



Health Promotion on the Behavior of Women of Childbearing Age in Early Detection Examinations for Cervical Cancer at Makassar City Health Centers

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ABSTRACT

The Influence of Health Education on Women's Age Behavior in IVA Examinations in Early Detection of Cervical Cancer at Community Health Centers in Makassar. Currently, the coverage of early detection of cervical cancer is still very low, this is due to a lack of public knowledge and awareness to participate in early detection programs for cervical cancer. IVA examination is an early detection program for cervical cancer implemented by the government. The aim of this research was to determine the influence of health education on the behavior of women of childbearing age in early detection of cervical cancer at the IVA examination at the Community Health Center in Makassar. The research design used was a quasi-experimental pre-post design with a comparison group that attempted to reveal the effectiveness of the independent variable on the dependent variable by stretching the control group in addition to the experimental group with a sample size of 66 women of childbearing age. The results of the research show that health education influences the knowledge, attitudes and actions of women of childbearing age in IVA examinations at early detection of cervical cancer at Community Health Centers in Makassar, from the T-Test statistical test $p \text{ sig} = 0.000 < 0.05$. Health education in IVA examinations in early detection of cervical cancer has the effect of increasing knowledge, attitudes and actions to be more positive, it is hoped that the authorized agencies can carry it out with a wider reach and better quality.





Keywords: Health Promotion, Behavior of Women of Childbearing Age, Early Detection Examination, Cervical Cancer, Makassar City Health Center

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1. Introduction

Cancer is a condition where the body's cells lose their ability to control their rate of division and growth. The tissue will grow uncontrolled and can be fatal (Otto, 2001).

Cervical cancer is a primary malignant tumor originating from squamous epithelial cells. Cervical cancer is cancer that occurs in the cervix or cervix, an area of the female reproductive organ which is the entrance to the uterus, located between the uterus (uterus) and the sexual canal or vagina (Notodiharjo, 2002).

Currently, cervical cancer ranks second among cancers that attack women in the world and first in developing countries, including Indonesia. It is estimated that 500,000 new cases of cervical cancer occur every year in the world, 80% of these cases are in developing countries (Aziz, 2006).

According to WHO data, it is known that there are 493,243 new cervical cancer sufferers per year in the world. With the death rate due to cervical cancer as many as 273,505 people per year (Emilia, 2010).

In Indonesia, cervical cancer is the second most common cancer found in women after breast cancer and is the main cause of death in women (Aziz, 2006).

New cases of cervical cancer are found 40-45 cases per day and every hour a woman dies from cervical cancer. There are 15,000 new cases per year with 8,000 deaths per year. (Nurwijaya, 2010).

Several factors are thought to increase the incidence of cervical cancer, namely sociodemographic factors which include age, socio-economic status, and sexual activity factors which include age at first sexual intercourse, multiple sexual partners, parity, lack





of maintaining genital hygiene, smoking, history of disease. genitalia, chronic trauma to the cervix, and long-term use of oral contraceptives, namely more than 4 years (Diananda, 2007).

According to Khasbiyah's research results (2004), most cervical cancer sufferers have a parity of more than 3. Most sufferers have their first sexual intercourse under the age of 20 years. Meanwhile, according to research conducted by Setyarini (2009), it is known that there is a significant relationship between age, age at first marriage, parity and use of oral contraceptives and the incidence of cervical cancer.

2. Research Methods

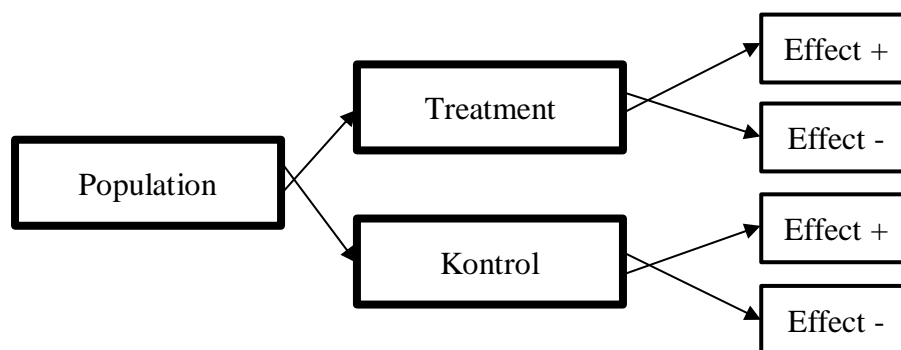
This research is a quantitative research using a quasi experimental pre post design with a comparison group because in this research the researcher provides intervention to the research subjects, then the intervention is measured and analyzed. This design attempts to reveal the effectiveness of the independent variable on the dependent variable by involving a control group in addition to the experimental group (Stommel, 2004).

