



Effectiveness of Health Education with Booklet and Poster Method on Improving Knowledge and Attitude About 1000 HPK Among Primigravida Mothers in North Tapanuli District

Janner Pelanjani Simamora¹, Dimpu Rismawaty Nainggolan²

^{1,2}Politeknik Kesehatan Kementerian Kesehatan, Medan

Email correspondence : jannerosaze@gmail.com

<p>Track Record Article</p> <p>Accepted: 06 September 2024 Revised: 05 October 2024 Published: 31 October 2024</p> <p>How to cite : Simamora, J. P., & Nainggolan, D. R. (2024). Effectiveness of Health Education with Booklet and Poster Method on Improving Knowledge and Attitude About 1000 HPK Among Primigravida Mothers in North Tapanuli District. <i>Contagion: Scientific Periodical Journal of Public Health and Coastal Health</i>, 6(2), 1312–1320.</p>	<p style="text-align: center;">Abstract</p> <p><i>One of the efforts to change the knowledge and attitude of mothers towards 1000 HPK is to provide health education. Media is very essential in the successful delivery of messages. In choosing a good media, it is very helpful to successfully convey the message, otherwise the media that is not appropriate can result in the delivery of a bad message. One of the media used is booklet and poster media. The purpose of this study was to analyse the Effectiveness of Health Education with Booklet Method and Poster Method on Improving Knowledge and Attitude of Primigravida Mothers about 1000 HPK in North Tapanuli Regency in 2024. The research used is quantitative with a Quasi Experiment approach using a pre test and post test nonequivalent control group approach. Data analysis method is univariate analysis aimed at obtaining the frequency distribution of knowledge and attitudes studied and presented with a percentage. Bivariate data analysis aims to see the effectiveness of the independent variable with the dependent variable. Due to the normal distribution of data in this Peneltian, the research analysis used the independent Sample T Test which aims to see the difference between the booklet method and the poster method. Sampling in this study with Purposive Sampling technique as many as 16 samples on the booklet method and 16 samples on the poster method. The study used the T test and obtained p value for knowledge of 0.729 and for attitudes of 0.381 which means that the booklet method and poster are equally effective of primigravida about 1000 HPK at Siborong-borong, Pangaribuan, Sipahutar and Siatas Barita Community Health Centre.</i></p> <p>Keyword: Booklet, Poster, Knowledge, Attitude, 1000 HPK</p>
---	--

INTRODUCTION

Accelerating stunting reduction requires new strategies and methods that are more collaborative and sustainable from upstream to downstream. To accelerate the reduction of stunting prevalence, the government has set a target of 14% by 2024. The results of the Nutrition health research in Indonesia stated that the prevalence of stunting was successful in reducing to 21.6% by 2022 (BKKBN, 2021).

From the results, the national prevalence of stunting from 2018 to 2022 has decreased but is still far from the 2024 national target of 14%. The 2019 stunting prevalence was 27.7%, 2021 was 24.4% and in 2022 it was 21.6. From the results, the prevalence of stunting in North Sumatra Province in 2022 is 21.1% while in North Tapanuli Regency in 2022 it is 27.4% (Kemenkes, 2022).

Stunting occurs due to malnutrition, especially during the First 1000 Days of Life (HPK). One thousand HPK (from conception until a human is 2 years old) is a critical

momentum that will determine the quality of a nation's future generation. One thousand HPK is a golden period where the growth and development of all organs and body systems can occur optimally (window of opportunity), starting from the fetus in the womb until the baby is two years old. Pregnant women, breastfeeding mothers, newborns and children under two years of age are the target groups to improve the quality of life of the first 1000 days of human life (Sudargo et al., 2018).

One of the efforts to change the knowledge and attitude of primigravida towards 1000 days of human life is to conduct health counselling. The success or failure of health counselling is influenced by learning components, for example educational media. Media has an important function in the effectiveness of message delivery. The use of good media is more effective in achieving the success of the counselling process, and conversely the use of poor media can lead to failure. Nutrition and health education media is no less important in the process of delivering health information. One of the media used is booklet and poster media (Mappamadeng et al., 2021).

