SANITAS: JURNAL TEKNOLOGI DAN SENI KESEHATAN
ISSN : 1978-8843 (*PRINT*) / 2615-8647 (*ONLINE*) **Vol. 15 No. 2 : 102 - 113**

DIFFERENCES IN KNOWLEDGE, ATTITUDES, AND PRACTICES OF COMPLEMENTARY FEEDING BEFORE AND AFTER NUTRITION EDUCATION WITH VIDEO MEDIA FOR BADUTA MOTHERS AT POSYANDU MAWAR 03 & 04 WEST PADEMANGAN, NORTH JAKARTA

Maulida Nugrah Priadi Putri[1] , Rosmida M. Marbun[1*]

[1]Department of Nutrition, Poltekkes Kemenkes Jakarta II, Jl. Hang Jebat III Block F3, 121210

*E-mail: rosmida.magdalena@poltekkesjkt2.ac.id

Submitted: 20th June 2024 ; Accepted: 17th September 2024

http://doi.org/10.36525/sanitas.2024.506

ABSTRACT

Nutritional issues are prevalent among children under the age of five in Indonesia, particularly among those aged 6-23 months. This is due to several factors, including early complementary feeding and a lack of variation in each meal. To determine the differences in knowledge, attitudes, and practices of complementary feeding before and after nutrition education with video media for baduta mothers at Posyandu Mawar 03 & 04 West Pademangan, North Jakarta. This study was Pre-Experimental using a One Group Pre-Test Post-Test Design with Purposive Sampling, obtained 40 respondents. The Chi-Square test and the Wilcoxon Matched Pairs test were used to analyze the data. There was a relationship between maternal education with attitudes and practices of complementary feeding before nutrition education through video media. There were differences in knowledge, attitudes, and practices of complementary feeding before and after nutrition education with video media for baduta mothers at Posyandu Mawar 03 & 04 West Pademangan, North Jakarta. Video could be used as an alternative media used in complementary feeding nutrition education to see differences in knowledge, attitudes, and practices of baduta mothers providing complementary feeding.

Keywords: *Video MP-ASI, Knowledge, Attitude, Practice*

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-Non-Commercial-Share Alike 4.0 license, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.
©2025 Sanitas

INTRODUCTION

After 6 months, an infant's need for nutrients can no longer be met just from breast milk, additional nutrients are needed through complementary food. MP-ASI is a complementary and transitional food from food that was originally in liquid form (milk) to semi-solid food or family food[1]. In MP-ASI feeding, some mothers still take inappropriate actions, such as giving early MP-ASI and less diverse MP-ASI. According to the 2018 Basic Health Research (RISKESDAS), the provision of MP-ASI for less than 6 months was 37.8 percent and in food diversity for children aged 6-23 months who met the requirements was 46.6 percent [2].

MP-ASI that does not have dietary diversity can cause malnutrition in children and giving MP-ASI early can cause the risk of illness including allergies, diarrhea and stunting since it's not easily digested as breast milk [3]. According to the 2021 Indonesian Nutrition Status Survey (SSGI), the prevalence of malnourished toddlers is 17 percent and the prevalence of stunted toddlers is 24.4 percent [4].

Provision of MP-ASI is strongly influenced by the mother's knowledge, attitudes and practices. Good knowledge can support mothers' attitudes in the practice of giving MP-ASI to children, such as MP-ASI at 6 months of age and with dietary diversity. To augment mothers' knowledge, a nutrition education about MP-ASI in video media may be very useful.

Video media is used in outreach to young mothers because videos are able to reach targets with both high and low levels of education and majority of mothers use smartphones in their daily lives, making it easier for mothers to access videos about MP-ASI in their free time. The aim of this research was to determine the differences in knowledge, attitudes and practices of MP-ASI before and after nutrition education using video media for mothers with infant under 2 years of age at Posyandu Mawar 03 & 04 Pademangan Barat, North Jakarta.

MATERIAL & METHODS

This research was conducted at Posyandu RW 03 & 04 Pademangan Barat, North Jakarta on March 2-11 2023. The research design used was Pre-Experimental with a One Group Pre-Test Post-Test design.

