

HEALTH EDUCATION USING ANIMATION VIDEO MEDIA TO IMPROVE PREGNANT WOMEN'S KNOWLEDGE ABOUT HEPATITIS B

Suryati Romauli^{1*}, Eka Setyaningsuci²

^{1,2}Polytechnic of Health Indonesian Health Ministry, Study Program of Diploma III Midwifery Jayapura
Correspondence email : yatikutobing77@gmail.com

ABSTRAK PENDIDIKAN KESEHATAN MENGGUNAKAN MEDIA VIDEO ANIMASI DALAM MENINGKATKAN PENGETAHUAN IBU HAMIL TENTANG PENYAKIT HEPATITIS B

Latar Belakang : Penyakit hepatitis B dalam kehamilan sekarang ini semakin meningkat dan mampu memicu efek koagulasi, kegagalan organ pada ibu hamil serta penularan infeksi secara vertikal ke janin yang dikandung. Pencegahan penularan dalam kehamilan diperlukan dengan memberikan informasi yang lengkap tentang penyakit hepatitis B, salah satunya dengan melakukan penyuluhan melalui media video animasi.

Tujuan : Penelitian ini bertujuan untuk mengetahui pengaruh penyuluhan kesehatan melalui media video animasi terhadap peningkatan pengetahuan perempuan hamil tentang penyakit hepatitis B.

Metode : Jenis penelitian ini adalah *quasi eksperiment* dengan rancangan *pretest posttest with control group*. Populasi dalam penelitian ini adalah perempuan hamil yang berkunjung ke Puskesmas Sentani yang memenuhi kriteria inklusi. Teknik pengambilan sampel dengan *simple random sampling* dengan jumlah sebanyak 60 responden yang dibagi menjadi 2 kelompok yaitu 30 responden untuk kelompok intervensi yang akan diberikan penyuluhan kesehatan melalui media video animasi dan 30 responden untuk kelompok kontrol yang tidak dilakukan intervensi. Instrumen penelitian menggunakan kuesioner dan data dianalisis menggunakan uji *Wilcoxon Signed Rank Test*

Hasil : Setelah dilakukan penyuluhan kesehatan melalui media video animasi, terdapat peningkatan pengetahuan perempuan hamil tentang penyakit hepatitis B secara signifikan pada kelompok intervensi sebesar 0,000 ($<P0,05$).

Kesimpulan: Penyuluhan kesehatan melalui media video animasi berpengaruh dalam meningkatkan pengetahuan perempuan hamil tentang penyakit hepatitis B.

Saran : Petugas kesehatan diharapkan lebih meningkatkan pengetahuan masyarakat tentang penyakit hepatitis B melalui media video animasi.

Kata Kunci : Hepatitis B, Penyuluhan Kesehatan, Video Animasi

ABSTRACT

Background: Recently, Hepatitis B disease in pregnancy is increasing and can be trigger a coagulation effect, organ failure in pregnant women and vertical transmission of infection to the fetus. Prevention of transmission in pregnancy is required by providing complete information about hepatitis B, one of which is by conducting counseling through animated video media.

Purpose: This study aims to determine the effect of health education using animated video media in increasing knowledge of pregnant women about hepatitis B disease.

Method: This type of research is a quasi-experimental design with pretest posttest with control group. The population in this study were pregnant women who visited the Sentani Health Center who met the inclusion criteria. The sampling technique was simple random sampling with a total of 60 respondents who were divided into 2 groups, namely 30 respondents for the intervention group who would be given health education through animated video media and 30 respondents for the control group without intervention. The research instrument used a questionnaire and the data were analyzed using the Wilcoxon Signed Rank Test.

Results: After conducting health education using animated video media, there was a significant increase in knowledge of pregnant women about hepatitis B in the intervention group by 0.000 ($<P0.05$).

Conclusion: Health education using animated video media has an effect in increasing the knowledge of pregnant women about hepatitis B disease.

