



Influence of Video Health Education on Knowledge and Attitudes toward Menopausal Nutrition.

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ABSTRACT

Menopause is a condition with a decrease in reproductive physiological function in women which results in a decrease in ovarian function which can result in a reduction and possibly a loss of reproductive estrogen. This research is a type of quantitative research with a research design using Quasy experiment with a pre-test post-test control group approach of 32 respondents divided into treatment groups and control groups. By using the research design "Non Equivalent Control Design" or "Non Randomized Control Group Pretest-Posttest Design", namely research to compare the results of interventions in the experimental group and the control group by sampling without purposive sampling. Statistical test results using the Wilcoxon Signed Rank Test in the treatment group, a significant value (p) of 0.001 was obtained, which was smaller than α 0.05, so the hypothesis was accepted, and in the control group, after the Wilcoxon test was carried out, a significant value (p) of 0.011 was obtained, which was greater than α 0.05, so the hypothesis was rejected, and it could be seen that in the treatment group there are significant attitude values, while in the control group there are no significant differences in attitude values. The results of statistical tests using the Mann Whitney U Test obtained a significant value (p) of 0.000, which is smaller than α 0.05 so that the hypothesis was accepted.

Keywords: *attitudes of menopause mother, knowledge, Video media*

INTRODUCTION

Menopause is a condition characterized by a decline in physiological reproductive function in women, leading to decreased ovarian function, which can result in a reduction or potential loss of estrogen production. A woman is considered to be in menopause when she has not had her period for 12 months. Typically, when a woman reaches the age of 40 to 50, her menstrual cycle may become irregular, and ovulation may begin to cease. After several months or even years, this cycle may stop completely. The balanced nutritional status of each individual is influenced by their knowledge and attitudes towards balanced nutrition. Knowledge can indirectly affect a person's nutritional status, as it involves processing information into understanding and potential. This results in an individual's awareness of the need to meet their nutritional requirements based on the knowledge they possess (Astikasari & Tuszahroh, 2019).

Demographic data from WHO indicates that each year, 25 million women worldwide experience menopause, resulting in an estimated 1.2 billion postmenopausal women by 2030. The Department of Reproductive Health estimates that the number of menopausal women in Asia will rise from 107 million to 373 million by 2025

(Atikah & Wulansari, 2023).

The East Java Province Welfare Indicators Report released by BPS Jatim states that the percentage of elderly individuals (aged over 60) in East Java reached 13.57% (5.58 million people) of the total population of approximately 41.14 million in 2021 (BPS, 2021). According to WHO, in 2018, there were 17 million deaths globally due to cardiovascular diseases, with 9.4 million caused by complications related to hypertension. The prevalence of hypertension in East Java is 1,377,356 (15.15%) (Kemenkes RI, 2019).

In Surabaya alone, according to the Health Profile of the East Java Health Office in 2021, there were approximately 279,613 cases of menopause in 2020. Based on nutritional status data from the East Java Ministry of Health in 2017, among adult or menopausal women, 5.1% were underweight, 46.7% were normal weight, 15.3% were overweight, and 32.9% were obese.

The causes of menopausal complaints include inadequate nutrition, while balanced nutrition can help menopausal women mitigate various negative impacts of menopause on brain function, prevent dry skin, and avoid degenerative diseases. The effects experienced by menopausal women

due to unbalanced nutrition include excessive hot flashes and emotional changes, which can increase significantly. The incidence of bone fragility (osteoporosis) and cardiovascular diseases increases among menopausal women. Bone fragility often leads to a higher risk of fractures. A study conducted by Fajriani (2020) indicates that knowledge, attitudes,

and behaviors are three factors that can influence an individual's nutritional status. A person with positive behaviors regarding balanced nutrition tends to possess good knowledge and attitudes, which translates into appropriate actions to meet their nutritional needs (Astikasari & Tuszahroh, 2019).

METODE

This study employs a quasi-experimental design with a pretest-posttest control group design. The research was conducted from December to May 2024 at the Puskesmas Pucang Sewu in Surabaya. The population consists of menopausal women aged 45-55 years in the Puskesmas Pucang Sewu area, totaling 64 individuals. A sample of 32 participants was selected using purposive sampling based on inclusion and exclusion

criteria, following the Federer formula.