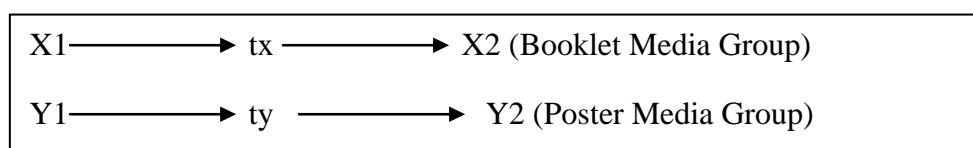
Booklets are small-sized books designed to educate readers with tips and strategies to solve a problem. Booklets are a type of learning media innovation in the form of print media. This media includes subject matter in a unique, attractive and flexible physical form. Unique because of its small design, complete with colour variations that create a sense of interest in using it. Flexible because of its small shape (smaller than a book in general), so it can be carried and used whenever possible (Sari, 2017).

Likewise, of the many ways to prepare primigravida mothers in facing 1000 HPK, namely making changes to cognitive aspects by providing education through health education using the poster method which is useful to facilitate and accelerate the understanding of message recipients of the messages presented. According to this description, the researcher is keen to examine 'the effectiveness of health education with the booklet method and the poster method on increasing the knowledge and attitudes of primigravida mothers about 1000 HPK in North Tapanuli Regency in 2024'.

METHODS

The research used is quantitative with a Quasi Experiment approach using a pre test and post test nonequivalent control group approach. The inclusion criteria in the study were primigravida mothers starting Trimester I, Trimester II and Trimester III, residing in Pangaribuan, Sipahutar, Siborong-borong and Siatas Barita sub-districts, willing to be sampled and able to read and write. While the exclusion criteria are primigravida mothers with

complications, cognitive and language disabilities and primigravida mothers who are not willing to be sampled. Pangaribuan District, Sipahutar District, Siborong-borong District and Siatas Barita District are part of North Tapanuli Regency, North Sumatra Province. The instrument in this study was to use a knowledge questionnaire by submitting a statement with the answers Yes and No (Gutman scale) and an attitude questionnaire by submitting a statement with the answers Strongly Agree, Agree, Disagree, Strongly Disagree (Likert Scale) with questionnaire material about 1000 HPK filled out by primigravida mothers. Measurement of knowledge using Baliwati's theory in Atika Nur Fauziah (Fauziyah et al., 2022), with categories of Good (>80%), Fair (60-80%), Less (<60%).



Picture of Research Design Model

Description:

X1 : Pre test, Measurement of knowledge and attitudes of Primigravida mothers before treatment Booklet method

X2 : Post test, Measurement of knowledge and attitudes of Primigravida mothers after treatment Booklet method

tx : Trial / intervention in the treatment group, namely health education with the Booklet method

Y1 : Pre test, Measurement of knowledge and attitudes of Primigravida mothers before the treatment of Poster method

Y2 : Post test Pre test, Measurement of knowledge and attitudes of Primigravida mothers before Poster method treatment

ty: Trial / intervention in the treatment group, namely health education with the Poster method

RESULTS

Data were collected directly by visiting participants in their respective places until the research quota was met.

Table 1. Primigravida in each Community Health Centre that became the research locus

Name of Health Centre	Number of Primigravida	Booklet	Poster
Community Health Centre Siborong-borong	8	4	4
Community Health Centre Pangaribuan	8	4	4
Community Health Centre Siatas Barita	7	4	3
Community Health Centre Sipahutar	9	4	5
Total	32	16	16

This study used 2 sample groups, namely 16 primigravida who were given the treatment of providing health education with the booklet method and 16 other primigravida were given the treatment of providing health education with the poster method.

