RESEARCH ARTICLE
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Development of Social Capital Based on Health Promotion Model to Improve Behavior for Taking VIA Test

Tinuk Esti Handayani[1], Agung Suharto[2(CA)], Teta Puji Rahayu[3]
[1]Departement Midwifery, Poltekkes Kemenkes Surabaya; tinukesti@gmail.com
[2(CA)]Departement Midwifery, Poltekkes Kemenkes Surabaya; agungsuharto14@gmail.com (Corresponding Author)
[3]Departement Midwifery, Poltekkes Kemenkes Surabaya; tarzako@yahoo.co.id

ABSTRACT

VIA Test is an alternative screening examination of pap smears because it is usually inexpensive, practical, very easy to carry out and simple equipment and can be done by health professionals other than gynecology doctors. The purpose of this study was to prove the development of social capital-based health promotion to improve maternal behavior in following VIA Test to detect early cervical ces. This type of research was quasy experiment research with non equivalent pre test post test control group design, to analyze the influence of social capital-based health promotion to improve the behavior of mothers of fertile age couples in taking the VIA Test. The sampling technique was multistage random sampling with a sample size of 160. The independent variable of the research was a social capital-based health promotion module. The dependent variables were cognitive, perception, commitment and behavior for taking VIA Test. Data analysis were carried out by t-test and multiple linear regression test. Showed significant differences between pre test and post test on social capital, perception, commitment and behavior of mothers in taking the VIA test. There were a significant difference between intervention group 1 and control and intervention group 2 with control on cognitive, perception, commitment and behavior of mothers in taking VIA test. From the results of multiple linear regression analysis, it was found that the effect of social capital-based health promotion on maternal behavior in taking VIA Test was significant (p-value = 0.021). The influence of perception and commitment on maternal behavior in taking VIA Test was significant (p-value = 0.000).

Keywords: social capital; perception; commitment; behavior

INTRODUCTION

Background

VIA test (Visual Inspection with Acetic Acid) is a cervical examination by looking directly at the cervix after applying the cervix with acetic acid solution 3-5%. If after the appearance of acetic acid 3-5% there is a change in color, which looks white patches, then there is a possibility of pre-cancerous stage abnormalities. Women who are recommended for VIA Test are aged 30-50 years. The VIA method is designed for people who are far from health facilities[1]. The requirements for taking part in the VIA Test include: being married, not having menstruation / menstruation, not being pregnant, and not having sexual intercourse 24 hours before. VIA (visual inspection with acetic acid) is a simple way to detect cervical cancer as early as possible [2]. VIA Test is an examination of the cervix (cervix) by looking directly (with the naked eye) of the cervix after applying the cervix with 3-5% acetic acid solution [3]. The Health Promotion Model notes that everyone has unique personal characteristics and experiences that influence subsequent actions. Collection of variables for knowledge and specific behavioral influences have important motivational significance. This variable can be modified through nursing actions. Health promoting behavior is the result of desired behavior and is the end point in the Health Promotion Model. Health promoting behavior must result in improved health, improved functional abilities and a better quality of life at all stages of development. The latter demand for behavior is also influenced by direct competing demands and preferences, which can thwart desired health promotion actions [4].

Purpose

The purpose of this study was to analyze the development of health promotion based on social capital to improve the behavior of mothers of fertile age couples in taking the VIA Test.

METHODS

This type of research was quasy experimental with the design of non-equivalent pretest-posttest control group design, to determine the effect of health promotion based on social capital on the cognitive, commitment and behavior of mothers of fertile age couples in following the VIA Test[5].

	Pre Test	Intervention	Post Test
Intervention group1	O1	X1(a)	O2
Intervention group 2	O1	X1(b)	O2
Control group	O1		O2

Figure 1. The research design

The independent variable of the research was the health promotion module based on social capital, VIA Test and Ca Cerviks. The dependent variable of the research was cognitive, perception, commitment and behavior of mothers of fertile age couples in taking VIA Test[6].

The location of the study was the Panekan Public Health Center in Magetan Regency. The time of the research began from the preparation of proposals, reviewing data, the middle seminar, the final and the preparation of research reports, namely April 2018 to October 2018.