Suggestion: Health workers are expected to increase public knowledge about hepatitis B disease using animated video media.

Keyword : Hepatitis B, Health Education, Video Animation

INTRODUCTION

One of the health problems that has become an important issue for people in the world is hepatitis B because it infects almost two billion people, of which 350 million people are pregnant women. This disease can cause coagulation, organ failure in pregnant women and can increase maternal and newborn mortality in pregnant women (Shukla et al., 2011).

Based on the high prevalence of hepatitis B virus infection, the World Health Organization (WHO) divides it into 3 types of endemic areas, namely: high (10-15%), moderate (8%) and low (5%). Meanwhile, the prevalence rate of HBV in developing countries is Indonesia (10%), Malaysia (5.3%), Brunei (6.1%), Thailand (8%-10%), Philippines (3.4%-7%). (World Health Organization, 2018).

Indonesia ranks third with the most hepatitis B sufferers, namely 1.07% per 100,000 population after Myanmar (2.03%) and Bangladesh 1.38. In 2017 there were 12,946 pregnant women affected by HBV. Complications that can occur in pregnant women with HBV infection include abortion, IUFD and preterm delivery (World Health Organization, 2018).

The risk of contracting Hepatitis B will increase over time, depending on the severity of the infection. More than 90% of newborns, 50% of children and 5% to 10% of adults are infected with the Hepatitis B virus and develop chronic Hepatitis B. Because it is easier for a person to be infected with the hepatitis B virus, the risk of developing chronic liver disease increases thereby increasing the risk of complications such as cirrhosis and liver cancer (Shukla et al., 2011).

The government has held a national program in the prevention and control of the hepatitis B virus which focuses on the Prevention of Mother to Child Transmission (PPIA) because 90% of the spread of the hepatitis B virus occurs vertically, from mothers who are positive for hepatitis B to their babies.

In order for pregnant women to know prevention so that there is no transmission of the hepatitis B virus from mother to baby, complete information is needed about hepatitis B virus disease. Research conducted by (Zulfian, 2018), detected that there is a relationship between parental knowledge about hepatitis B with cases of hepatitis B in pregnant women, which is exacerbated by several factors, including predisposing factors and risk factors (Zulfian, 2018).

According to (Ministry of Health RI, 2018), Papua is at the top with a positive HBsAg prevalence of 4.09 percent per 1000 people. East Nusa Tenggara (5.53 percent) and North Maluku are the two provinces that show the highest other HBsAg

reactive pregnant women (4.53 percent). In Papua Province, there were 547 people who experienced HBsAg reactivation, while 169 people (30.8%) had received HBIG immunization (Ministry of Health RI, 2018).

Therefore, efforts that can be made in the prevention and control of the hepatitis B virus are by providing health promotion or counseling so that it will increase the understanding of pregnant women about hepatitis B disease prevention. The success of health education in the community depends on the components or learning media. Attractive media will provide confidence so that affective and psychomotor cognitive changes can be accelerated (Setiawati & Dermawan, 2018).

Data from the Jayapura District Health Office in 2019, it was recorded that from 2780 pregnant women who screened for HIV, syphilis and Hepatitis B, there were 280 women who were positive for Hepatitis B and there was an increase in cases in 2020, namely 315 women with hepatitis B (District Health Office Jayapura, 2020).

A preliminary study conducted by the author at the Sentani Health Center in Jayapura Regency in 2020, the number of hepatitis cases in pregnant women was 114 cases from 987 pregnant women who screened for HBV and based on the results of interviews with the MCH coordinator midwife, usually given health education about hepatitis B when women Pregnant women came for the first visit to prepare for screening for sexually transmitted diseases, but did not discuss hepatitis B in depth.

Various available communication media can be used to disseminate information in the prevention of hepatitis B disease in pregnant women. In the opinion of (Surawati et al., 2020), that video media is an effective media used in increasing the knowledge of pregnant women about the dangers of hepatitis B before and after being given information which shows $p = ,000$.