The population used in this study were all mothers who had children aged 6-23 months and lived in the Posyandu Mawar 03 & 04 West Pademangan, North Jakarta, with a total of 43 mothers. The research sample was taken using the Purposive Sampling method, namely taking all mothers who met the following criteria mother with a toddler (baduta) aged 6-23 month, willing to be a research respondent and participate in the research until completion, being able to read and communicate well and residing in the Working Area of West Pademangan I Health Center, North Jakarta. The number of samples in this study that met the criteria was 40 mothers.

The data collected includes sample characteristics data, pre-test post-test data on knowledge, attitudes and practices before and after nutrition education, and documentation of practices before and after nutrition education. Data on sample characteristics in the form of name, age, highest level of education and occupation were obtained through filling out a questionnaire by the respondents.

Pre-test data on knowledge, attitudes and practices were obtained from a questionnaire given before the nutrition education. After one week of MP-ASI nutrition education with video media, Post-test data was obtained through a questionnaire filled in by the respondents.

Practice documentation is carried out before and after nutrition education. Prior to nutrition education, homes of respondent mothers were visited to see MP-ASI provision to their infants and some mothers sent in photos of their MP-ASI provision. After nutrition education, practice documentation was obtained when the mothers brought their MP-ASI to the posyandu and some mothers sent in photos of MP-ASI provision.

Measurements of MP-ASI provision practice before nutrition education were carried out by visiting the homes of the respondent mothers to see their MP-ASI by

assessing the amount, texture and diversity of food. Measurements for mothers who sent in photos of their MP-ASI practice were assessed by food diversity only. After nutrition education with video media, measurements of MP-ASI provision bringing in the respondent mother to the posyandu and assessing the amount, texture and dietary diversity in their MP-ASI. For those who sent in photos of their MP-ASI, only dietary diversity were assessed from the main meals and snacks.

Data collection was carried out by four people consisting of one main researcher and three assistant researchers.

RESULT & DISCUSSION

The results of the study showed that 38 respondent mothers (95%) were not at age risk (20-35 years old). Only 2 mothers were in the risk category (<20 and >35 years). In terms of education, 27 respondents (67.5%) had higher education, and 13 respondents (32.5%) had intermediate education. Based on the mother's occupation, most are in the non-working category, 35 people (87.5%) and only 5 people in the working mother category (12.5%).

Table 1 Frequency Distribution of Characteristics of Baduta Mothers

Characteristics	n	%
Age		
At risk (<20 and >35 years)	2	5,0
No risk (20-35 years)	38	95,0
Amount	40	100,0
Education		
Intermediate (SD-SMP)	13	32,5
High (SMA-PT/ Equivalent)	27	67,5
Amount	40	100,0
Occupation		
Non-working	35	87,5
Working	5	12,5
Amount	40	100,0

Table 2 Distribution of Knowledge, Attitudes and MP-ASI Practices of Baduta Mothers Before and After Nutrition Education with Video Media

Variable	Before		After	
	n	%	n	%
Knowledge				
Good (>50%)	22	55,0	39	97,5
Poor (≤50%)	18	45,0	1	2,5
Attitude				
Positive	35	87,5	38	95,0
Negative	5	12,5	2	5,0
Practice				
Good (>50%)	25	62,5	33	82,5
Poor (≤50%)	15	37,5	7	17,5
Total	40	100,0	40	100,0

The results obtained showed that there was an increase in the knowledge of baduta mothers before nutrition education in the good category by 22 people (55%), while the knowledge results after nutrition education in the good category increased to 39 people (97.5%).

Based on the data, it shows that there was an increase in the attitudes of baduta mothers before nutrition education in the positive category by 35 people (87.5%), while the attitude results after nutrition education in the positive category increased to 38 people (95%).

Based on the data, it shows that there was an increase in the practice of baduta mothers before nutrition education in the good category by 25 people (62.5%), while the results of practice after nutrition education in the good category increased to 33 people (82.5%).

