

Original Research Article

THE LEVEL OF KNOWLEDGE AND ATTITUDES OF MOTHERS IN COMPLEMENTARY FEEDING TO INFANTS AGED 0-12 MONTHS

Riesmiyatiningdyah Riesmiyatiningdyah ^{1*}, Kusuma Wijaya Ridi Putra ¹, Faida Annisa ¹, Meli Diana ¹

¹ Kerta Cendekia Nursing Academy, Sidoarjo
Lingkar Timur Road, Rangkah Kidul Village, Sidoarjo Sub-District, Sidoarjo District, East Java Province, Indonesia 61234

*Correspondence:

Riesmiyatiningdyah Riesmiyatiningdyah
Kerta Cendekia Nursing Academy, Sidoarjo
Lingkar Timur Road, Rangkah Kidul Village, Sidoarjo Sub-District, Sidoarjo District, East Java Province, Indonesia 61234

Email: miyatimiyati2005@gmail.com

Article Info:

Received: 3 October 2020

Revised: 7 November 2020

Accepted: 7 November 2020

DOI:

<https://doi.org/10.36720/nhjk.v9i2.197>

Abstract

Background: Until now, there are still many mothers who give complementary foods to babies before the age of 6 months. This is due to the lack of knowledge of mothers about complementary foods, the benefits and methods of giving complementary foods correctly, and improper complementary feeding habits, as well as the support from families in providing complementary foods. These conditions affect the mother's attitude in giving complementary foods (Sulistijani & Herlianty, 2001).

Objectives: This study aimed to determine the relationship between the level of knowledge and attitudes of mothers in providing complementary foods to infants aged 0-12 months.

Methods: The research design used correlational analytic with cross sectional approach. The population in this study were all mothers who had children aged 0-12 months in Balonggabus Village as many as 58 people. The selection of this population is due to habits in Indonesian society, giving complementary foods to children who should be still undergoing the exclusive breastfeeding program for up to 6 months. The sampling technique used was total sampling. The sample size in this study were 58 respondents. Data collection was obtained through demographic data and questionnaire sheets with a total of 26 questions divided into each variable, namely the knowledge level variable as many as 14 questions (modification from Widyawati, Sarbini, & Muwakhidah, 2016) and the attitude variable as many as 12 questions (Wawan & Dewi, 2011). Data were analyzed using the Chi Square test with a significance level of $p \leq 0.05$.

Results: The results showed that the level of knowledge of mothers in giving complementary foods to infants aged 0-12 months in Balonggabus Village, Candi, Sidoarjo, almost half of them had a low level of knowledge of 28 respondents (48.3%), and attitudes of mothers in giving complementary foods to babies. Most of those aged 0-12 months had negative attitudes as many as 38 respondents (65.5%). The results of statistical tests show that there is a relationship between the level of knowledge and attitudes of mothers in providing complementary foods to babies aged 0-12 months in Balonggabus Village, Candi, Sidoarjo with a significance level of 0.000 ($p \leq 0.05$).

Conclusion: Knowledge level of mothers in providing complementary foods needs to be improved by providing

information by health workers and health cadres about complementary feeding, so that the mother's attitude will be positive.

Keywords: Knowledge Level, Attitude, Complementary Feeding, Infants aged 0-12 Months.

© 2020 The Authors. Nurse and Health: Jurnal Keperawatan Published by Community Service and Research of Kerta Cendekia Nursing Academy - Kerta Cendekia Nursing Academy
This is an Open Access Article distributed under the terms of the [Creative Commons Attribution-NonCommercial 4.0 \(CC BY-NC 4.0\)](https://creativecommons.org/licenses/by-nc/4.0/), which allows others to remix, tweak, and build upon the work non-commercially as long as the original work is properly cited. The new creations are not necessarily licensed under the identical terms.