With the many variations of methods used to help promote the prevention of hepatitis B disease in pregnancy, the researchers are interested in proving the effect of health education using modified animated video media, where the theory is packaged in an attractive way by using moving image media accompanied by the voice of the researcher supports image movement so that there are differences with previous studies.

This study aims to study the effect of health education using animated video media in increasing knowledge of pregnant women about hepatitis B disease.

RESEARCH METHODOLOGY

This research is based on a quasi-experimental design with two groups with control post-test design. There are two types of groups, namely the intervention group who received treatment in the form of hepatitis B counseling using animated video media for 15 minutes and the control group who did not receive treatment.

This study was conducted from June to October 2021 at the Sentani Health Center, Jayapura Regency. The study population was 152 respondents from all pregnant women who came to visit from July to December 2020. The collection of 30 samples for the intervention group and 30 samples for the control group used simple random sampling technique.

Collecting data using primary data in the form of questionnaires and secondary data. The media used by researchers to provide counseling about hepatitis B disease is video media that has been designed in such a way by researchers. Univariate analysis was conducted to determine the characteristics of the distribution of respondents

(age, education, occupation and parity) and the distribution of knowledge before and after the intervention. Bivariate analysis using the Wilcoxon Signed Rank Test was performed in this study.

This research has passed an ethical review and received a statement of ethical feasibility from the Health Research Ethics Commission of the Health Poltekes of the Ministry of Health Jayapura number 079/KEPK-J/VI/2021.

RESEARCH RESULT

Univariate Analysis

Based on table 1, it was found that of the 30 pregnant women respondents in the intervention group, most of them were aged 20-35 years (66.7%), with secondary education/high school education (53.3%), not working (76.7%) with parity multigravida (63.3%). While in the control group, most of them were 20-35 years old (50%), had secondary education/high school (63.3%), did not work (70%) with multigravida parity (43.3%).

Table 1.
Frequency Distribution of Respondents Characteristics of Pregnant Women

Characteristic	Intervention Group		Control Group	
	f	%	f	%
Age				
< 20 years	5	16,7	6	20
20-35 years	20	66,7	15	50
> 35 years	5	16,7	9	30
Education				
Low (Elementary)	6	20	4	13,3
Middle (High School)	16	53,3	19	63,3
High (Graduates)	8	26,7	7	23,3
Occupation				
Working	7	23,3	9	30
Not Working	23	76,7	21	70
Paritas				
Primigravida	7	23,3	9	30
Multigravida	19	63,3	13	43,3
Grandemultipara	4	13,3	8	26,7
Total	30	100	30	100

Based on table 2, the results obtained before being given health education about hepatitis B disease using animated video media, in the intervention group most of them had less knowledge

(56.6%), and a small part had good knowledge (16.7%), while in the control group, most of them also have poor knowledge (70%) and a small proportion have good knowledge (10%).

Table 2.
Distribution of Knowledge of Pregnant Women About Hepatitis B Disease Before Giving Health Education Using Animated Video Media

Knowledge Variable	Intervention Group		Kelompok Kontrol	
	F	%	F	%
Good	5	16,7	3	10
Enough	8	26,7	6	20
Less	17	56,6	21	70
Total	30	100	30	100

Table 3.
Distribution of Knowledge of Pregnant Women About Hepatitis B Disease After Being Given Health Education Using Animated Video Media

Knowledge Variable	Intervention Group		Control Group	
	f	%	f	%
Good	20	66,7	6	20
Enough	10	33,3	5	16,7
Less	0	0	19	63,3
Total	30	100	30	100

Based on table 3, the results obtained after being given health education about hepatitis B disease using animated video media, in the intervention group most of them had good knowledge

(66.7%), and a small portion had sufficient knowledge (33.3%), while in the control group most have less knowledge (63.3%) and a small part have sufficient knowledge (16.7%).

