

The Effectiveness Of Education Using Whatsapp About The Importance Of Pregnancy Checks For Increasing The Knowledge Of Pregnant Women In Karangsinom Village, Tirtamulya District, Karawang Regency In 2023

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Abstract.

Background: Education via whatsapp about the importance of prenatal checks has been proven to increase pregnant women's knowledge. Through this platform, information about the benefits and importance of routine pregnancy checks can be conveyed easily by health workers and pregnant women in access to the WhatsApp application. Purpose of Writing: to find out the Effectiveness of Education Using WhatsApp About the Importance of Pregnancy Checks for Increasing Knowledge of Pregnant Women. Research Methods: Pre-experimental research with the type of one group pre test – post test design by means of a causal relationship by involving one group of subjects. the subject group was observed before the intervention was carried out and then observed after the intervention was carried out. The sampling technique is non-probability sampling with a purposive method. Research Results: This study obtained the results of the Wilcoxon statistical test, which obtained a sig. (0.000) < 0.05, which means there is a difference in knowledge before and after education via whatsapp. It can be concluded that there is Effectiveness of Education with WhatsApp About the Importance of Pregnancy Checks for Increasing Knowledge of Pregnant Women in Karangsinom Village, Tirtamulya District, Karawang Regency in 2023. Conclusions and Suggestions: In providing education to pregnant women, midwives can collaborate with other health teams, in providing health education it can be added by using the WhatsApp application in the form of groups of pregnant women so that it is easy to provide health information for pregnant women in groups.

Keywords: Education with WhatsApp and Knowledge of Pregnant Women.

I. INTRODUCTION

Adequate antenatal care by professional health care providers has been proven not only to reduce maternal, fetal and infant morbidity and mortality but also to improve the health status and parenting behavior of mothers after the child is born. Dissatisfaction can be a major factor in the use of antenatal care facilities, satisfaction can increase the frequency of visits and good relations with service providers (Galle A et al, 2015). This shows that the midwife's job in providing antenatal care can reduce high-risk pregnancies and create better communication during pregnancy check-up services (Galle A et al, 2015). According to data from the Ministry of Health in 2018 it was stated that around 70% of pregnant women in Indonesia had at least 4 prenatal checkups during pregnancy so there are still pregnant women who have not had at least 4 prenatal checkups. This is due to several factors such as a lack of knowledge about the importance of pregnancy checks, limited access to health services, or even high costs for carrying out pregnancy checks. The revised version of the ANC guidebook is the 3rd edition of the integrated ANC service guidebook, it is stated that ANC is carried out at least 6 times, where during the first ANC visit the doctor will screen and treat risk factors for pregnancy. Whereas at the fifth visit in the 3rd trimester of pregnancy, the doctor carried out a screening for risk factors for childbirth.

The latest antenatal care checks are in accordance with service standards, namely a minimum of 6 examinations during pregnancy, and a minimum of 2 examinations by a doctor in the first and third trimesters. 2 times in the first trimester (up to 12 weeks of pregnancy), 1 time in the second trimester (pregnancy above 12 weeks to 26 weeks), 3 times in the third trimester (pregnancy above 24 weeks to 40 weeks) (Latest MCH Handbook, 2020 revision). According to Wulandari, Dwi (2022) Regular prenatal check-ups are very important for the health of the mother and fetus during pregnancy. However, there are still many pregnant women in Indonesia who do not check their pregnancies regularly and some even do not at all based on data from the Ministry of Health (2018). This can be due to a lack of knowledge about the

importance of prenatal checks, limited access to health services, or even high costs for do a pregnancy check. According to researcher Ariyanti, (2017) Providing health education that can be done to increase awareness of pregnant women about the importance of prenatal checks is through education using social media such as WhatsApp. This research focuses on the utilization of WhatsApp social media, because WhatsApp is the most popular social media by the public.