E-ISSN
2623-2448
P-ISSN
2088-9909

INTRODUCTION

In the first six months of a baby's life, breast milk alone is sufficient to meet the nutritional needs of the baby. This means that babies only get breast milk without additional fluids, both formula milk, honey and water. Babies are also not given other solid foods such as bananas, mashed rice, biscuits and team rice. After the age of 6-12 months, babies need complementary foods because breast milk is not sufficient for energy and nutritional needs for the baby. Mothers often do not really understand how to provide complementary foods and healthy foods for babies aged 6 months to 12 months (Sulistijani & Herlianty, 2001). In fact, in the village of Balonggabus Candi Sidoarjo there are still many mothers who give complementary foods to their babies before the age of 6 months, namely by giving them bananas, starches, plain water, biscuits and mushy rice, and mothers also giving food to babies who are 12 months old with food. There are several reasons for mothers to provide complementary breastfeeding before the baby is 6 months old, including low milk production, the mother thinks that her child will starve if she is only given breast milk, so that the baby is not fussy, the baby can sleep soundly, so that the baby grows up quickly, there is support from people closest (parents-in-law, mother, and neighbors) and have been passed down from generation to generation.

This is due to the lack of knowledge of mothers about complementary foods, the benefits and methods of giving complementary foods correctly, and improper complementary feeding habits, as well as the support from families in providing complementary foods. So

that it affects the attitude of the mother in giving complementary foods. Until now, there are still many mothers who give complementary foods to their babies before the age of 6 months and provide complementary foods to babies aged 10-12 months with a family diet. Until now, there has never been any counseling in Balonggabus Village about MP-ASI. Knowledge and a good attitude of mothers about complementary foods plays an important role in preventing the dangers of improper complementary feeding. They are not aware of the consequences of giving complementary breastfeeding too early and inappropriately, which can cause negative impacts on children such as the risk of obesity, reducing frequency and intensity of suction, diarrhea, intestinal colic, and food allergies (Leman, 2013).

Therefore, efforts are needed to prevent and overcome inaccuracies in the provision of complementary foods, so it requires knowledge and good attitudes from mothers who have babies aged 0-12 months about giving complementary foods. To overcome this problem, it is necessary to collaborate with the local health center team and its cadres to provide counseling on the meaning of complementary foods, the dangers of improper and premature complementary feeding, processing of complementary foods, and changing people's perceptions that complementary foods are used. too early and inappropriate is dangerous for the health of the baby, as well as making leaflets about the meaning of complementary foods and the dangers of giving complementary foods too early and inappropriately.

Methods

Study Design

The research design used correlational analytic with cross sectional approach.

Research Subject

The population of this study were 58 mothers who had babies aged 0-12 months in Balonggabus Village, Candi, Sidoarjo. The sampling technique used was total sampling, so the sample size in this study was 58 respondents.

Setting

The research was conducted on March 16th -21st, 2019 in Balonggabus Village, Candi, Sidoarjo.

Instruments

The research instrument used in data collection in this study was a closed ended question questionnaire with a total of 26 questions divided into each variable, namely the knowledge level variable as many as 14 questions (modification from Widyawati, Sarbini, & Muwakhidah, 2016) and the attitude variable as many as 12 questions (Wawan & Dewi, 2011). The questionnaire used in this study has been tested for reliability using

respondents who have almost the same characteristics as the respondents at the place of this study. Cronbach's Alpha of the knowledge level questionnaire was .659. Cronbach's Alpha of attitude questionnaire was .731.

Data Analysis

The data analysis conducted in this study was univariate and bivariate analysis. The bivariate analysis performed was Chi Square test with a significance level of $p \leq 0.05$.

Ethical Consideration

This research has received approval from the Sidoarjo Regency Health Office and the Head of Balonggabus Village with the permit number 005/11/438.7.2.13.2018. In conducting research, researchers still pay attention to the ethics of health research by asking the willingness of potential respondents to participate in this research. To inquire about the willingness of potential respondents, they were given informed consent by the researcher after first explaining the objectives and methods of conducting this research. In addition, researchers also maintain the confidentiality of respondents' data while paying attention to anonymity.

RESULTS

Characteristics of Respondents

Table 1 Distribution of Frequency of Respondents by Age, Educational Level, Occupational, and Whether or Not They Have Received Information in Balonggabus Village, Candi, Sidoarjo at March, 2019 (n = 58).