Table 4.
The Effect of Health Education Using Animated Video Media To Increase Knowledge of Pregnant Women About Hepatitis B Disease

Knowledge Intervention Group	Before Intervention		After Intervention		Nilai <i>p</i>
	f	%	f	%	
Good	5	16,7	20	66,7	,000
Enough	8	26,7	10	33,3	
Less	17	56,6	0	0	

Based on table 4, the results show that from the Wilcoxon Signed Rank Test it is known that the value of Sig (2 tailed) = 0.000 < 0.05, it can be concluded that Ho is rejected and Ha is accepted, so there is a significant correlation between health education using animated video media. in increasing knowledge of pregnant women about hepatitis B disease.

DISCUSSION

Based on the research, the results obtained before being given health education about hepatitis B through animated video media, in the intervention group most of them had less knowledge (56.6%),

while in the control group most of them also lacked knowledge (70%).

This is in line with the findings of (Astuti & Anggraini, 2021), in the area of UPT Puskesmas Blora where it is known that WUS knowledge about prevention of hepatitis B in pregnancy in the pretest of both groups before being given counseling using animated hepatitis B videos is mostly less knowledgeable (60%), also supported by research by (Zulfian, 2018), where most of the 37 pregnant women (71.2%) at the Beringin Health Center, Lubai District, Palembang City lacked knowledge about hepatitis B.

According to the researcher's view, the knowledge of pregnant women before giving the intervention was not in the good category because many pregnant women did not understand about hepatitis B disease, only understood the summary but did not understand in depth about hepatitis B disease, its symptoms, causes, prevention and treatment.

Factors causing knowledge of pregnant women who cannot be classified in either category due to lack of access to information, according to interviews at the time of initial data collection according to the MCH coordinator midwife, usually given health education about hepatitis B when pregnant women come for the first visit to prepare for disease screening sexually transmitted disease, but not specifically discussed about hepatitis B disease.

This should be a concern for the Puskesmas to provide more information about hepatitis B by using counseling methods or even methods that have been modified to follow trends to increase knowledge of pregnant women about hepatitis B.

The results of research from (Basri, 2021), prove that health workers have a very large impact in conveying information about hepatitis B, both directly and indirectly. Thus, health workers in charge of health promotion can provide counseling on hepatitis B disease during pregnancy, which is a very good thing.

In addition to the lack of information obtained, when viewed from the characteristics of the respondents, in the intervention group most of the pregnant women had secondary education 53.3% and in the control group 63.3%. According to Green's (1980) theory, socio-demographic factors in education have a significant impact on the achievement of health services, especially if the respondent has a high level of understanding.

Educational background is able to influence the way individuals think and observe themselves and their environment, such as the assumptions of researchers. (Indriani & Anggraini, 2021), based on the results of their research on indicators that affect hepatitis B cases in pregnant women, where it was found that there was a relationship between education and mother's knowledge about hepatitis B in pregnancy where $P = 0.02$.

This is also supported by (Nugroho, 2019), which found a significant relationship between education and knowledge about hepatitis B in children with $P = 0.02$; 95 percent CI = 1.20-5.45 and OR 2.56, indicating that mothers Pregnant women with secondary education are more likely to have a low understanding of hepatitis B during pregnancy.

Based on the results of the study, which was obtained after being given health education about hepatitis B through animated video media, most of the intervention group had good knowledge (66.7%), while most of the control group had less knowledge (63.3 %).

These results indicate that a short health education intervention will have a positive impact on increasing one's knowledge. This is also in line with the results of research by (Rahmadona, 2017), which increased the knowledge of pregnant women about hepatitis B in pregnancy, where most of the mothers after the intervention had an increase in knowledge of pregnant women about hepatitis B in pregnancy with an average initial score of understanding 66.85 to 78.33 with a mean comparison of 11.48.

When presenting the counseling material, it is done by playing a video about hepatitis B which is packaged in an attractive way by modifying the animation using moving images where the message is conveyed using the voice of the researcher so that it attracts the attention of the listeners. The reviewer also examines the content of the video so that the information obtained by the respondents is more optimal.