WhatsApp is a social media application designed to make it easier for users to communicate through a variety of available features. According to Wulandari, Dwi (2022) Some of the features in the WhatsApp application include Group Chat, WhatsApp on the Web and Desktop, WhatsApp Voice and Video Calls, End-To-End Encryption, Sending Photos and Videos, Voice Messages, and Documents. WhatsApp social media through the various features provided can be used for more useful activities, for example for education (Sulistianingsih, A., & Hasyim, D. I. (2021) According to Sulistianingsih, A., & Hasyim, D. I. (2021) As for the ease of using the WhatsApp application in providing education, especially for pregnant women, such as in situations where access to health services may be limited, using WhatsApp can help ensure that pregnant women stay connected with doctors or midwives making it easier in obtaining relevant and needed health information for pregnant women, the use of whatsapp in pregnancy health education can increase the knowledge of pregnant women such as information about a healthy diet during pregnancy, proper exercise for pregnant women, danger signs of pregnancy, preparation for childbirth and all the needs that pregnant women have to do can be conveyed through whatsapp education which is available on devices that can send information using videos, reminder messages to pregnant women. According to Kholisotin, K., Agustin, Y. D., & Prasetyo, A. D. (2019) extension media play an important role in increasing knowledge and sources of information.

With the modification of counseling media, it will further increase the level of knowledge and can reduce the existing morbidity rate or can reduce the still high infant mortality rate. This whatsapp-based video is a new breakthrough and innovation in the field of electronic-based health counseling to keep up with the current times. Counseling involves listening, speaking and seeing activities which make this method effective. Analyzing that information plays a role in supporting changes in one's behavior. Information received through print, electronic, educational / counseling media, books and so on will increase a person's knowledge so that he will usually improve or change his behavior for the better. Therefore, the existence of WhatsApp video-based counseling is very helpful in changing negative attitudes. be positive. Another factor that has an important influence on this positive change in attitude is the knowledge of the respondents, most of whom are already good. If the knowledge is good then the attitude will also be positive. Based on the description above, the researcher is interested in conducting research on the use of the WhatsApp application as an educational tool in pregnancy checks. Therefore, the current research title is "Effectiveness of Education with WhatsApp About the Importance of Pregnancy Checks for Increasing Knowledge of Pregnant Women in Karangsinom Village, Tirtamulya District, Karawang Regency in 2023."

II. METHODS

This research was conducted in Karangsinom Village in 2023. Pre-experimental research with the type of one group pre test - post test design by means of a causal relationship by involving one group of subjects. the subject group was observed before the intervention was carried out and then observed after the intervention was carried out. The sampling technique is non-probability sampling with a purposive method. the study was divided into 2 variables, namely the independent variable, namely Education with WhatsApp and the dependent variable, namely Increased Knowledge of Pregnant Women. The instrument used in this study was a questionnaire to determine the knowledge of pregnant women about the importance of prenatal care. The data used are primary data obtained from the results of questionnaires and secondary data to find out the number of pregnant women in Karangsinom Village, Tirtamulya District, Karawang Regency. The analytical method used is the normality test and the different test (t test) using the SPSS statistical test. The latest antenatal care checks are in accordance with service standards, namely a minimum of 6 examinations during pregnancy, and a minimum of 2 examinations by a doctor in the first and third trimesters. 2 times in the first trimester (pregnancy up to 12 weeks), 1 time in the second trimester (pregnancy above 12 weeks to

26 weeks), 3 times in the third trimester (pregnancy above 24 weeks to 40 weeks) (Latest MCH Handbook, 2020 revision). Researchers used closed questionnaires with right or wrong answers. The number of knowledge questions about the importance of prenatal check-ups is 15 multiple-choice items

III. RESULT AND DISCUSSION

A. Univariate Analysis

1. Distribution of Pregnant Women by Age Category

No	Age	F	Percentage
1	<20 tahun	1	1,8 %
2	21-35 tahun	48	87,3 %
3	>35 tahun	6	10,9%
Total		55	100%

Based on the Table above, it shows that the majority of mothers are in the age group of 21-35 years, namely as many as 48 people (87.3%). Pregnant women who are over 35 years old are 6 people (10.9%) and pregnant women who are less than 20 year as much as 1 person (1.8%)

2. Distribution of Pregnant Women Based on Education

No	Education	F	Percentage
1	Elementary school	2	3,6 %
2	Junior high school	13	23,6 %
3	Senior High School	40	72,7 %
Total		55	100%

In the table above, there are a large number of pregnant women with high school education, namely 40 people (72.7%), then pregnant women with junior high school education are 13 people (23.6%) and pregnant women with elementary school education are 2 people (3.6%).)