The study population was mothers of fertile age couples in three villages namely Milangasri, Ngiliran and Bedagung in the work area of Panekan Health Center in Magetan District in 2018 as many as 6,500 people. The inclusion criteria were: 1) mother of childbearing age couple, 2) cooperative, 3) willing to be a research respondent [7]. The sampling technique in this study was Multistage random sampling, which is sampling which is carried out based on the regional level in stages [20]. So the sample size taken in the study was 160 mothers of fertile age couples who were divided into 3 groups, each group was 60 people, namely 2 treatment groups and 1 control group (16).

Data analysis was done by: descriptive analysis using frequency [21], presented in the form of tables, graphs and images. Perform normality and homogeneity tests on demographic characteristics. The hypothesis testing used t-test and multiple linear regression[17].

RESULTS

Distribution of Age, Education and Work of Respondents

From Table 1, obtained the distribution of the age of research respondents, mostly aged 31-35 years as much as 3.56% and a small percentage of 16-20 years old as much as 2.8%. From the education frequency distribution, the majority of respondents in the study were 58.3% of the secondary education and 6.7% of the majority of tertiary education. From the frequency distribution of work, the majority of respondents worked as 56.1% of entrepreneurs / entrepreneurs / farmers and a small percentage worked as civil servants / military as much as 3.9%.

Table 1. Distribution of age, education and work of respondents at Panekan Public Health Center, Magetan Regency in 2018

Age (year)	Frequency	Percentage	Mean	SD	Kolmorgorov-Smirnov
16-20	5	2.8			
21-25	39	21.7			
26-30	53	29.4	3.29	1.012	2.928
31-35	64	35.6			
36-40	19	10.6			
Education					
Basic	63	35			
Second	105	58.3	1.72	0.582	4.520
Hight	12	6.7			
Employment					
Housewife	72	40			
Entreprenuer	101	56.1	1.64	0.557	4.583
Goverment employee	7	3.9			

Description of Variables

Table 2. Description of variables

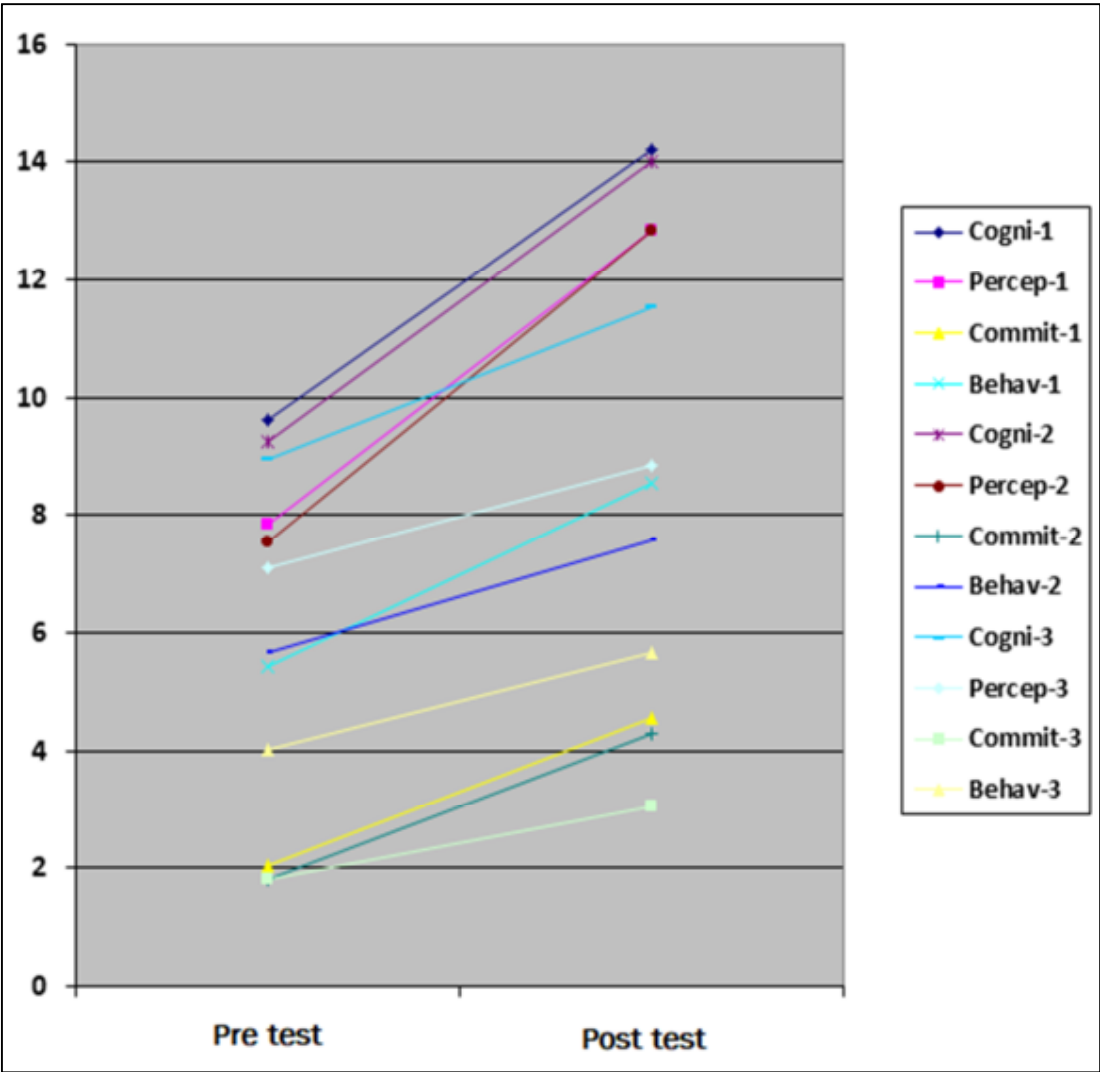|	Cognitive Pretest	Cognitive Postest	Perception Pretest	Perception Postest	Commitment Pretest	Commitment Postest	Behavior Pretest	Behavior Postest
Mean	9.27	13.26	7.51	11.51	1.89	3.96	5.04	7.27
Median	9.00	13.00	8.00	12.00	2.00	4.00	5.00	8.00
Mode	9	13	8	12	2	4	5	8
SD	1.394	1.716	0.829	2.097	0.483	0.861	0.982	1.369
Min	7	10	5	4	1	2	3	4
Max	13	17	9	15	3	5	7	9
n	180	180	180	180	180	180	180	180