Quasi experiments are used for several variables that are measured/intervened to control the occurrence of inclusion bias, measurement bias and confounding bias (Sastroasmoro; Ismael, 2007).

This design can be illustrated as follows:

	Pretest	Treatment	Posttest
Experiment Group	01	X1	02
Kontrol	03	X2	04

With the following schematic description:





3. Results and Discussion

1. Results

a) Univariate Analysis

Univariate analysis aims to describe the condition of each variable using established objective criteria while the sub-variables tested are described using frequencies and percentages.

Table 1
 Distribution frequency respondents based on characteristics
 Woman Age Fertile on group intervention and group control

Variable	Group Intervention		Group Control	
	n	%	n	%
Age				
20- 35	12	36.4	16	48.5
>35	21	63.6	17	51.5
Education				
elementary school	2	6.1	3	9.1
JUNIOR HIGH SCHOOL	2	6.1	3	9.1
SMA/SMK	21	63.6	14	42.4
D1/D2/D3	2	6.1	3	9.1
S1	5	15.2	9	27.3
S2	1	3.0	1	3.0
Work Mother				
IRT	27	81.8	22	66.7
Teacher	3	9.1	5	15.2
Self-employed	1	3.0	0	0
Civil servants	1	3.0	1	3.0
Employee Private	1	3.0	5	15.2
Work Husband				
No Work	3	9.1	7	21.2
Laborer Daily	11	33.3	3	9.1
Self-employed	5	15.2	5	15.2
Employee Private	9	27.3	8	24.2
Teacher	1	3.0	1	3.0
Civil servants	3	9.1	6	18.2
Driver	1	3.0	2	6.1
Sailor	0	0	1	3.0





Table 1 shows that, the frequency distribution of respondents in the intervention group based on age shows that the majority were >35 years old, namely 21 respondents (63.6 %), and so also on group control more aged >35 years, namely 17 respondents (51.5%).

Apart from that, the table above also shows the frequency distribution of respondents based on education, the intervention group shows the highest level of education, namely High School, namely 21 respondents (63.6%), as well as in group control, level the highest level of education was high school with 14 respondents (42.4%). In the frequency of respondents based on mother's occupation, in the intervention group the number of housewives in the intervention group was 27 respondents (81.8%), as well as in group control more Lots with housewives working as many as 22 respondents (66.7%), temporary For work husbands, in the intervention group showed the highest number of husbands' jobs, namely Daily Laborers with 11 respondents (33.35), while in the control group showed respondents with husbands' jobs the most with work as private employees were 8 respondents (24.2%).

Table 2
 Distribution frequency respondents based on
 level knowledge And Pre/Post Test respondent attitudes
 in the Intervention Group and Control Group

Behavior	Group Intervention				Group Control			
	Pre Test		Post Test		Pre Test		Post Test	
	n	%	n	%	n	%	n	%
Knowledge								
Not enough	8	24.2	0	0	11	33.3	0	0
Good	25	75.8	33	100	22	66.7	33	100
Attitude								
Negative	9	27.3	0	0	10	30.3	6	18.2
Positive	24	72.7	33	100	23	69.7	27	81.8
Action								
Do IVA	0	0	13	39.4	0	0	3	9.1
No Doing an IVA	33	100	20	60.6	33	100	30	90.9





Table 2 shows that the intervention group respondents' knowledge was at pre-test show Poor knowledge was 8 respondents (24.2%) and in the post-test it became 0, while good knowledge was 25 respondents (75.8%) and in the post-test it increased to 33 respondents (100%), for the pre-control group. The test showed that 11 respondents (33.3%) had poor knowledge and at the post-test it was 0, while good knowledge was 22 respondents (66.7%) and at the post-test it increased to 33 respondents (100%).