Table 2. Knowledge and Attitude Distribution of Primigravida Mothers in the Booklet Group and Poster Group

Knowledge	Group Booklet				Group Poster			
	Pre		Post		Pre		Post	
	n	%	n	%	n	%	n	%
Good	2	12,5	6	37,5	5	31,3	7	43,8
Fair	13	81,3	10	62,5	10	62,5	9	56,2
Less	1	6,2	0	0	1	6,2	0	0
Total	16	100	16	100	16	100	16	100

Attitude	Group Booklet				Group Poster			
	Pre		Post		Pre		Post	
	n	%	n	%	n	%	n	%
Strongly Agree	5	31,3	14	87,5	10	62,5	12	75
Agree	10	62,5	2	12,5	5	31,3	4	25
Disagree	1	6,2	0	0	1	6,2	0	0
Total	16	100	16	100	16	100	16	100

According to the value of the primigravida pre-test with the booklet method, it is known that the most knowledge before being given health education is a good category as many as 2 people (12.5%), enough as many as 13 people (81.3%), and less 1 person (6.2%). While in primigravida mothers with the poster method it is known that good knowledge is 5 people (31.3%), enough as many as 10 people (62.5%) and less 1 person (6.2%). It can be seen that primigravida mothers in the booklet and poster method groups before treatment are the majority of knowledgeable enough.

According to the value of the primigravida pre-test with the booklet method, it is known that the attitude is in the category of strongly agreeing as many as 5 people (31.3%), agreeing as many as 10 people (62.5%) and disagreeing as many as 1 person (6.2%). In primigravida mothers with the poster method it is known that the attitude strongly agrees as many as 10 people (62.5%), Agree as many as 5 people (31.3%) and disagree 1 person (6.2%). In this case, it can be concluded that most of primigravida mothers in the booklet method group agreed as many as 10 people (62.5%) while for the poster method before treatment the majority strongly agreed as many as 10 people (62.5%).

After being given treatment by providing health education in the booklet group, the knowledge of primigravida mothers was a good category as many as 6 people (37.5%) and sufficient knowledge as many as 10 people (62.5%) and no more primigravida mothers were found to be less knowledgeable. Primigravida mothers with the poster method had good

knowledge as many as 7 people (43.8%) and sufficient knowledge as many as 9 people (56.2%) and no longer found to be less knowledgeable.

A person's knowledge can increase with good assimilation of information, with increasing levels of health and understanding, perspectives on the concepts of health and disease become more established, ultimately influencing beliefs, lifestyles and efforts to achieve improved health (Susanti, 2021).

The attitude of primigravida mothers in the booklet method group was strongly agreed as many as 14 people (87.5%) and agreed totalling 2 people (12.5%), and in the poster method group 2 people (75%) strongly agreed and 4 people (25%) agreed. From the data above, it can be seen that the majority of primigravida mothers' attitudes after treatment are strongly agreed. According to Lawrence Green's theory, individual attitudes are also included in the factors that influence health behaviour. Good behaviour can be produced if a person's knowledge is good and is also supported by a positive attitude positive attitude (Arnita et al., 2020).

Table 3. Effectiveness of Health Education with Booklet Method and Poster Method on Improving Knowledge and Attitude of Primigravida Mothers about 1000 HPK in the Working Area of Siborong-borong, Pangaribuan, Sipahutar and Siatas Barita Health Center

Knowledge			
Group	Mean	p value	n
Group Booklet	1,63	0,729	16
Group Poster	1,56		16
Attitude			
Kategori	Mean	p value	n
Group Booklet	1,13	0,381	16
Group Poster	1,25		16

Based on table 3. for the primigravida knowledge category shows that there is a mean comparison between the booklet method and poster before and after receiving the intervention of 0.07. Based on the normality test using the Kolmogorov Smirnov and Shapiro Wilk tests, it was found that the data was normally distributed. Due to the normal distribution of knowledge category data, the test used is the Independent sample T Test test. In the T test, the p value was 0.729 (>0.05), it can be concluded that there is no comparison between booklet method and poster on increasing the knowledge of primigravida at Siborong-borong, Pangaribuan, Sipahutar and Siatas Barita Health Centers. In other words, the booklet method and the poster method both have effectiveness in improve the knowledge of primigravida mothers about first 1000 days of life.

