

The Effect of E-Booklet: CETING on Maternal Knowledge and Attitude Regarding Stunting at Integrated Health Posts for Toddlers in Gunung Wetan Village, Banyumas Regency

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ABSTRACT

Background: The problem of short children (stunting) is one of the nutritional problems that is the focus of the Indonesian Government. Stunting is a condition of malnutrition that is related to nutritional deficiencies. Various efforts have been made to prevent stunting, one of which is health education using e-booklets. This research focuses on mothers' knowledge and attitudes regarding stunting prevention, because if health education is not provided, the stunting rate in Indonesia could increase. Method: This research is a quasi-experimental research with a pre-post-test without control group design. The research was conducted on 53 mothers who have toddlers aged under 2 years. The sampling technique used purposive sampling, the dependent variable was knowledge and attitude for the independent variable, the influence of e-booklets. Researchers used percentage and paired t-test analysis. Results: : The majority of respondents were aged 21-26 years, all of whom were female. At the education level, most of the respondents had elementary and junior high school education. The majority of the work of IRT respondents is 28 respondents. The average value of knowledge and attitudes after the intervention was good 29 has increased. while the average mother's attitude after the intervention was Good 25 increased. The p-value of the Paired T-test for knowledge is 0.001 and for attitude is 0.000. Conclusion: Ceting e-booklet media (preventing stunting) has an effect on efforts to increase mothers' knowledge and attitudes about stunting (0.000).

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1. INTRODUCTION

Indonesia has quite a serious nutritional problem, marked by high cases of malnutrition in children under the age of five, both boys and girls. Malnutrition is an influence on short-term and long-term nutritional status. There are 4 types of malnutrition, namely: Malnutrition, which includes wasting (low body weight for height), stunting (low height for age), and underweight (low body weight for age). Micronutrient-related malnutrition, which includes micronutrient deficiencies (lack of important vitamins and minerals) and excess micronutrients.

Overweight, obesity. Non-communicable diseases related to diet, such as heart disease, stroke, diabetes and several types of cancer).[1]

Stunting is a condition of malnutrition that is related to insufficient nutrition. Stunting is measured as nutritional status, taking into account the baby's height or length, age and gender. The community's habit of not measuring the size and length of a child's body makes it difficult to detect stunting. This makes stunting a priority with the aim of improving the world's diet by 2025.[1]

Data on toddler stunting in Asia is 83.6 million, the largest proportion comes from South Asia (58.7%), the second position is Southeast Asia (14.9%) and the lowest proportion is in Central Asia (0.9%) (Ministry of Health , 2018). In Central Java, the prevalence of very short and stunted according to 2018 Basic Health Research (Riskesdas) data, among toddlers aged 0-59 months is ranked 17th out of 34 provinces, namely 31.30%. Data obtained from the Banyumas Health Service in 2021 showed that there were three Puskesmas work areas with the highest prevalence of stunting cases, namely Kebasen District (14.3%), Kembaran District (13.8%) and Ajibarang I District (13.3%).[2]

Research by Utami found that family knowledge about nutrition management, parental education, unemployed head of household, and household income had an impact on stunting in children under 5 years of age. The research above shows that the role of the mother greatly influences the incidence of stunting with a lack of knowledge and attitudes towards stunting prevention. In order to gain knowledge and attitudes about stunting, information is needed to obtain information. Health education can be done with several media and methods.[3]

In line with modern developments, almost everyone has a cellphone. Information technology-based nutrition education can be provided in the form of an e-booklet created using a smartphone via the Canva application to present modules with an electronic display. The Canva application has the function of opening each page like a book. Electronic books are popular because they can be opened at any time via smartphone, and also generally have a search feature, so that words in electronic books can be quickly searched and found.[4]

The results of a preliminary study conducted by data researchers obtained from the Bangda Action website of the Ministry of Home Affairs in the Banyumas area in 2022 showed that three areas with the highest prevalence of stunting cases were Karangasari Village (29.5%), Gunung Wetan (23.8%) and Karangturi (24.4%). The Gunung Wetan area still has a high prevalence of stunting cases (23.3%), the number of stunted children is 103 and very stunted 33. After field survey researchers, the number of stunted children under five was 56, with 51 in the stunted category and 5 in the very stunted category.

Based on these problems, researchers are interested in researching the influence of the CETING E Booklet on mothers' knowledge and attitudes about stunting at the Posyandu in Gunung Wetan Village, Banyumas Regency. Presented through E-Booklet media which aims to ensure that readers do not get bored and have a better understanding of the content of the material.