Figure 2. Description of variables

Statistical analysis results

Table 3. The results of paired sample t-test

No	Variable relation	T	df	Sig. (2-tailed)	Information
1.	Cognitive Pre-Post	-27.123	179	0.000	Significant
2.	Perception Pre-Post	-27.534	179	0.000	Significant
3.	Commitment Pre-Post	-30.569	179	0.000	Significant
4.	Behavior Pre-Post	-27.139	179	0.000	Significant

From table 3, there was a significant difference between pre test and post test on social capital, perception, commitment and behavior of mothers in taking VIA test.

Table 3. The results of independent sample t-test

Variable	Variable group	F	T	df	Sig	Information
Cognitive	Intervention-1 Control	8.868	12.481	118	0.000	Significant
Perception	Intervention-1 Control	2.668	23.242	118	0.000	Significant
Commitment	Intervention-1 Control	6.498	15.374	118	0.000	Significant
Behavior	Intervention-1 Control	2.141	22.826	118	0.000	Significant
Cognitive	Intervention-2 Control	1.239	12.276	118	0.000	Significant
Perception	Intervention-2 Control	2.686	23.442	118	0.000	Significant
Commitment	Intervention-2 Control	6.471	11.456	118	0.000	Significant
Behavior	Intervention-2 Control	0.280	14.179	118	0.000	Significant

From table 4 there was a significant difference between intervention group 1 and control and intervention group 2 with control on cognitive, perceptions, commitments and behavior of mothers in following VIA test.

Table 5. The result of linear regression test

No	Influence between variables	t	Sig. (2-tailed)	Information
1.	Cognitive-Behavior	2.336	0,021	Significant
2.	Perception-Behavior	6.610	0.000	Significant
3.	Commitment-Behavior	4.438	0.000	Significant

From the results of multiple linear regression analysis obtained the p-valueof influence of social capital-based health promotion on the behavior in taking VIA Test was 0.021 (<0.05); the p-value of influence of cognitive, perception and commitment on the behavior in taking VIA Test was 0.000 (<0.05).