3. Distribution of Pregnant Women Based on the Number of Children

No	Number of children	F	Percentage
1	Child 1	3	5,5%
2	Child 2	28	50,9%
3	Child 3	17	30,9%
4	Child 4	7	12,7%
Total		55	100%

In Table 3, there are 28 pregnant women who have a large number of children (50.9%), followed by 17 (30.9%) 3 children, 7 4 children (12.7%) and the number of children 1 as many as 3 people (5.5%).

4. Knowledge of Pregnant Women Before and After Education via WhatsApp

No	Knowledge	Pretest		Posttest	
		N	%	N	%
1	Good	1	1,8%	32	58,2%
2	Enough	37	67,3%	23	41,8%
3	Not Enough	17	30,9%	0	0 %
Total		55	100%	55	100%

Above knowledge about the importance of prenatal check-ups prior to education through whatapp, the majority of pregnant women with sufficient knowledge were 37 people (67.3%) and pregnant women with less knowledge were 17 people (30.9%) and found 1 person (1.8 %) pregnant women have good knowledge. After education through WhatsApp, knowledge about the importance of prenatal check-ups, the majority of pregnant women with good knowledge were 32 people (58.2%) and pregnant women with sufficient knowledge were 23 people (41.8%) and there were no pregnant women with poor knowledge after being given education. through WhatsApp about the importance of pregnancy checks.

B. Normality Test Results

The table above shows the asymp values. sig. both for the pretest ASI fluency score data is 0.000 <0.05 or declared not normally distributed and posttest 0.00 <0.05 or declared not normally distributed. Because the results of the study used non-parametric statistical tests through the Wilcoxon test as the basis for taking the results of hypothesis testing.

		Pretest	Posttest
N		55	55
Normal Parameters ^{a,b}	Mean	56.73	85.64
	Std. Deviation	9.241	9.956
	Absolute	.311	.342
Most Extreme Differences	Positive	.234	.203
	Negative	-.311	-.342
Tes Statistik		.311	.342
Asymp. Sig. (2-tailed)		.000 ^c	.000 ^c

C. Bivariate analysis

Table 6. Wilcoxon Test Results (Test Differences in Knowledge of Pregnant Women Before and After Education Through WhatsApp)

Tahap	Rata-rata Pengeahuan	Z-hitung	Sig.
Before education via WhatsApp	56,73	-6.932	0,000
After education via WhatsApp	85,64		

Table 6 above shows the average score before education via WhatsApp, the average value of knowledge is 56.73. After education via WhatsApp, there is an increase in the average value of pregnant women's knowledge about the importance of prenatal care, namely 85.64. Based on the Z-count value of -6.932 with a sig. (0.000) < 0.05, there is a difference in knowledge before and after education via whatsapp. This means that there is Effectiveness of Education with WhatsApp About the Importance of Pregnancy Checks for Increasing the Knowledge of Pregnant Women in Karangsinom Village, Tirtamulya District, Karawang Regency in 2023.

Discussion

A. Discussion of Univariate Data Results

The results showed that pregnant women experienced hypertension in terms of gestational age. In the study, it was found that the results of knowledge about the importance of prenatal checks before education was carried out through WhatsApp, the majority of pregnant women with sufficient knowledge were 37 people (67.3%) and pregnant women with less knowledge were 17 people (30.9%) and found 1 person (1.8%) pregnant women with good knowledge. After education through WhatsApp, knowledge about the importance of prenatal check-ups, the majority of pregnant women with good knowledge were 32 people (58.2%) and pregnant women with sufficient knowledge were 23 people (41.8%) and there were no pregnant women with poor knowledge after being given education. through WhatsApp about the importance of pregnancy checks. The results of this study are in line with the theory according to Latif & Tiala. (2022). In his research, he explained education via WhatsApp, which explained that education via WhatsApp had a positive impact on increasing knowledge because it provided easy access for its dissemination. The WhatsApp application has the advantage that almost all Indonesian people have this application in using the WhatsApp application. In education via WhatsApp, material providers can easily share material directly with respondents by sending links such as videos, images, so that students can access this material at any time, repeating when necessary so that the material is given and read repeatedly will help improve knowledge of someone.