The attitude category based on the table above shows that the average difference (mean) between the poster method and the booklet method is 0.12. Based on the normality test using

the Kolmogorov Smirnov and Shapiro Wilk tests, it was found that the attitude category data were normally distributed. Because the data is normally distributed, the test used is the Independent sample T Test test. In the T test, the p value was 0.381 (>0.05), it can be concluded that there is no comparison between booklet method and poster on changes in the attitude of primigravida. From these results, it was found that the booklet method and the poster method were equally effective in changing the attitudes of primigravida mothers about first 1000 days of life.

DISCUSSION

Knowledge and Attitude of Primigravida Mothers pre dan post action

Based on the results of the study, for the knowledge category that of 16 primigravida mothers before health education with the booklet method was obtained that those with good knowledge were 2 people (12.5%) to 6 people (37.5%) after treatment. Knowledgeable enough as many as 13 people (81.3%) before treatment to 10 people (62.5%) after treatment, and those with less knowledge as many as 1 person (6.2%) before treatment to none after treatment. By giving the poster method, the results of primigravida mothers' knowledge were good as many as 5 people (31.3%) before treatment to 7 people (43.8%), enough as many as 10 people (62.5%) to 9 people (56.2%), while those with less knowledge as many as 1 person (6.2%) became no more after treatment.

According to the researcher's assumption, respondents' knowledge will increase with information, especially with the booklet and poster method about 1000 HPK in well-designed primigravida mothers. In the research of Meri and Delvira, 1000 HPK is the beginning of life when the child is still in the womb until 2 years. 1000 HPK starts when the baby is in the womb for 280 days, the exclusive breastfeeding period of 0 - 6 months, and the period of breast milk and MP ASI for 540 days or known as Baduta. The results showed that there was an increase in the knowledge of pregnant women after being given education about the 1000 HPK Diet in preventing stunting with a p value of 0.035 (Meri Agritubella & Delvira, 2020).

From the results of research by Tri Bayu Purnama, et al (2023), found that maternal knowledge about nutrition contributes to the incidence of stunting. It is important that children receive adequate nutrition at all stages of growth and development (prenatal and postnatal). Suboptimal child growth in the prenatal period is often caused by malnutrition. Difficult access to health care facilities in terms of time, distance and cost, incidence of infectious diseases that can impair child growth, poor water consumption, inadequate WASH (water, sanitation and

hygiene) management, poor quality household sanitation, exposure to cigarette smoke and incomplete immunisation coverage (Purnama et al., 2023)

According to Notoatmodjo's theory in Wijayanti's research (2024), knowledge is the result of the knowledge process that occurs after a person realises a certain object. This perception occurs through the five human senses such as sight, hearing, smell, taste, and touch. Most human knowledge is acquired through the eyes and ears (Wijayanti et al., 2024).

From the results of the study it can be seen that with the booklet method, the attitude of primigravida mothers strongly agreed as many as 5 people (31.3%) before treatment to 14 people (87.5%) after treatment. Agree as many as 10 people (62.5%) to 2 people (12.5%). Disagree as many as 1 person (6.2%) to none after treatment. With the poster method, the results of the attitude of primigravida mothers strongly agreed as many as 10 people (62.5%) to 12 people (75%) after treatment. Agree as many as 5 people (31.3%) to 4 people (25%). Disagree as many as 1 person (6.2%) to none after treatment.

Attitude is a predisposition to respond to environmental stimuli that can initiate or guide the person's behavior. Attitude is said to be a response that only arises when the individual is faced with a stimulus (Rachmawaty, 2019). Attitudes are influenced by stimuli in the form of images, sounds, or media. In line with the results of the study that the attitude of primigravida mothers before and after treatment both with booklet and poster methods changed the attitude of primigravida mothers, especially about 1000 HPK.

According to Nursalam in Yurissetiowati and Namsyah's research, states that a person's attitude is influenced by beliefs to get positive results if they believe that the behaviour will bring good results (Yurissetiowati & Baso, 2023). Based on the results of research conducted by Trisnawati, et al (2016), it was found that 76% of pregnant women were supportive of nutrition for the first 1000 days of life. The number of pregnant women who are supportive of nutrition for the first 1000 days of life will lead pregnant women to good behaviour in fulfilling their children's nutrition in the first 1000 days of life (Trisnawati et al., 2016).