Table 3 Relationship between Baduta Mother's Characteristics and Knowledge about MP-ASI before Nutrition Education with Video Media

Characteristics	Knowledge Category				Amount		*p-value*
	Good		Poor				
	n	%	n	%	n	%	
Age							
At risk (<20 and >35 years)	0	0	2	100	2	100	0,19
No risk (20-35 years)	22	57,9	16	42,1	38	100	
Amount	22	55	18	45	40	100	

Characteristics	Knowledge Category				Amount		*p-value*
	Good		Poor				
	n	%	n	%	n	%	
Education							
Intermediate (SD-SMP)	7	53,8	6	46,2	13	100	1,00
High (SMA-PT/ Equivalent)	15	55,6	12	44,4	27	100	
Amount	22	55	18	45	40	100	
Occupation							
Working	1	20	4	80	5	100	0,15
Non-working	21	60	14	40	35	100	
Amount	22	55	18	45	40	100	

Based on table 3, it shows that the good knowledge category is often found in baduta mothers with a non-risk age (20-35 years) as many as 22 people (57.9%) and the poor knowledge category is often found among toddler mothers with a non-risk age (20-35 years) as many as 16 people (42.1%). The p-value was 0.19 (p>0.05), indicating that there was no significant relationship between mother's age and knowledge about MP-ASI before nutrition education via video media. This is different from Notoatmodjo's (2018) theory that a person's knowledge can be influenced by age. As a person gets older, his or her grasping power and thought patterns will further develop so that the knowledge gained will increase [5].

Based on the data, it shows that the good knowledge category is often found in mothers with higher education (SMA – PT/Equivalent) as many as 15 people (55.6%) and the poor knowledge category is often found among mothers with higher education (SMA – PT/Equivalent) as many as 12 people (44.4%). The p-value is 1.00 (p>0.05), indicating that there is no significant relationship between maternal education and knowledge about MP-ASI before nutrition education via video media. The knowledge that people gain does not only come from formal education but can also comes from their own experience or in social life. According to Notoatmodjo's (2018) states that education is not one of the factors that can influence knowledge, but there are other factors such as work, experience, beliefs, social culture, and age [5].

Based on the data, it shows that the good knowledge category is more often found in mothers with non-working status, 21 people (60%). Meanwhile, the category of

insufficient knowledge was often found in mothers with non-working status, 14 people (40%). The p-value is 0.15 (p>0.05), indicating that there is no significant relationship between mother's employment and knowledge about MP-ASI before nutrition education via video media. In this research, mothers who do not work allow them to seek or obtain more information through social media or following nutrition education from health workers compared to mothers who work.

Table 4 Relationship between Baduta Mother's Characteristics and Attitudes about MP-ASI before Nutrition Education with Video Media

Characteristics	Attitude Category				Amount		*p-value*
	Positive		Negative				
	n	%	n	%	n	%	
Age							
At risk (<20 and >35 years)	1	50	1	50	2	100	0,23
No risk (20-35 years)	34	89,5	4	10,5	38	100	
Amount	35	87,5	5	12,5	40	100	
Education							
Intermediate (SD-SMP)	9	69,2	4	30,8	13	100	0,03
High (SMA-PT/ Equivalent)	26	96,3	1	3,7	27	100	
Amount	35	87,5	5	12,5	40	100	
Occupation							
Working	4	80	1	20	5	100	0,50
Non-working	31	88,6	4	11,4	35	100	
Amount	35	87,5	5	12,5	40	100	

Based on table 4, it shows that the positive attitude category is often found in mothers of toddlers who are not at risk (20-35 years) as many as 34 people (89.5%) and only 4 people (10.5%) with the negative attitude category are found in mothers with a non-risk age (20-35 years). The p-value was obtained at 0.23 (p>0.05), indicating that there was no significant relationship between mother's age and attitudes about MP-ASI before nutrition education via video media. The results of this research are not in accordance with the theories of Lewin (1970) and Green (1991) in Rusmini et al. (2014) which states that one of the factors in forming attitudes is age, the older a person gets, the better their attitudes will be [6].

Based on the data, the positive attitude category was mostly found in mothers with higher education (SMA – PT/Equivalent) as many as 26 people (96.3%) and only 4

people (30.8%) with the negative attitude category were found in mothers with secondary education (SD-SMP). The p-value was obtained at 0.03 (p<0.05), indicating that there was a significant relationship between maternal education and attitudes about MP-ASI before nutrition education via video media. This is also in line with the theory of Lewin (1970) and Green (1991) in Rusmini et al. 2014 that the level of education can influence a person's attitudes [6].