On Variable attitude on the intervention group showed in the pre-test a negative attitude of 9 people (27.3%) and a positive attitude of 24 people (72.7%), and in post test show attitude improvement positive as much 33 person (100%) , while the control group showed on pre test there is negative attitude as much 10 person (30.3%) and positive attitudes of 23 people (69.7%), and the post test showed an increase in positive attitudes of 27 people (81.8%) and negative attitudes of 6 people (18.2%).

For the action behavior variable, all respondents during the pre-test were all WUS who had never had an IVA examination before in accordance with the inclusion criteria set by the author, and during the post-test it showed that in the intervention group of 33 respondents there were 13 respondents (39.4 %) who came to have an IVA examination, while in the control group there were 3 respondents (9.1%) who came to have an IVA examination.

Table 3
 Analysis Normality test on Group One-Sample
 Intervention Kolmogorov- Sminorv Test

Group Intervention	Score Knowledge		Score Attitude	
	Pre- test	Post- test	Pre- test	Post- test
N	33	33	33	33
Mean	70.91	94.24	28.76	38.88
Std. Deviation	15,883	7,084	4,724	1,900
Kolmogorov-Smirnov Z	1,156	1,937	,801	2,409





Asymp. Sig. (2-tailed)	,138	,001	,542	,000
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Table 3 shows that based on the normality test of the intervention group for the pre-test knowledge scores, the Kolmogorov-Smirnov Test results show that $Z=1.156$ Which It means >0.05 then the population is normally distributed, the Post Test knowledge score appears as the Kolmogorov-Smirnov Test results which produce $Z=1.937$ Which It means >0.05 then the population is normally distributed, Attitude score pre-test appear results test Kolmogorov-Smirnov Test which produces $Z=0.801$ which means >0.05 then the population is distributed normal, score attitude Post Test , the results of the Kolmogorov-Smirnov Test are visible produce $Z=2.409$ Which It means >0.05 so population distribute normal.

From the results of the analysis, it was found that all data in the intervention group had a normal distribution by looking at the significance value for knowledge and attitude, each p-value was > 0.05 ie 0.138 For knowledge and 0.542 for attitude.

2. Discussion

- a. Changes in knowledge of Women of Childbearing Age before and after being given Health Education regarding VIA examinations in early detection of Cervical Cancer at Community Health Centers in Makassar

In this study, changes in knowledge of women of childbearing age before and after being given Health Education showed that of the 33 respondents, at the pre-test there were 25 people (75.8%) in the good category, and at the post-test it increased to 33 people (100%), while in the category of insufficient knowledge during the pre-test there were 8 people (24.2%) and during the post-test there were 0 people (0%).

In this study, the results showed that there was a significant influence between the provision of Health Education on increasing the knowledge of women of childbearing age in IVA examinations on early detection of cervical cancer at Community Health Centers in Makassar.





The research results show that even though someone has good knowledge, it does not necessarily mean that they will have self-examination behavior in the form of an IVA examination in early detection of cervical cancer. This may be caused by other factors such as husband or family support.

In this study, when the pre-test was carried out, the level of knowledge of the majority of respondents showed good knowledge, although there were still some with a poor level of knowledge. On average, respondents already knew about cervical cancer, but regarding knowledge about IVA examinations, the majority of respondents did not know.

They know better that early detection of cervical cancer is a Pap smear examination and requires quite an expensive fee, most respondents also do not know that the health center provides IVA examination services and is free of charge. so that after being given intervention in the form of giving lectures and distributing brochures, there was an increase in respondents' knowledge and in the motivational session and showing videos in the form of confessions from cervical cancer survivors, how cervical cancer sufferers had to experience long suffering and required quite high costs, that's where the respondents were moved and motivated so that they are aware of the importance of early detection of cervical cancer through IVA examinations so that if pre-cancerous lesions are discovered as early as possible, the severity can be reduced and cervical cancer can be cured.