DISCUSSION

Description of Variables

This study discusses the participation of VIA tests based on age, education and work. This discussion is presented based on the results of the study. Based on the result, the distribution of respondents based on age shows the majority of 31-35 years old is 35.6%. At this age, age is susceptible to cervical cancer, so it is necessary to check to prevent cervical cancer, one of which is VIA test. This is supported by the theory that cervical cancer is a malignant tumor that grows on the cervix which is the entrance to the uterus which is located between the uterus and burrow intercourse that is common in women aged 30-50 years[6,7]. This age is also an age that is mature enough to obtain information either through mass media or experience. With increasing age, there will be changes in the physical and psycholigic aspects [8].

Based on the work shows the majority of respondents based on mother's work are entrepreneur / farmer as much as 56.1%. The work environment can make a person gain experience and knowledge both directly and indirectly [9]. The majority of maternal work and data that VIA test participation turned out to be many did not follow so it can be assumed that the mother's experience and knowledge was less developed because it only relates to people around the house so that many did not participate in the VIA test.

Statistical Analysis Results

From the Paired T Test analysis, there were significant differences between pre test and post test on cognitive, perceptions, commitment and behavior of mothers in following the VIA test. This research is in line with the research conducted by on the influence of community leaders in promoting HIV risk to adolescents with the results that community leaders play an important role in the perception and behavior of adolescents in an environment about the risk of HIV[10]. Maternal behavior regarding early detection of cervical cancer through VIA test before and after being given health promotion and motivation by community leaders mostly have behaviors in not in the category of early detection of cervical cancer with VIA test and after health promotion and commitment by community leaders mostly have behavior in the category yes in the early detection of cervical cancer with VIA test[11].

Based on the results of statistical tests it was found that there were behavioral differences in mothers before and after being given health promotion using modules (0,000 <0,05). This is due to the provision of health information with a module on early detection of cervical cancer so as to increase the perception and commitment of respondents about cervical cancer and form a positive attitude. In the end the respondents who were given a health promotion with the module can do what is recommended in the health promotion. Positive perception causes women to behave according to positive perceptions, causing women to behave according to their knowledge, in this case women's participation in early cervical cancer detection programs[18].

Based on the results of statistical tests found that there are differences in behavior for mothers before and after being given a health promotion with community commitment (0,000 <0.05). Community commitment or people who have a strong influence in the community are very helpful in delivering information to the community so that it is easily accepted by the community, so that approaches to community leaders are needed in various scientific fields so that people can receive it well. The additional commitment by community leaders makes respondents more enthusiastic to participate in health promotion activities from the beginning to the end, so that the information delivered can be received completely so that knowledge and behavior will be better[13].

The results of multiple linear regression analysis showed the effect of social capital-based health promotion on maternal behavior in following VIA Test with significance = 0.021 (<0.05). The influence of perception and commitment to behavior in following VIA Test with significance p = 0.000 (<0.05). This behavior change proves that health promotion is one of the efforts to prevent a disease in a group of healthy people, with the aim that they can improve their health[22]. Coupled with the encouragement from community leaders so that respondents are more confident and willingThe influence of perception and commitment to behavior in following VIA Test with significance p = 0.000 (<0.05). This behavior change proves that health promotion is one of the efforts to prevent a disease in a group of healthy people, with the aim that they can improve their health. Coupled with the encouragement of community leaders so that respondents are more confident and enthusiastic to make behavior changes as has been done by their leaders, namely early detection of cervical cancer with VIA test. Another study by Delgado-gallego & Vázquez which states that there are institutional and leadership influences on changes in passive attitudes and behavior towards health services in the Colombian region[22].

CONCLUSION

Social capital-based health promotion has an effect on the behavior of mothers of fertile age couples in following the VIA Test. This is indicated by the results of data analysis, the mean value of social capital-based health promotion intervention groups is higher than the control group. Providing information through health promotion will affect the cognitive, perceptions and commitment of the mother and eventually will behave healthily by early detection of cervical cancer using the VIA test.

This change in behavior proves that health promotion is one of the efforts to prevent an illness in individuals, groups of healthy people, and the community with the aim that they can improve their health. Positive perceptions and community commitment will make mothers more confident and eager to change behavior, namely early detection of cervical cancer with VIA test.

It is expected that the community will participate actively in detecting the early occurrence of cervical cancer through VIA Test quickly and correct response supported by a healthy lifestyle.

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