The independent variable in this study is video, while the dependent variables are knowledge and attitudes. Data collection was carried out using questionnaires. Data analysis was performed using SPSS for Windows, which included normality tests, the Wilcoxon Signed Rank Test, and the Mann-Whitney U Test

RESULTS AND DISCUSSION

RESULTS

Respondent Characteristics

In this study, there were 32 adolescent girls divided into two groups: 16 in the experimental group and 16 in the control group. The characteristics of the respondents are presented as follows:

Table 1 Frequency Distribution of Menopausal Women Characteristics Based on Age, Occupation, and Education.

Characteristics of Mothers	Treatment Group		Control Group	
	f	%	f	%
Age				
40-55 years old	16	100%	16	100%
	16		16	

Occupation				
Not employed	14	87,5%	9	56,3%
Employed	2	12,5%	7	43,8%
	16		16	
Education				
Primary Education	7	43,8%	11	68,8%
Secondary Education	4	25,0%	3	18,3%
Higher Education	5	43,8%	2	12,5%
	16		16	

Data Source: Primary Data (2024)

Table 1 shows the pretest results for the treatment group before the intervention using video media, where 93.8% had inadequate knowledge. After the intervention, the posttest results indicated that nearly all respondents in the treatment group had good knowledge (93.8%).

Knowledge of Adolescent Girls

Table 2 Frequency Distribution of Knowledge Before and After the Video Intervention in the Treatment Group and Leaflet in the Control Group for Menopausal Women.

Knowlwdge	Treatment Group				Control Group			
	Pretest		Posttest		Pretest		Posttest	
	f	(%)	f	(%)	f	(%)	f	(%)
Good	0	0	15	93,8	0	0	8	50,0
Sufficient	1	6,3	1	6,3	1	6,3	8	50,0
Poor	15	93,8	0	0	15	93,8	0	0
Totall	16	100	16	100	16	100	16	100

Data Source: Primary Data (2024)

Table 2 shows the pretest results for the treatment group before the intervention using video media, where 93.8% had poor knowledge. The posttest results indicated that almost all respondents in the treatment group had good knowledge.

Attitudes of Adolescent Girls

Table 3. Frequency Distribution of Knowledge Before and After the Video Intervention in the Treatment Group and Leaflet in the Control Group for Menopausal Women.

Attitude	Treatment Group				Control Group			
	Pre test		Post test		Pre test		Post test	
	f	(%)	f	(%)	f	(%)	f	(%)
Positive	6	37,5	15	93,8	6	37,5	10	62,5
Negative	10	62,5	1	6,3	10	62,5	6	37,5
Total	16	100	16	100	16	100	16	100

Data Source: Primary Data (2024)

Table 3 shows the pretest results for the treatment group before the intervention using video media, where 62.5% fell into the negative category and 37.5% into the positive category. The posttest results indicate that, in general, there was an improvement in attitudes, with nearly all

respondents in the treatment group exhibiting positive attitudes (93.8%) after the intervention, while only 6.3% maintained negative attitude.

The Influence of Animated Video Media on Knowledge and Attitudes of Adolescent Girls

Table 4. Wilcoxon Test Results for Pretest and Posttest

Variable	Treatment Group					Control Group				
	Pretest		Posttest		<i>p-value</i>	Pretest		Posttest		<i>p-value</i>
	Mean	SD	Mean	SD		Mean	SD	Mean	SD	
Knowledge	56.88	6.02	75.94	4.17	0.00	55.31	6.94	62.50	4.83	0.15
Attitude	67.63	2.33	72.56	2.25	0.000	70.88	2.80	63.19	3.25	0.000

Data Source: Primary Data (2024)

Based on Table 4, the results of the Wilcoxon signed rank test indicate a significant *p*-value of 0.000 in the treatment group, which is <0.05 , meaning that video media is effective in improving the knowledge of menopausal women. The Wilcoxon signed rank test results for the control group also show a *p*-value of 0.000 <0.05 , indicating that leaflet media can

enhance menopausal women's knowledge about balanced nutrition. Therefore, it can be concluded that H1 is accepted and H2 is rejected, which means there is an effect of video-based health education on the knowledge and attitudes of menopausal women

Differences in Knowledge and Attitude Improvement Among Adolescent Girls

The respondents in this study in the treatment group used video media, while the control group used leaflets. To assess the effectiveness of video media compared to leaflets, a Mann-Whitney U Test was conducted.