- b. The influence of Health Education on the actions/participation of Women of Childbearing Age in IVA examinations on early detection of cervical cancer at Community Health Centers in Makassar

In this study, all respondents were those who had never previously had an IVA examination, and after carrying out Health Education which included lecture methods, giving leaflets, giving motivation and showing videos, it was found that of the 33 respondents who were given the intervention, there were 13 people (39.4%) who carried out a IVA examination and 20 people (60.6%) carried out a IVA examination ($p=0.004$) <0.005 so it was found that there was an influence of





Health education on the actions/participation of WUS in IVA examinations at Community Health Centers in Makassar.

In this research, it was also found that there were several phenomena that needed to be studied further, namely that there were several respondents whose knowledge and attitudes had increased but still did not carry out IVA examinations. From the results of the author's observations and interviews, it is known that there are still respondents who feel embarrassed and afraid to have themselves checked and feel uncomfortable about having an examination because they have to carry out an examination of their female organs and also one of the reasons they do not have themselves checked is considering that the Health Center is located in In the middle of the urban city of Makassar, the busyness of women of childbearing age is quite high, so this is also the reason for not having an IVA examination.

- c. Differences in knowledge, attitudes and actions of women of childbearing age between the experimental group and the control group in IVA examinations for early detection of cervical cancer at Community Health Centers in Makassar

In this study, in the test of differences in knowledge, attitudes and post-test actions between the intervention group and the control group there were significant differences. The intervention group received treatment in the form of giving lectures, distributing leaflets, giving motivation and showing videos, while the control group received intervention only in the form of lectures. In both groups there was an increase in knowledge, attitudes and actions, but the increase in the intervention group was higher, especially in changes in actions/participation in IVA examinations. Therefore, more efforts are needed apart from the lecture method to improve people's knowledge, attitudes or behavior.

The research results show that the determining factors for early detection of cervical cancer behavior are Health Education interventions using lecture methods, distributing leaflets, providing motivation and showing videos. Respondents who received health education had 3 times the chance of behavior





change compared to respondents who only received the lecture method. Efforts to make respondents' intrinsic factors more effective were carried out by providing education using various stimulations. Health Education provides learning to respondents so that there is a learning/education process that can improve attitudes and behavior. As in research conducted by Wall (2009), in his research which aimed to modify factors inhibiting women's compliance in carrying out early detection of cervical cancer, data was obtained that education about cervical cancer and pap smears influenced individuals to carry out regular screening.

4. Conclusion

Based on the results of research on the influence of Health Education on the Behavior of Women of Childbearing Age in IVA examinations for early detection of cervical cancer at Community Health Centers in Makassar, it can be concluded as follows:

- 1) Health Education has an effect on changes in the knowledge of Women of Childbearing Age regarding IVA examinations, this is proven by the T-Test statistical test which shows a p value of sig=0.000. This means that the value of $\rho < \alpha$, because the value of $\rho \text{ sig} = 0.000 < 0.05$, which means that H_a is accepted and H_o is rejected, so that it is stated that there is a significant influence between providing intervention on increasing the knowledge of women of childbearing age in IVA examinations in early detection of cervical cancer at Community Health Centers in Makassar.
- 2) Health Education has an influence on changes in the attitudes of women of childbearing age towards IVA examinations, this is proven by the T-Test statistical test which shows a p value of sig=0.000. This means that the value of $\rho < \alpha$, because the value of $\rho \text{ sig} = 0.000 < 0.05$, which means that H_a is accepted and H_o is rejected, so that it is stated that there is a significant influence between providing intervention on improving the attitude of women of childbearing age in VIA examinations at early detection of cervical cancer at Community Health Centers in Makassar.
- 3) There is a significant difference in the knowledge, attitudes and actions of women of childbearing age between the intervention group and the control group in IVA examinations for early detection of cervical cancer at Community Health Centers in





Makassar. This is proven by the test of the difference in t-count significance values on knowledge, attitudes and post-test actions. 0.000 each, therefore it can be concluded that $0.000 < 0.05$ so that H_0 is rejected, meaning that the average level of knowledge, attitudes and actions of respondents between the intervention group and the control group is different.

5. Compliance with ethical standards

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Disclosure of conflict of interest

This research collaboration is a positive thing for all researchers so that conflicts, problems and others are absolutely no problem for all writers.

Statement of informed consent

Every action we take as authors is a mutual agreement or consent.

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