Characteristics of Respondents	Frequency (f)	Percentage (%)
Age		
20-25 years	21	36.20
26-30 years	16	27.59
31-36 years	11	18.97
≥ 37 years	10	17.24
Educational Level		
Elementary School	0	0.00
Junior High School	27	46.55
Senior High School	26	44.83

Characteristics of Respondents	Frequency (f)	Percentage (%)
Diploma Program	3	5.17
Bachelor Degree	2	3.45
Occupational		
Housewife	42	72.41
Labor	15	25.86
Teacher/ Lecturer	1	1.73
Whether or Not They Have Received Information		
Ever	26	44.83
Never	32	55.17

Sources: Primary data of Questionnaire, 2019.

Based on the results of the research in table 1, it is found that most of the respondents aged 20-25 years were 21 respondents (36.20%). Education level of respondents is mostly Junior High School, as many as 27 respondents (46.55%) and the majority of their jobs are housewife as many as 42 respondents (72.41%). Most of the respondents had never received any previous information regarding complementary feeding as many as 32 respondents (55.17%).

Analysis of the Relationship between Knowledge Level and Attitudes of Mothers in Complementary Feeding to Infants Aged 0-12 Months using Chi Square Test

Table 2 Results of Analysis of the Relationship between Knowledge Level and Attitude of Mother in Complementary Feeding to Infants Aged 0-12 Months using Chi Square Test in Balonggabus Village, Candi, Sidoarjo at March, 2019 (n = 58).

Level of Knowledge	Attitudes				Total	
	Positive		Negative		f	%
	f	%	f	%		
Good	15	25.86	2	3.45	17	29.31
Enough	4	6.90	9	15.52	13	22.41
Low	1	1.72	27	46.55	28	48.28
Total	20	34.48	38	65.52	58	100.00

$p < .001$

Sources: Primary data of Questionnaire, 2020.

Based on the results of the research above, it was found that most mothers who had a low level of knowledge related to giving complementary foods to infants 0-12 months had negative attitudes in giving complementary foods as many as 27 respondents (46.55%). Based on the results of Pearson Correlation test showed that the relationship between the level of knowledge and attitudes of mothers in giving complementary foods in infants 0-12 months ($p < .001$).

DISCUSSION

The results showed that there was a correlation between the level of knowledge of mothers about complementary feeding and attitudes of mothers in giving complementary foods. The higher the level of knowledge, the

more positive the attitude of the mother in giving complementary foods. This positive attitude of mothers includes knowing about when they can provide complementary foods to their babies and kinds of complementary foods that are appropriate for the age of the baby. The

results of this study are in line with the results of other studies, for example research conducted by Simbolong (2015). The research conducted by Simbolong was carried out in Tigabalata Village, Jorlang Hataran District, Simalungun Regency, which stated that there was a significant relationship between maternal knowledge and the accuracy of giving complementary foods to infants. The same thing was stated by Nuraini, Nusri, and Pebriani (2018) who stated that there was a significant relationship between the level of knowledge and the behavior of giving complementary foods. This is in accordance with the statement of Notoatmodjo (2007) which states that the formation of a new behavior, especially in adults, starts in the cognitive domain, in the sense that the subject knows in advance about the material stimulus. More clearly, it is said that a stimulus in the form of a material or object will give rise to new knowledge on the subject and then cause an inner response in the form of an attitude. Finally, stimulation, which is an object that has been known and fully realized, will cause further responses, namely in the form of action on the stimulus and it can be concluded that good knowledge will lead to a good attitude as well. The role of MP-ASI is not at all to replace breast milk, but only to complement breast milk. And there are still mothers who agree that babies aged 7-9 months are given more than 6 times of additional food every day, even though babies at that age need additional nutritional intake should be given additional complementary food for breast milk 2-4 times a day. Generally, the reason mothers give complementary foods to breast milk that are not appropriate for the age of the baby is because the baby often cries so that the mother thinks that the baby is still hungry, the mother feels that by giving additional food to the baby it will be healthy and the baby will grow up quickly. Environmental factors that are thought to influence the provision of complementary foods are local culture and family traditions passed down from generation to generation. From the research results, it can be seen that the respondents' knowledge is mostly lacking and