Based on the theory and opinions of previous researchers that knowledge can be increased through the whatsapp application, the results of this study are proven by assessing knowledge before and after obtaining an average score before education via WhatsApp, the average value of knowledge is 56.73 after education through WhatsApp. whatsapp there is an increase in the average value of pregnant women's knowledge about the importance of pregnancy checks, namely 85.64. Therefore, the researchers argue that in order to facilitate interaction between targets to increase their knowledge, it is necessary to use the application via WhatsApp, where the majority of people already use WhatsApp in their daily lives. Just as researchers do by collecting targets in one group, then researchers can easily provide guidance, materials and questions about pregnancy in the group space. Therefore, the results of the current study have no gaps with previous studies which explain the advantages or benefits of using the WhatsApp application in increasing

one's knowledge so that the use of WhatsApp has a positive impact in facilitating health workers, especially midwives, in providing education by utilizing the WhatsApp application as a means of facilitating delivery information so that the achievement of targets in health can be carried out optimally.

B. Discussion on Pregnancy Examination on Increased Knowledge of Pregnant Women

In this study, the results of the Wilcoxon statistical test obtained a sig. (0.000) < 0.05, which means there is a difference in knowledge before and after education via whatsapp. It can be concluded that there is Effectiveness of Education with WhatsApp About the Importance of Pregnancy Checks for Increasing Knowledge of Pregnant Women in Karangsinom Village, Tirtamulya District, Karawang Regency in 2023. The results of this study are in line with Wuri Ratna Hidayani, (2022) who explained that with health education via whatsapp, pregnant women are enthusiastic about participating in this education as evidenced by being active in asking questions about these activities and being enthusiastic about healthy behavior by always carrying out early detection of anemia in pregnancy by carrying out examination at a health facility. The pocket book media can increase pregnant women's knowledge about pregnancy anemia in addition to listening to pregnant women in educational activities or outreach about pregnancy anemia. WhatsApp media is one of the media such as videos and flipcharts which functions to increase knowledge, especially pregnant women in preventing anemia. Video media and flipcharts are educational educational media that can increase pregnant women's knowledge in preventing anemia.

Health education media with videos is more effective than flipchart media in increasing pregnant women's knowledge and increasing positive attitudes in anemic pregnant women (Oktaviani, 2019) Based on theoretical opinions and previous research, the researcher believes that the results of this study indicate that the use of the WhatsApp application is an application that can increase mother's knowledge where information about the benefits and importance of routine prenatal checks can be conveyed in a detailed and easy to understand manner. Text messages, pictures and videos explaining the stages of prenatal check-ups, the purpose of each check-up, and how the check-up can monitor the health of the mother and fetus are well received by pregnant women. In addition, on WhatsApp, when material is submitted, it can be opened according to the needs of students and access to the material being conveyed so that it cannot be opened repeatedly when it is necessary to know the importance of the pregnancy examination. Therefore, it can be seen that between the current research and previous research there is no gap regarding education through WhatsApp and WhatsApp is very effective in efforts to use social media so that it can make it easier for midwives or health workers to convey information.

IV. CONCLUSION

Based on the results and discussion of the research results, it can be concluded that:

1. The majority of mothers are in the age group of 21-35 years, namely 48 people (87.3%), a large number of pregnant women with high school education, namely 40 people (72.7%), pregnant women who have 2 children which is a lot of 28 people (50.9%)
2. Knowledge about the importance of prenatal check-ups prior to education through whatsapp, the majority of pregnant women with sufficient knowledge were 37 people (67.3%) and pregnant women with less knowledge were 17 people (30.9%) and found 1 person (1.8 %) pregnant women have good knowledge.
3. After education through whatsapp, knowledge about the importance of prenatal check-ups, the majority of pregnant women with good knowledge were 32 people (58.2%) and pregnant women with sufficient knowledge were 23 people (41.8%) and there were no pregnant women with less knowledge after the implementation Providing education via WhatsApp about the importance of prenatal check-ups.
4. The average score before education via whatsapp was the average value of knowledge, namely 56.73. After education via WhatsApp, there was an increase in the average value of pregnant women's knowledge about the importance of prenatal checkups, namely 85.64.
5. Significant value. (0.000) < 0.05, there is a difference in knowledge before and after education via whatsapp. This means that there is Effectiveness of Education with WhatsApp About the Importance of Pregnancy Checks for Increasing the Knowledge of Pregnant Women in Karangsinom Village, Tirtamulya District, Karawang Regency in 2023.

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