Based on the data, it shows that the positive attitude category is more often found in mothers with non-working status, as many as 31 people (88.6%) and only 4 people (11.4%) with the negative attitude category are found in mothers with non-working status. The p-value was obtained at 0.50 (p>0.05), indicating that there was no significant relationship between mother's employment and attitudes about MP-ASI before nutrition education via video media. This is in line with Fitriani's research, Fri (2015) said that there was no relationship between the mother's employment status and attitudes towards exclusive breastfeeding with p-value = 0.294 or (p>0.05) [7].

Table 5 Relationship between Baduta Mother's Characteristics and Practices about MP-ASI before Nutrition Education with Video Media

Characteristics	Practice Category				Amount		*p-value*
	Good		Poor				
	n	%	n	%	n	%	
Age							
At risk (<20 and >35 years)	1	50	1	50	2	100	1,00
No risk (20-35 years)	24	63,2	14	36,8	38	100	
Amount	25	62,5	15	37,5	40	100	
Education							
Intermediate (SD-SMP)	5	38,5	8	61,5	13	100	0,04
High (SMA-PT/ Equivalent)	20	74,1	7	25,9	27	100	
Amount	25	62,5	15	37,5	40	100	
Occupation							
Working	2	40	3	60	5	100	0,34
Non-working	23	65,7	12	34,3	35	100	
Amount	25	62,5	15	37,5	40	100	

Based on table 5, the good practice category is more often found in mothers who are not at risk (20-35 years) as many as 24 people (63.2%) and the less common practice category is found in mothers who are not at risk (20-35 years) as much as 14

people (36.8%). The p-value is 1.00 (p>0.05), indicating that there is no significant relationship between mother's age and practice of MP-ASI before nutrition education via video media. This is not in accordance with the theory of Lewin (1970) and Green (1991) in Rusmini et al. (2014) which states that one of the factors forming a person's practice or behavior is age [6].

Based on the data, the good practice category is often found in mothers with higher education (SMA – PT/Equivalent) as many as 20 people (74.1%) and only 8 people (61.5%) in the poor practice category are found in mothers with secondary education (SD -SMP). The p-value is 0.04 (p<0.05), indicating that there is a significant relationship between maternal education and the practice of MP-ASI before nutrition education via video media. The results of this research are in accordance with the theories of Lewin (1970) and Green (1991) in Rusmini et al. (2014) which states that one of the factors in shaping a person's practice or behavior is education [6].

The results showed that the good practice category was often found in mothers with non-working status as many as 23 people (65.7%) and the poor practice category was often found among mothers with non-working status as many as 12 people (34.3%). The p-value is 0.34 (p>0.05), indicating that there is no significant relationship between mother's employment and practice of MP-ASI before nutrition education via video media. In line with Khairunnisa's research. et al (2021), there is no relationship between work and Covid-19 prevention practices in the community with p-value = 0.230 or (p>0.05) [8].

Table 6 Differences in Knowledge, Attitudes, and MP-ASI Practices among Baduta Mothers Before and After Nutrition Education with Video Media

Variable	n	Mean	SD	Difference Average	*p-value*
Knowledge					
Before	40	61,50	13,311	31,75	0,000
After		93,25	10,473		
Attitude					
Before	40	30,80	3,770	1,93	0,000
After		32,73	3,566		
Practice					

Variable	n	Mean	SD	Difference Average	*p-value*
Before	40	61,75	15,671	16,5	0,000
After		78,25	18,521		

Based on table 6, the results showed that there was an increase in the average knowledge of baduta mothers before nutrition education from 61.50 to 93.25 after nutrition education with an average difference of 31.75. The p-value is 0.000 (p<0.05), there is a difference in knowledge about MP-ASI before and after nutrition education using video media. In line with Supriani's research, Ni Nengah. et al. (2021) that there is a difference in knowledge before and after counseling about IMD using video media for pregnant women in the third trimester with a pre-test average of 46.77, an increase in the post-test of 74.88 and p-value = 0.001 or (p <0.05) [9].

Based on the data, there was an increase in the average attitude of baduta mothers before nutrition education from 30.80 to 32.73 after nutrition education with an average difference of 1.93. The p-value is 0.000 (p<0.05), there are differences in attitudes regarding MP-ASI before and after nutrition education using video media. These results are in line with research by Safitri, Vania et al. (2021) that there is a significant difference between breastfeeding education through video media and mothers' attitudes about exclusive breastfeeding and obtained p-value = 0.001 or (p<0.05) [10].