2. RESEARCH METHOD

The research method used is quasi-experimental research with a pre-post-test without control group design. With a total sample of 53 mothers who have children under 2 years old, totaling 53 parents. The dependent research variable is knowledge and attitude of the independent variable Stunting prevention health education (E-Booklet Ceting). Data analysis used paired T test. The measuring instruments used were 20 knowledge questionnaires, while 15 attitude questionnaires. The activity began by conducting a pretest to determine the extent of the mother's knowledge and attitudes regarding stunting prevention, then continued by providing intervention twice, after which an evaluation was carried out by conducting a posttest. This research adheres to the code of ethics KEPK/UMP/1201/2023.

3. RESULT AND DISCUSSIONS

Table 1. Frequency Distribution Respondents Demographic Status Based on Age, Education, Occupation,

Characteristics of Respondents	n	(%)
Age:		
21-26	34	64,2
27-31	19	35,8
Gender		
Women	53	100
education :		
Elementary school	21	39,6
Junior High School	21	39,6
Senior Highschool	9	17,0
Characteristics of Respondents	n	(%)
University	2	3,8

Work		
civil servants	2	3,8
laborer	23	43,4
housewife	28	52,8

Based on the data in Table 4.1 shows that Most respondents were aged 21-26 years, namely 34 respondents. Furthermore, the distribution of respondent data by type gender, it can be seen that all respondents are of the same sex women, namely as many as 53 respondents. If you look at the data on The table above also describes the majority of respondents elementary and junior high school education, namely 42 respondents. Data next has shown that the majority of work IRT respondents were 28 respondents.

A study (Khotimah & Kuswandi, 2015) found that young mothers can prevent infant deficiencies nutrition. In other words, older mothers (35 years and over) almost 11 times more likely to have a malnourished baby, whereas Labada et al. (2016) stated that there is no relationship between maternal age and infant nutritional status. researchers concluded that age is an indicator important in determining the productivity of individuals compared with older people. Young people are more productive because His physical condition and health are still excellent. Age is also a factor explanatory factors of human maturity and implications for maturity in forming food consumption patterns affect nutritional status.[5]

From the research results obtained all respondents Woman. This is in line with Antarini's research, (2020) This research involved 30 mothers of stunted babies under the age of 2 years (6-24 months) were selected through purposive sampling.[6]

according to which stated by Soetijiningsih, 2014 that parental education is one of the important factors in status nutrition. Because with a good education, then parents can accept everything outside information about how good childcare especially like where mother gives food to children, how to maintain children's health, education, and so on.[7]

According to Picauly (2013) that working mothers are more likely to experience stunting than mothers who do not work, where the probability of a child experiencing stunting amounting to 3,623 for working mothers. A study by Furia (2014) showed that mothers who do not work automatically raise their own children, with 82.1% of babies being cared for by their mothers.[8]

Table 2. Distribution of Respondents' Knowledge Scores Pretest_Posttest

Variable	Frequency	%
Pretest knowledge		
Good	17	32.1
Enough	28	52.8
Not enough	8	15,1
Posttest knowledge		
Good	29	54,7
Enough	20	37,7
Not enough	4	7,5

Based on table 2, The level of parental knowledge is categorized into three, namely good, sufficient and not good. The results showed that from 53 parents the average mother's knowledge before good was 17 (32.1%), 28 was sufficient (52.8%) with 8 poor (15.1) and after good 29 (54.7), sufficient 20 (37.7) with 4 less (7.5). The average knowledge after being given health education about stunting through the ceting e-booklet media has increased.

The mothers who took part in the research had a certain level of knowledge and different attitudes. Knowledge is the result of know and occur after someone feels a certain object. Sensations arise through the five human senses: sight, hearing, smell, taste and touch. Knowledge can come from others through direct hearing, watching, or through communication tools such as television, radio, and e-booklets.[9]

Table 3. Distribution of Respondents' Attitude Scores Pretest_Posttest

Variable	Frequency	%
Good	0	0
Enough	29	54.7
Not enough	24	45,3
Posttest Attitude		
Good	25	47,2
Enough	22	41,5
Not enough	6	11,3

Based on table 3, The level of parental attitude is categorized into three, namely good, fair and not good. The results showed that 53 parents showed that the average mother's attitude before Good was 0 (0%), 29 Fair (54.7%) with 24 poor (45.3) and after Good 25 (47.2), Fair 22 (41 .5) with 6 less (11.3). The average attitude after being given health education about stunting through the Ceting e-booklet media has increased.

Attitudes, on the other hand, are an individual's tendencies to behave in the form of a reaction to a particular stimulus or object. Attitude shows the suitability of responses to stimuli 61 already contains one's own opinion or emotional component. By therefore, attitudes are not behaviors or activities, but rather a tendency to perform a behavior, behavior, or role. [9]

Table 4. The effect of giving Ceting e-booklets on mothers' knowledge and attitudes

Variable	Mean	95% Confidence Interval of the Difference		P-value
		lower	upper	
Pretest - Posttest Knowledge	-8,660	-13,636	-3,685	.001
Pretest - Posttest Attitude	- 16,113	-19,013	-13,213	.000

Based on table 4, the results show that the p-value is $0.000 < 0.05$, so it can be concluded that H_0 is accepted, meaning there is a difference in knowledge and attitudes before and after the intervention. So it can also be concluded that providing health education using ceting e-booklet media has an influence on knowledge and attitudes towards stunting prevention in the toddler posyandu in Gunung Wetan Village.