Effectiveness of Booklet Method and Poster Method on Improving Primigravida Mother's Knowledge and Attitude about 1000 HPK

Based on the results of the study for the primigravida knowledge category, it was found that there was an average difference (mean) between the booklet method and the poster method before and after the intervention of 0.07. In the independent sample T Test test, the p value was 0.729 (> 0.05). The results of the study for the maternal attitude category were the average difference (mean) between the poster method and the booklet method of 0.12. In the T test, the p value is 0.381 (> 0.05). From these results, it can be concluded that there is no comparison of

the effectiveness of the booklet and poster methods on the increase of the knowledge and attitude of primigravida mothers at Siborong-borong, Pangaribuan, Sipahutar and Siatas Barita Health Centers about 1000 HPK.

This research is in line with research conducted by Reni (2021), where the results of their research show that there is no difference in the effectiveness of using booklets and leaflets on increasing the knowledge and attitudes of women of childbearing age in preventing stunting at 1000 HPK (Reni, 2021). Likewise, research conducted by Lydia and Affif (2022) found that there is no difference in the effectiveness of video media, booklets and combinations on knowledge (p value = 0.098) and attitudes (p value = 0.111) (Kurniatin, 2022).

Counseling is an activity to convey messages and beliefs so that individuals or families, groups are aware, understand, and carry out health-related recommendations. Providing educational information can be done with attractive media or props. The media such as booklets and posters, which contain text or images or both about health shown for targets who can read (Lusiani et al., 2021).

According to Ashyar in Lydia and Afif's Research (2022) Increased knowledge and attitude is a form of knowing effect caused by the respondent's learning process after sensing a certain object and awareness of the evaluation. The sensing in question can be through a single sense or a combination of the senses of sight, hearing, touch and even smell. Video media is a media that combines the use of the senses of sight and hearing so that it can further increase a person's interest in learning (Kurniatin & Zakiyya, 2022)

CONCLUSIONS

Based on the results of the study, there is no difference in the effectiveness of the booklet method and poster method on increasing knowledge (p value 0.729 (> 0.05)) and changing attitudes (p value 0.381 (> 0.05)) of primigravida mothers. With these results, it shows that the booklet method and the poster method are equally effective in increasing knowledge and changing the attitudes of primigravida mothers about 1000 HPK at Siborong-borong, Pangaribuan, Sipahutar and Siatas Barita Community Health Centre.

REFERENCE

- Arnita, S., Rahmadhani, D. Y., & Sari, M. T. (2020). Hubungan Pengetahuan dan Sikap Ibu dengan Upaya Pencegahan Stunting pada Balita di Wilayah Kerja Puskesmas Simpang Kawat Kota Jambi. *Jurnal Akademika Baiturrahim Jambi*, 9(1), 7. <https://doi.org/10.36565/jab.v9i1.149>
- BKKBN. (2021). *Panduan Pelaksanaan Pendampingan Keluarga dalam Upaya Percepatan Penurunan Stunting di Tingkat Desa/Kelurahan*.