the attitudes of the respondents are mostly negative. This mother's attitude may also be caused by a lack of family support, education level, exposure to information related to complementary feeding, culture, work, and socioeconomics (Ginting, Sekawarna, & Sukandar, 2012; Hasibuan, 2019; Setianingrum, Widiastuti, & Istioningsih, 2018). Researchers assume that to change the respondent's attitude requires good knowledge. Good knowledge can be obtained through counseling by the village midwife and cadres in the village, the role and support of the family, the environment and the local community. In addition to increasing knowledge related to complementary feeding, training in making PMT and nutritional counseling is also considered very necessary because it can affect the nutritional status of babies (Kusumasari, 2019; Utami, Suyatno, & Nugraheni, 2018).

CONCLUSION

Based on the results of the research above, it was found that the level of mother's knowledge about complementary feeding was related to the mother's attitude in giving complementary foods. In changing the attitudes of mothers in giving complementary foods, it is necessary to increase their knowledge about complementary feeding. Increasing this knowledge can be done through counseling, training, and nutritional counseling conducted by health workers and health cadres. In addition to increasing maternal knowledge, health workers must also approach families in order to provide good social support related to complementary feeding.

SUGGESTION

With the results of the above research, health workers are expected to be able to conduct socialization related to complementary feeding. This outreach can take the form of counseling, training in making additional food, and nutritional counseling. In addition, health workers must also be active in approaching families who have babies in order to change their thinking regarding complementary

feeding so that good social support can be created in this regard.

ACKNOWLEDGMENT

A big thanks from researchers to Sidoarjo Regency Health Office and the Head of Balonggabus Village who have given permission for this research and supported the researcher to conduct this research. And also, I thank you to all of the respondents who are willing to be the subjects of this research.

DECLARATION OF CONFLICTING INTEREST

None.

FUNDING

None.

AUTHOR CONTRIBUTION

Riesmiyatiningdyah Riesmiyatiningdyah: Prepare research proposal, conducting, research permit, selecting samples based on criteria, compile research report, writing manuscript and presentation result report.

Kusuma Wijaya Ridi Putra: Assist in preparing proposal, perform data processing, analyses data, assist in the preparation of publication.

Faida Annisa: Assist in collecting data, assist in the preparation of publication.

Meli Diana: Assist in collecting data, assist in the preparation of publication.

ORCID

Riesmiyatiningdyah Riesmiyatiningdyah

None.

Kusuma Wijaya Ridi Putra

<https://orcid.org/0000-0003-2009-0392>

Faida Annisa

None.

Meli Diana

None.

REFERENCES

- Ahmad, A., Madanijah, S., Dwiriani, C. M., & Kolopaking, R. (2019). Pengetahuan, sikap, motivasi ibu, dan praktik pemberian MP-ASI pada anak usia 6-23 bulan: studi formatif di Aceh. *Jurnal Gizi Klinik Indonesia*, 16(1), 1.
- Ginting, Daulat, Sekarwarna, dkk. (2012). *Pengaruh Karakteristik, Faktor Internal dan Eksternal Ibu Terhadap Pemberian MP-ASI Dini Pada Bayi Usia <6 Bulan Di Wilayah Kerja Puskesmas Barusjahe Kabupaten Karo Provinsi Sumatera Utara*. Retrieved from http://pustaka.unpad.ac.id/wpcontent/uploads/2013/01/pustaka_unpad_pengaruh_karakteristik_faktor_internal.pdf on February 10, 2018.
- Hasibuan, E. A. (2019). *FAKTOR YANG BERHUBUNGAN DENGAN PEMBERIAN MP-ASI DINI PADA BAYI 0-6 BULAN DI DESA LINGGA TIGA KECAMATAN BILAH HULU KABUPATEN LABUHAN BATU TAHUN 2019* (Doctoral dissertation, Institut Kesehatan Helvetia).
- Kusumasari, G. A. (2019). *EFEKTIVITAS PELATIHAN PEMBUATAN PMT MENU LOKAL TERHADAP PENGETAHUAN DAN SIKAP IBU DALAM MEMBERIKAN PMT PADA BALITA DENGAN GIZI KURANG DI DESA LEYANGAN* (Doctoral dissertation, Universitas Ngudi Waluyo).
- Leman, Martinus. 2013. *Kunci Sukses Pemberian Makanan Pendamping Air Susu Ibu (MP-ASI)*. Jakarta Selatan.
- Notoatmodjo, Soekidjo (2007). *Ilmu Perilaku Kesehatan*. Jakarta: Rinneka Cipta.
- Nuraini, S., Nusri, T. M., & Pebriani, U. (2018). *HUBUNGAN PENGETAHUAN IBU TERHADAP PERILAKU PEMBERIAN*