This is in accordance with the theory that the media is a means for convey the message to the target audience in a way that easy to understand, but health promotion media is an attempt to 62 convey the message or information to be conveyed by communicator in some way. It is hoped that through print media, electronic or outdoor, targets can add his knowledge and ultimately change his behavior towards positive for health.

The findings of this study are supported by research conducted by Anita Dyah Listyarini and Yayuk Fatmawati at the Community Health Center Quds Regency invitation with the title Nutrition Education for Pregnant Women, Nutrition Education for Stunted Babies Using Booklet Media. thing = $0.000 < \alpha 0.05$. Therefore H_0 is rejected. That means nutritional counseling pregnant women with effective stunting behavior leaflet media in the region the work of the Undaan Health Center in the Kudus Governorate.[10]

4. CONCLUSION AND RECOMMENDATION

The results of research activities, namely the ceting (prevent stunting) e-booklet media, have an influence on efforts to increase mothers' knowledge and attitudes about stunting (0.000). For future researchers, they can improve the e-booklet media so that it can be accessed offline, and researchers can carry out environmental control for mothers who are carrying toddlers so that the mother's focus is not divided during the course of the research, and then they can conduct research on preventing stunting with variables that different.

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REFERENCES

- M. S. Rohman, N. A. Febriyanti, L. Mas, and S. Qoimah, "PENYULUHAN KESEHATAN DI DESA PANCURWENING TENTANG KENALI STUNTING," vol. 2, 2022.
- E. FITRIAMI and A. V. Galaresa, "Edukasi Pencegahan Stunting Berbasis Aplikasi Android Dalam Meningkatkan Pengetahuan Dan Sikap Ibu," *Citra Delima J. Ilm. STIKES Citra Delima Bangka Belitung*, vol. 5, no. 2, pp. 78–85, 2021, doi: 10.33862/citradelima.v5i2.258.
- R. Nurhayati, R. B. Utami, and A. A. Irawan, "Health Education about Stunting Nutrition in Mothers to Weight Stunting Children Aged 2-5 Years," *J. Qual. Public Heal.*, vol. 4, no. 1, pp. 38–43, 2020, doi: 10.30994/jqph.v4i1.148.
- A. Dhiah Anggraeni and W. Riyaningrum, "Pencegahan Stunting pada Anak melalui E-Booklet pada Orang Tua di TK Aisyiyah Bustanul Athfal Kebasen," *J. Pengabd. Serulingmas*, vol. 2, no. 1, pp. 1–5, 2022, [Online]. Available: <https://ejournal.stikesserulingmas.ac.id/index.php/jps/article/view/33>

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- K. Khotimah, H. dan Kuswandi, "Hubungan Karakteristik Ibu Dengan Status Gizi Balita Di Desa Sumur Bandung Kecamatan Cikulur Kabupaten Lebak Tahun 2013," *Obs. Sci.*, p. hal. 55–73, 2015.
- Antarini, "EFEKTIFITAS PENGGUNAAN KALENDER 1000 HARI PERTAMA KEHIDUPAN TERHADAP PENENTUAN STUNTING," *J. Kesehat. Masy. Indones.*, vol. VOL 1 NO 2, 2020.
- Soetjiningsih, *Tumbuh Kembang Anak*. Jakarta: EGC, 2014.
- S. A. Anggraini, S. Siregar, and R. Dewi, "Pengaruh Media Audio Visual Terhadap Tingkat Pengetahuan Dan Sikap Pada Ibu Hamil Tentang Pencegahan Stunting Di Desa Cinta Rakyat," *J. Ilm. Kebidanan Imelda*, vol. 6, no. 1, pp. 26–31, 2020, doi: 10.52943/jikebi.v6i1.379.
- S. Notoatmodjo, *Metode Penelitian Kesehatan*. Jakarta: PT Rineka Cipta., 2012.
- A. D. Listyarini, Y. Fatmawati, and I. Savitri, "Edukasi Gizi Ibu Hamil Dengan Media Booklet Sebagai Upaya Tindakan Pencegahan Stunting Pada Balita Di Wilayah Kerja Puskesmas Undaan Kabupaten Kudus," *J. Pengabd. Kesehat.*, vol. 3, no. 1, pp. 73–83, 2020, doi: 10.31596/jpk.v3i1.70.