Table 5 Differences in Knowledge and Attitude Improvement Among Menopausal Women

Respondent Groups	Pengetahuan			Sikap		
	Mean	SD	<i>P</i>	Mean	SD	<i>p</i>
Treatment Group	75.94	4.17	0.00	76.56	2.25	0.000
Control Group	62.50	4.83		63.19	3.25	

Data Source: Primary Data (2024)

Based on Table 5, there is a significant difference between video media and leaflets. The improvement in knowledge and attitude is higher among respondents who received

education through video media compared to those who received leaflets. This can be seen from the mean values presented in Table 5. The results of the Mann-Whitney U Test

indicate a p-value of 0.019 for knowledge ($p < 0.05$) and a p-value of 0.023 for attitude ($p < 0.05$). These results show that there are significant differences between the treatment group and the control group after receiving health education using video and leaflet media. The increase in knowledge and

attitude among respondents educated with video media is higher than that of those educated with leaflets, indicating that video-based health education for achieving balanced nutrition is more effective than leaflet media.

DISCUSSION

Based on the analysis conducted, it was found that the knowledge and attitudes of menopausal women regarding balanced nutrition showed an improvement before and after receiving video-based health education. The results of the statistical test for knowledge and attitudes before and after the intervention, using the Wilcoxon Signed Rank Test, indicated significant values, meaning there were differences in the knowledge and attitudes of the women. Therefore, it can be concluded that video media is effective in enhancing the knowledge and attitudes of menopausal women. Thus, it can be concluded that education using this leaflet media is very effective in improving the knowledge and attitudes of menopausal women regarding balanced nutrition.

According to the research conducted by Romiko (2020), there are several factors that influence an individual's knowledge, including age and education. Age and

education can lead to a lack of awareness, while education can facilitate the learning process, enabling individuals to develop their potential. personality, intelligence, and the skills needed for personal development. These factors can significantly influence an individual's daily life. Another factor affecting a person's knowledge is the source of information, as it can enhance understanding and knowledge in everyday life. Information plays a crucial role because it helps in acquiring the knowledge we seek (Pengabdian & Kebidanan, 2019).

The use of appropriate educational media to deliver information to the target audience can improve knowledge and lead to positive behavioral changes. According to research conducted by Widyasari & Sari (2019), health education is a health practice aimed at changing the behavior of individuals, groups, and larger populations toward healthier behaviors. Accurate information

provides positive stimulation regarding healthy living.

The researchers recommend that health services adopt video-based health education as an intervention for menopausal women concerning balanced nutrition. This is because video media engages both visual and auditory senses, allowing respondents to read, see, and listen to explanations about balanced nutrition in menopause (Nurma Yunita, 2021).

The results of the study, both in the treatment and control groups, showed that the impact of health education on balanced nutrition for menopausal women influenced their knowledge and attitudes. The findings

indicate a significant difference in knowledge and attitudes between the treatment group and the control group, particularly regarding the use of media health education through video and leaflets. The increase in knowledge and attitudes was higher among respondents who received health education using video media compared to those who used leaflets. Is very suitable for today's digital era. This facilitates respondents in accessing information anywhere and anytime, and they can also watch the information multiple times. It can be said that video media provides equal opportunities for each respondent to obtain information.

CONCLUSION

Based on the research conducted at the Sekar Melati Posyandu of Puskesmas Pucang Sewu Surabaya and outlined in the previous discussion chapter, the researcher concludes that health education using video media is effective in improving knowledge among menopausal women regarding balanced nutrition.

Health education through video media can also positively change the attitudes of menopausal women. The video media has been proven effective in enhancing the knowledge and attitudes of menopausal

women. Animated video media can further increase knowledge. And change the positive attitudes of menopausal women compared to leaflet media.

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