During the outreach activities, although there may be some respondents who are less enthusiastic about hepatitis B, most of the respondents are very happy to see the shows and the information provided, where respondents are brought into a pleasant atmosphere and there is no pressure. (Prabandari, 2018), which explains about the selection and use of assistive devices is one of the essential elements to do to support the best use of the senses.

A person gains knowledge through his five senses where most of it is in the sense of sight (eyes) by 83% and the sense of hearing (ears) by 11% and the rest through the sense of taste 1%, the sense of touch 2% and the sense of smell 3% (Kustandi & Sutjipto, 2011). The views, responses, characteristics, and information conveyed by health education providers will be easily accepted and used to increase the knowledge of pregnant women, especially about hepatitis B.

(Rumini, 2018), suggest that the use of video media is efficient when providing health education in the community. This condition is in accordance with the findings of (Permana et al., 2019), who found evidence of the impression of health education using the audiovisual method, by the speed with which the information was provided.

According to the researcher's assumption that animated video media is a modern interactive device that always makes adjustments to the development

of scientific and technological advances. The animated video message delivered will be more efficient because the movement of the image can communicate the message reliably and concretely so that it can spur the interpretation of the message more effectively. Increased knowledge is able to change the perspective and understanding of hepatitis B disease, its causes, modes of transmission, forms of transmission, incubation period, signs and symptoms, vulnerable groups, diagnosis, prevention and treatment of hepatitis B in pregnancy.

The results of the Wilcoxon Signed Rank Test show that the value of Sig (2 tailed) = 0.000 < 0.05, it can be concluded that H_0 is rejected and H_a is accepted, so there is a significant correlation between health education through animated video media and increasing knowledge of pregnant women about diseases. hepatitis B. This means that animated video media is an effective medium in providing health education because videos have several advantages, including being more interesting and easier to understand, with animated videos one can learn on their own, can be repeated in certain parts that need more attention. clearly and displays something in detail (Prabandari, 2018).

The results of this study are in line with the research of (Yanti et al., 2021), regarding counseling with video media through whatsapp groups about hepatitis B on the knowledge of pregnant women in Sibangkaja Village, where the Wilcoxon test results are known to have a value in the control group with a p value of 0.000 < 0.05 with The interpretation is that there is an effect of counseling with video media through whatsapp groups on the knowledge of pregnant women.

This study is supported by previous research conducted by (Jafar, 2020), at SMP Negeri 3 Narmada, Narmada District, West Lombok Regency where the results of the Wilcoxon sum runk test showed a P value of 0.000 < 0.005 meaning that it had an influence on the use of video media on the knowledge of respondents before and after after promoting health education about hepatitis B, where the results of health education have a significant influence on behavior change.

According to the researcher's assumption that the animated video media in this study can be used as a medium to promote to the public as an effort to prevent hepatitis B in pregnancy. In this study, the animated video media acts as a stimulus that functions to attract respondents, namely pregnant women as organisms so that the results of the response are found in the form of changes in knowledge about hepatitis B disease.

In creating a stimulus that has more power than the previous stimulus, the efforts that can be made must be more creative, innovative, interesting and in accordance with the goals. The use of animated video media that researchers use is very different from other media so that it is easier for the target to understand, this is supported by (Hardian & Fajar, 2018), about the impact of family health education on hepatitis B with steps to prevent hepatitis B transmission at IRNA VIII RSUD dr. Saidiman Magetan where the significant value obtained is less than 0.005 then H_1 can be accepted which indicates there is a significant effect.

CONCLUSION

Health education provided using animated video intermediaries in the intervention group had a significant effect in increasing pregnant women's knowledge about hepatitis B disease.

SUGGESTION

It is hoped that health workers will increase public awareness about hepatitis B disease using video media as IEC media so that the number of hepatitis B disease in pregnancy can be reduced.

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