

Effect of Health Education Using WhatsApp Group on Knowledge About Visual Inspection Acetate Test

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ABSTRACT

Background: According to the World Health Organization (WHO) in 2016 nearly 9 million women died from cervical cancer. Public awareness to detect early the disease is low. Visual Inspection Acetate (VIA) test for cervical cancer is considered a taboo solution. Women feel embarrassed to carry out VIA examination. Research is lacking whether health education through communication media using WhatsApp groups is effective. This study aimed to determine the effect of health education using WhatsApp group on knowledge about cervical cancer and VIA.

Subjects and Method: This was a quasi-experiment with one group pre-test and post-test design, conducted at the Simpang Kiri Health Center in February 2023. A total of 98 women of reproductive age were selected for this study. The dependent variable was knowledge about cervical cancer and VIA. The independent variable was health education using WhatsApp group. The data were collected by questionnaire. The mean difference of knowledge before and after WhatsApp group education was tested by paired t-test.

Results: The mean score of knowledge about VIA after WhatsApp group education was higher (Mean= 16.61; SD= 3.24) than before (Mean= 11.35; SD= 1.69), and this was statistically significant ($p = 0.011$).

Conclusion: WhatsApp group education is effective to improve knowledge about cervical cancer and VIA among women of reproductive age.

Keywords: WhatsApp, education, knowledge, visual acetate inspection.

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BACKGROUND

Reproductive health is important for everyone, especially women. From the womb until death. One disease that disrupts the function of the reproductive organs is cervical cancer or cervical cancer. Cervical cancer is caused by human papilloma virus (HPV) types 16

and 18. Cervical cancer is the most dangerous disease affecting women and is deadly.

Based on WHO data (2013), it is stated that IVA can detect pre-cancerous lesions with a sensitivity of around 66 – 69% and a specificity of 64 – 98%. Meanwhile, the positive predictive value is between 10 - 20%

and 92 - 97% respectively (Wantini and Indriyani, 2019).

Based on data from the Ministry of Health (Kemenkes), the incidence of cervical cancer in Indonesia has reached 23.4 people per 100 thousand population. The death rate due to cervical cancer reaches 13.9 people per 100 thousand population. Where the incidence of cervical cancer is increasing every year (Kusumadinata, 2018).

From the data obtained, the incidence of cervical cancer is still high in Indonesia, it can be seen that one of the causes of the still high incidence of cervical cancer is, sending and receiving messages for free without being charged SMS fees, because internet data packages for web browsing and email are valid for WhatsApp users. Whatsapp is used as the world's most popular short and instant message sender and has reached 1 billion active users every day, on average 1.3 billion active users use WhatsApp every month, of the 55 billion messages, 4.5 billion are in the form of photos while 1 billion are photos. In Indonesia WhatsApp users reach 58% (Yudhiyanto, 2017).

WhatsApp makes it easier for health workers and cadres to provide counseling by creating a WhatsApp group. Because of the other media that have been carried out during counseling, such as videos, it is quite good, but there are still many mothers who do not come when the counseling is carried out. Due to other reasons such as the distance being quite far, the husband not having permission and feeling that it was not that important. Therefore, counseling is carried out using WhatsApp groups where videos about cervical cancer or information can be shared via WhatsApp groups that have been created (Khasanah et al., 2019).

From data from the North Sumatra Provincial Health Service for cancer sufferers in 2015, 14,716 women underwent IVA examinations, 14,676 of them tested negative

(99.72%) and 40 of the 14,676 people tested positive (0.27%) (North Sumatera Health Office, 2015). An IVA examination can be carried out effectively if you use attractive delivery media. One media that can be used is social media such as WhatsApp. Previous researchers showed results that counseling using media can increase mothers' knowledge and increase mothers' awareness of carrying out IVA tests (Ayu, 2019).

Forms of technological development include smartphones, which are widely used by people regardless of age. Smartphones have applications, one of which is WhatsApp. Whatsapp functions for community health centers that provide counseling. This study aims to analyze the effect of using WA on knowledge about IVA at the Simpang Kiri Community Health Center, Simpang Kiri District, Subulussalam in 2023.

SUBJECTS AND METHOD

1. Study Design

This type of study is a quasi-experimental design or quasi-experiment with a pretest - posttest design, namely a study design where the researcher intervenes/treats the subject. This study was conducted at the Simpang Kiri Community Health Center, Simpang Kiri District, Subulussalam City. This study was conducted from February – May 2023.

2. Population and Sample

The population in this study were all WUS who carried out IVA examinations at Simpang Kiri Community Health Center. The sample for this study was all WUS who carried out VIA examinations, totaling 98 WUS consisting of 49 case groups and 49 control groups. The case group in this study is WUS who carried out a VIA examination and did not join the WhatsApp group. Meanwhile, the control group in this study was (WUS) who carried out a VIA examination and joined the WhatsApp group.