Based on the data, there was an increase in the average practice of baduta mothers before nutrition education from 61.75 to 78.25 after nutrition education with an average difference of 16.5. The p-value is 0.000 (p<0.05), there is a difference in practice regarding MP-ASI before and after nutrition education using video media. This is in line with research by Utama, Utari (2021) that there are differences in mothers' practices before and after counseling using video media about stunting toddlers with an average practice score before counseling of 20.30, increasing after counseling by 27.17 with an increase difference of 4.4 and p-value = 0.000 or (p<0.05) [11].

CONCLUSION

Providing MP-ASI to children is greatly influenced by the mother's knowledge, attitudes and practices. So, a study was conducted to find out whether there were

differences before and after MP-ASI nutrition education via video media regarding knowledge, attitudes and practices. After nutrition education for 1 (one) week, the results showed that there were differences in knowledge, attitudes and practices of MP-ASI before and after nutrition education via video media with a p-value of 0.000 ($p<0.05$) accompanied by an increase in the average knowledge value of 31.75, attitude of 1.93, and practice of 16.5 from the difference before and after nutrition education.

ACKNOWLEDGEMENT

The authors would like to express his deepest gratitude to the health cadres of RW 03 & 04 who have helped and supported this research by providing the facility and data necessary for the success of the research.

REFERENCES

1. Siregar IS. Hubungan Pengetahuan Dengan Sikap Ibu Tentang Pemberian Makanan Pendamping ASI (MP-ASI) Di Wilayah Puskesmas Binjai Estate Tahun 2020. J Heal Reprod [Internet]. 2020;5(2):8–16.
2. Kementerian Kesehatan RI. RISET KESEHATAN DASAR 2018. 2018.
3. Kementerian Kesehatan RI. PEDOMAN GIZI SEIMBANG [Internet]. 2014. p. 1–96.
4. Kementerian Kesehatan RI. Buku Saku Hasil Studi Status Gizi Indonesia (SSGI) Tingkat Nasional, Provinsi, dan Kabupaten/Kota Tahun 2021. Jakarta; 2021.
5. Notoatmodjo S. METODOLOGI PENELITIAN KESEHATAN. Jakarta: Rineka Cipta; 2018. 243 p.
6. Rusmini H, Suryawan B. Faktor-Faktor yang Mempengaruhi Sikap dan Perilaku Masyarakat Terhadap Kepatuhan Minum Obat Anti Filariasis Di Kabupaten Bogor. J Ilmu Kedokt dan Kesehat. 2014;1(3):1–15.
7. FITRIANI F. Hubungan Dukungan Keluarga dan Status Pekerjaan Dengan Sikap Ibu Dalam Pemberian ASI Di Puskesmas Trauma Center Kecamatan LOA Janan. Umkt. SEKOLAH TINGGI ILMU KESEHATAN MUHAMMADIYAH SAMARINDA; 2015.
8. Khairunnisa, dkk. Hubungan Karakteristik Dan Tingkat Pengetahuan Dengan Perilaku Pencegahan COVID-19 Pada Masyarakat Desa Paya Bujok Blang Pase Kota Langsa. J Averrous. 2021;6(1):1–14.

9. Supriani NN, dkk. Penyuluhan Dengan Media Video Terhadap Peningkatan Pengetahuan Ibu Hamil Trimester III Tentang Inisiasi Menyusu Dini. J Ilm Kebidanan (The J Midwifery). 2021;9(2):123–31.

10. Safitri VA, Pangestuti DR, Kartini A. Pengaruh Video Edukasi Terhadap Pengetahuan dan Sikap Ibu dalam Pemberian ASI Eksklusif di Puskesmas Bulu Lor 2021. Media Kesehat Masy Indones. 2021;20(5):342–8.

11. Utama ULG. Pengaruh Media Vidio pada Tingkat Pengetahuan, Sikap dan Perilaku Ibu Tentang Balita Stunting di Wilayah Kerja Puskesmas Tanjung Harapan Kecamatan Ulok Kupai Tahun 2021. Repository Poltekes Bengkulu. POLTEKKES KEMENKES BENGKULU; 2021.