care for her baby. From the results of the study, the majority of respondents were IRT (15 people (50.0%)). it is possible that mothers do not receive much information about exclusive breastfeeding for infants aged 0-6 months. According to Mubarak [13]. The work environment can make a person gain experience and knowledge both directly and indirectly

#### 4.3. The Effect of Complementary Feeding on Constipation in Babies

From the results of statistical analysis obtained  $p = 0.02$  ( $\alpha = 0.05$ ) with  $p < 0.05$  so it can be concluded that this hypothesis failed to be rejected namely that there was a significant effect between the provision of Complementary Feeding on the occurrence of constipation in children in the Desa Ladang Bambu. Based on the results of research from 30 respondents. It was found that the group of cases that experienced constipation were 23 people who provided Complementary Feeding and there were 7 people who did not give complementary feeding.

In the control group of 30 respondents, there were 20 respondents who did not provide complementary Feeding and 10 respondents who gave complementary feeding.

#### 5. Conclusion

Based on the results of research on the effect of complementary feeding on the occurrence of constipation in infants in the Ladang bamboo village of Medan Tuntungan in 2021. The following conclusions can be drawn: the majority of high school education is as many as 19 people (63.3%), the majority of respondents work as housewives (IRT) as many as 15 people (50.0%). Based on the results of research from 30 respondents in the control group, the majority of respondents aged 20-35 years are 20 people (67.7%), the majority of high school education are 20 people (67.7%), the majority of respondents work as Housewives (IRT), namely as many as 15 people (50.0%).

Based on the results of statistical analysis, obtained  $p = 0.02$  ( $\alpha = 0.05$ ) with  $p < 0.05$  so it can be concluded that this hypothesis failed to be rejected. It shows that there was a significant effect between the provisions of complementary feeding on the occurrence of constipation in children in Desa Ladang Bambu on 2021.

## References

- [1] Kementerian Kesehatan RI, *Profil Kesehatan Indonesia Tahun 2019*. Jakarta: Kementerian Kesehatan RI, 2020.
- [2] Setyowati, *Asupan Gizi Seimbang Neonatus Dan Bayi*, Edisi 10. Jakarta: EGC LANGGA, 2017.
- [3] J. E Brown, *Nutrition through the Life Cycle 4th edition*. USA: Wadsworth Cengage Learning, 2011.
- [4] R. Agestika, "The pattern of complementary feeding affect the incidence of diarrheain infants," *Indonesian Midwifery and Health Science Journal*, vol. 6, no. 1, January 2022.
- [5] Zakiyah, *Pengaruh Pengetahuan Ibu Terhadap Pemberian Complementary Feeding Pada Bayi Usia 0-6 Bulan di Puskesmas Jangkar Kabupaten Situbondo Tahun 2012*. Thesis, UNS, 2012.
- [6] E. Ardinasari, *Buku Pintar Mencegah & Mengobati Penyakit Bayi & Anak*. Jakarta: Penerbit Bestari, 2016.
- [7] R. Mona, *Pintar ASI dan Menyusui*, Jakarta: Noura Books, 2018.
- [8] Y. Farida, *MP –ASI Tepat, Anak Sehat, Budget Hemat*, Indonesia: Elex Media Komputindo, 2021.
- [9] S. Notoatmodjo, *Metodologi Penelitian Kesehatan*, Jakarta: Rineka Cipta, 2018.
- [10] A. Hidayat, *Metode Penelitian Kebidanan dan Teknik Analisa Data*, Jakarta: Salemba Medika, 2015.
- [11] Mahmud, "Faktor-Faktor Yang Berhubungan Dengan Pemberian ASI Eksklusif Pada Bayi Usia 6-12 Bulan Di Desa Ureng Kecamatan Leihtu Kabupaten Maluku Tengah," *Global Health Science*, vol. 4, no. 3, 2019.
- [12] S. Nousiainen, "Mothers' perceptions of complementary feeding and the influence of context on child feeding practices," Helsinki: University Helsinki, 2014.
- [13] W. I. Mubarak, *Promosi Kesehatan: Sebuah Pengantar Proses Belajar Mengajar dalam Pendidikan Edisi 1*. Yogyakarta: Graha Ilmu, 2007.
- [14] Noordiati, *Asuhan Kebidanan Neonatus, bayi, Balita dan Anak Pra Sekolah*. Malang: Wineka Media, 2019.
- [15] N. Wayam, *Asuhan Kebidanan Neonatus, Bayi, Balita dan Anak Pra Sekolah*. Yogyakarta: ANDI, 2017.
- [16] D. Amelia and B. Wirjatmaddi, *Hubungan Aktivitas Fisik Dengan Kejadian Konstipasi Pada Lansia Di Kota Madiun*, 2016.