- Fauziyah, A. N., Astuti, P., Siti, D., Program, F., Pendidikan, S., Boga, T., Pendidikan, J., & Keluarga, K. (2022). Pengaruh antara Pengetahuan dan Sikap Gizi Siswa dengan Pola Konsumsi Jajan Siswa di SD Negeri 08 Brebes. *FOOD SCIENCE AND CULINARY EDUCATION JOURNAL*, 11(1), 22–30.
- Kemendes. (2022). *Cegah stunting dengan makanan bergizi seimbang pada 1000 hari Kehidupan Pertama Anak*.
- Kurniatin, L. F. (2022). Pendidikan Kesehatan dengan Media Video dan Booklet Pendampingan 1000 Hari Pertama Kehidupan terhadap Tingkat Pengetahuan dan Sikap Ibu Hamil dalam Upaya Pencegahan Stunting. *Jurnal Kesehatan Poltekkes Kemenkes RI Pangkalpinang*, 10(1). <https://doi.org/10.32922/jkp.v10i1.458>
- Kurniatin, L. F., & Zakiyya, A. (2022). Pendidikan Kesehatan dengan Media Video dan Booklet Pendampingan 1000 Hari Pertama Kehidupan terhadap Tingkat Pengetahuan dan Sikap Ibu Hamil dalam Upaya Pencegahan Stunting. *Jurnal Kesehatan Poltekkes Kemenkes RI Pangkalpinang*, 10(1), 28–37. <https://doi.org/10.32922/jkp.v10i1.458>
- Lusiani, E., Prastyawati, I. Y., & Nobita, A. (2021). Efektifitas Pendidikan Kesehatan Dengan Menggunakan Media Booklet Terhadap Tingkat Pengetahuan Ibu Tentang Stunting. *Jurnal Ilmu Keperawatan Jiwa*, 4(2), 315–320.
- Mappamadeng, A. A., Kurnaesih, E., & Idris, F. P. (2021). Intervensi Edukasi Tentang Pengasuhan Anak pada 1000 Hari Pertama Kehidupan (HPK) Di Wilayah Puskesmas Takalalla Kabupaten Soppeng. *An Idea Health Journal*, 1(02), 126–141. <https://doi.org/10.53690/ihj.v1i02.49>
- Meri Agritubella, S., & Delvira, W. (2020). Efektifitas Poster Pola Diet 1000 Hari Pertama Kehidupan (HPK) terhadap Pengetahuan Ibu Hamil tentang Nutrisi dalam Pencegahan Stunting di Puskesmas Rambah Kabupaten Rokan Hulu. *Jurnal Endurance*, 5(1), 168. <https://doi.org/10.22216/jen.v5i1.5027>
- Purnama, T. B., Hasibuan, R., Susanti, N., Ashar, Y. K., Insani, A., & Assegaf, M. T. (2023). Assessment of Multicausal Factor related Stunting at Limited Resources Area, Indonesia: A case study in Nias Island, Indonesia. *Social Medicine*, 16(3), 100–108.
- Reni, Z. M. (2021). Efektivitas Penggunaan Booklet Dan Leaflet Sebagai Media Promosi Gizi Terhadap Peningkatan Pengetahuan Dan Sikap Wanita Usia Subur (WUS) Dalam Pencegahan Stunting Pada 1000 Hari Pertama Kehidupan. *Repository Poltekkes Yogyakarta*.
- Sari, D. K. (2017). Penerapan Media Booklet Untuk Meningkatkan Perkembangan Bahasa (Membaca Awal) Pada Kelompok B di TK Kemala Bhayangkari 34 Kendal. *Repository Unnes*.
- Sudargo, T., Aristasari, T., & Afifah, A. (2018). *1000 Hari Pertama Kehidupan*. Gadjah Mada University Press.
- Susanti, L. (2021). Pengaruh Pendidikan Kesehatan dengan Booklet Terhadap Pengetahuan Ibu Hamil Tentang 1000 Hari Pertama Kehidupan. *Jurnal Delima Harapan*, 8(2), 46–52. <https://doi.org/10.31935/delima.v8i2.136>
- Trisnawati, Y., Purwanti, S., & Retnowati, M. (2016). Studi Deskriptif Pengetahuan Dan Sikap Ibu Hamil Tentang Gizi 1000 Hari Pertama Kehidupan Di Puskesmas Sokaraja Kabupaten Banyumas. *Jurnal Kebidanan*, 8(02), 175–182. <https://doi.org/10.35872/jurkeb.v8i02.218>
- Wijayanti, D., Purwati, A., & Retnaningsih, R. (2024). Hubungan Pengetahuan Dengan Sikap Ibu Hamil Tentang Pemanfaatan Buku KIA. *Jurnal Asuhan Ibu Dan Anak*, 9(2), 67–74. <https://doi.org/10.33867/c2byzp04>
- Yurissetiowati, Y., & Baso, N. (2023). Hubungan Pengetahuan dan Sikap Ibu Tentang 1000 HPK dengan Perilaku Pencegahan Stunting. *MAHESA: Malahayati Health Student Journal*, 3(2), 517–525. <https://doi.org/10.33024/mahesa.v3i2.9637>