3. Study Variable

The dependent variable was knowledge about cervical cancer and VIA. The independent variable was health education using WhatsApp group

4. Operational Definition of Variable

WUS knowledge about IVA is WUS's ability to answer questions including the causes of cervical cancer, who gets cervical cancer, preventing cervical cancer, the purpose of IVA examination, the benefits of IVA examination. The measuring tool uses a questionnaire using an interval scale. If you answer the question correctly you will be given a code of 1 and if you answer the question incorrectly you will be given a code of 0.

Health Education using WA groups is the use of WhatsApp groups which is measured through indicators, namely by using WhatsApp groups, all subjects have the WhatsApp application.

5. Study Instrument

This study instrument uses a WhatsApp group and a questionnaire about IVA. WhatsApp

use was measured using WhatsApp groups and WUS knowledge was measured with a questionnaire about IVA.

6. Data Analysis

Analysis of this study data is by using the T Test, which is a test that looks at the influence of all independent variables together on the dependent variable.

7. Research Ethics

Study ethics are using informed consent, anonymity, confidentiality. A letter of approval for study ethics permission was obtained from the Research Ethics Committee of the Medica Bakti Persada Midwifery Academy, Subulussalam City, No.003/Yckb/Akbid-MBP/2022, on May 20 2022

RESULTS

1. Sample Characteristics

Table 1 shows that the majority of subjects were 22 (44.9%) years old with ages ranging from 19 to 23 years and 28 people (57.1%) had poor knowledge.

Table 1. Sample characteristics

Sample characteristics	Frequency (n)	Percentage (%)
Age		
19 – 23 years old	22	44.9
24 – 28 years old	16	32.7
29 – 34 years old	11	22.4
Knowledge		
Good	21	42.9
Poor	28	57.1

1. Bivariate analysis

Table 2 shows that the total subjects were 49 WUS. Bivariate results show that the average knowledge score about IVA after the

intervention was higher (Mean= 16.61; SD= 3.24) than before the intervention (Mean= 11.35; SD= 1.69), and the results were statistically significant (p = 0.011).

Table 2. Bivariate results regarding the effect of using WhatsApp groups on knowledge about IVA

Knowledge	Mean	SD	Min	Max	p
Pretest	11.35	1.69	10.00	17.00	0.011
Posttest	16.61	3.24	10.00	20.00	

DISCUSSION

Based on the results of the study before the intervention, most of the subjects had poor knowledge about VIA examinations, it can be seen from the pre-test that was carried out that the results of knowledge were not good about VIA examinations. This was influenced by various aspects such as age, education and occupation, resulting in a low level of knowledge about VIA examinations. perform an IVA examination.

After the intervention was carried out in the form of information about health, especially about VIA examinations, danger signs of cervical cancer via the WhatsApp group, it could be seen that knowledge about VIA examinations was getting better with 49 subjects having good knowledge out of the 49 existing subjects. The results of this study show that there is an influence of using WhatsApp groups on knowledge about acetate visual inspection (IVA) as seen from the significant p value of 0.011.

The results of the study conducted by Simangunsong, (2020) The results of the pretest and posttest on knowledge using the paired sample t-test obtained a p value of <0.001 , for pretest and posttest attitudes a p value of <0.001 was obtained ($p < 0.05$). This study can be interpreted to mean that there is an influence of IEC via WhatsApp on knowledge and attitudes about early detection of cervical cancer. For further studies, it is necessary to carry out IEC via WhatsApp on the participation of women of child-bearing age in carrying out early detection of cervical cancer with a larger number of respondents.

Herniyatun (2022) found that motivation in the intervention group was higher than the control group ($p < 0.001$). It can be concluded that there is an influence of cervical cancer health education on motivation for VIA test in women. Providing health education about VIA examinations

will increase information related to cervical cancer as well as efforts to detect cervical cancer early through VIA examinations so that it can increase knowledge, change behavior, and motivate the public to undergo VIA examinations.

The results of a study conducted by Marhamah (2022) show that health education using WhatsApp groups has an impact on education because it makes it easier in terms of communication, availability of time and ease of access to information, thus influencing the quality of education in terms of health, thereby increasing respondents' interest in IVA examinations, seen in the use of WhatsApp groups. effective in Health Education about cervical cancer for women aged 30-50 years in Kerta Bhakti village.

According to Rohmawanti (2023), frequency of watching educational videos increases knowledge, interest, and participation in VIA test.

This study concluded that educational video toward VIA test can be used to increase knowledge, interest and participation in VIA examinations.

AUTHOR CONTRIBUTION

In this study, Ricca Nophia Amra, Fitriani Bancin and Rizka Sititah Rambe collaborated to create a conceptual framework and research methodology for Rizka Sititah Rambe to collect data. Rizka Sititah Rambe, and Ricca Nophia Amra, Fitriani Bancin collaborated to analyze the data.

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None.

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CONFLICT OF INTEREST

There is no conflict of interest in this study.

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