- MAKANAN PENDAMPING ASI (MP-ASI) PADA BAYI USIA 0-6 BULAN DI POSYANDU ANGGREK VI PUSKESMAS PAYO SELINCAH KOTA JAMBI TAHUN 2017. *Jurnal Ilmu Kedokteran dan Kesehatan*, 5(1).
- Saputri, F., & Kusumastuti, K. (2019). Penerapan Penyuluhan tentang MP ASI terhadap Praktek Pemberian MP ASI 4 Bintang pada Bayi Umur 6-12 Bulan di BPM Jemanis Kabupaten Kebumen. *Proceeding of The URECOL*, 556-564.
- Setianingrum, D. R., Widiastuti, Y. P., & Istioningsih, I. (2018). FAKTOR-FAKTOR YANG BERHUBUNGAN DENGAN PEMBERIAN ASI PADA IBU BEKERJA. *Jurnal Keperawatan*, 10(3), 187-195.
- Simbolon, D. C. D. Hubungan Pengetahuan Dan Sikap Ibu Dengan Ketepatan Pemberian MP-ASI Pada Bayi Di Kelurahan Tigabalata Kecamatan Jorlang Hataran Kabupaten Simalungun Tahun 2015.
- Sitohang, F. D., Kahar, I. A., & Sirait, A. (2019). Faktor yang Berhubungan dengan Pemberian Asi Eksklusif pada Bayi Usia 6-12 Bulan di Wilayah Kerja Puskesmas Sigalingging Kabupaten Dairi Tahun 2017. *Jurnal Ilmiah Keperawatan Imelda*, 5(1), 568-578.
- Sulistijani, D. A., & Herlianty, M. P. (2001). *Menjaga kesehatan bayi dan balita*. Jakarta: Puspa Swara.
- Utami, H. M., Suyatno, S., & Nugraheni, S. A. (2018). Hubungan Konsumsi Jenis MP-ASI dan Faktor Lain dengan Status Gizi Bayi Usia 6-12 Bulan (Studi di Wilayah Kerja Puskesmas Pandanarum Kabupaten Banjarnegara). *Jurnal Kesehatan Masyarakat (e-Journal)*, 6(1), 477-485.
- Wawan, A., & Dewi, M. (2011). *Teori dan Pengukuran Pengetahuan sikap dan Perilaku manusia*. Muha Medika: Yogyakarta.
- Widyawati, W., Sarbini, D., & Muwakhidah, S. K. M. (2016). *Hubungan Tingkat Pengetahuan Ibu Balita Mengenai Pemberian Makanan Pendamping Asi (MP-ASI) dengan Status Gizi pada Balita Usia 6-24 Bulan di Kelurahan Semanggi Kecamatan Pasar Kliwon Kota Surakarta* (Doctoral dissertation, Universitas Muhammadiyah Surakarta).

Cite this article as: Riesmiyatiningdyah, R., Putra, K. W. R., Annisa, F., Diana, M. (2020). The level of knowledge and attitudes of mothers in complementary feeding to infants aged 0-12 months. *Nurse and Health: Jurnal Keperawatan*, 9 (2), 233-239. <https://doi.org/10.36720/nhjk.v9i2.197>