PERCEIVED OF BEHAVIORAL CONTROL INFLUENCE ON FEMALE’S INTENTION IN EARLY DETECTION OF CERVICAL CANCER BY AVI METHOD

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ABSTRACT

Background: Cervical cancer is one of the cancers that can be cured if it detected early. Early detection of cervical cancer can be done with Visual Inspection of Acetic Acid (AVI) and Pap-smear. The percentage of female who had early detection with AVI in Surabaya increased every year, but still did not reach the national target of 10%. The aims of study is to determine the factors influencing on perceived of behavioral on the intention of early detection of cervical cancer and its effects on the intention of early detection of cervical cancer.

Material and Methods: This was an observational study with cross-sectional methods in 93 females as respondents. Primary data was collected by conducting to fill out questionnaires.

Result: Perceived of behavior control obtained p value 0,000 (p <0,05) indicating that perceived of behavior control was a factor influencing female intention in early detection of cervical cancer by AVI method. OR=14.467 indicates that female who have perceived of behavior control either have a positive intention to perform early detection of cervical cancer by AVI method 14,467 times compared with female having perceived of behavior control enough.

Conclusion: Creating a family atmosphere and the immediate environment that was aware and concerned about health, especially female's reproductive health, through the provision of facilities and assistance and also the provision of a good understanding to the community about early detection of cervical cancer, could increase support and perceived of behavior control in female to take early detection of cervical cancer so that would impact on the increase of female’s intention to take AVI examination.

Keywords: perceived of behavioral control, intention, cervical cancer, AVI
1.0 Introduction

Cervical cancer is a malignant tumor in the cervix that attaches to the top of the vagina. Cervical cancer is caused by Human Papiloma Virus (HPV). HPV found in cervical cancer patients are types 16 and 18 (Kumalasari I, 2014).

Based on data from the World Health Organization (WHO), cervical cancer occupied the first position of some cancers that could cause death of female in productive age with age range 20-34 years in developing countries. In Indonesia, cervical cancer was the cause of death in female, which every 1 hour female died from cervical cancer (IARC, 2012).

Cervical cancer is one type of cancer that can be prevented through early detection. Early detection of cervical cancer that can be done is AVI (Visual Inspection Acetic Acid) and Pap smear. AVI is a method that health professionals can do non gynecologist, such as midwife or nurse, and can be done at first level health facility, while pap smear can be done at health facility equipped with laboratory. AVI could detect cervical cancer with specificity up to 85% (Kemenkes RI, 2016).

The coverage of AVI in Indonesia until 2016 reaches 4.34%, which was still far from the national coverage target of 10% until the end of 2019. The coverage of early detection of cervical cancer in Surabaya City spread over 31 sub districts in 2016 reached 30% in female aged 30-50 years, while in 2017 reached 46% in female aged 30-59 years. Every year, the AVI examination in Surabaya had not reached the target of 50% in female aged 30-59 years (Dinas Kesehatan Kota Surabaya, 2016).

Coverage was still far from expectations in the city of Surabaya due to various obstacles, including human resources, infrastructure, and geographical constraints. Some other factors also became obstacles to early detection of cervical cancer, for example: female felt the behavior of shame and fear so reluctant to conduct early detection examination. The lack of female's knowledge, cost factors, and information sources was also an obstacle to early detection (Schiffman and Solomon, 2013).

A person's behavior arises because of intention or intention or to behave. This intention was determined by three direct determinants in Theory of Planned Behavior (TPB), namely attitude, subjective norm, and perceived of behavioral control (PBC) (Ajzen and Fishbein, 2001). The determinant domain that complements TPB was perceived of behavior control or control perceived by female as an assessment of the attitude of female to perform early detection of cervical cancer. Perceived of behavior control consisted of control beliefs and perceived power. Control beliefs were female's beliefs about things that support or inhibit the early detection of cervical cancer, while perceived power was about beliefs how to inhibit and support it in affecting female to perform early detection of cervical cancer.

The awareness of Indonesian female to perform early detection of cervical cancer on a regular basis was still low. The coverage of early detection in Indonesia was lacking so that many cases of cervical cancer were found in an advanced stage, which often led to death. Based on this background, it was important to do research how the influence of perceived of behavioral control on female's intentions in early detection of cervical cancer by AVI method. The aims of study is to analyze the influence of demographic characteristics (age,
female’s education, and female’s job) on perceived of behavioral control of female’s and to analyze the effect of perceived of behavioral control on the intention of early detection of cervical cancer.

2.0 Material and Methods

This research used a quantitative approach with cross-sectional design. Respondents used in this study were 93 female who were in the working area of Tambakrejo Community Health Center Surabaya City which selected by simple random sampling technique. The research instrument used questionnaires containing questions about control beliefs and perceived power. The data was analyzed by using logistic regression with the help of SPSS 2.2 application.

3.0 Study Instruments

Data collection of socio-demographic characteristics of female’s (age, female’s education, and female’s job) and perceived of behavioral control female’s in early detection used questionnaires to respondents. Questionnaires developed by the researcher themselves using closed questions with four choices of answers (strongly agree, agree, disagree, strongly disagree). Questionnaire self-administrated by respondents with mentoring researcher. Before given to the respondents, the questionnaire through the stages of validity and reliability tests on respondents who have the same characteristics. Test the validity using Pearson Product Moment with the result of all questions declared valid. Test reliability using Alfa Cronbach with the results of all questions declared reliable. Test Validity and reliability assisted by the application SPSS 22.

4.0 Result

From the research that had been conducted, the characteristic data, which includes age, occupation status, and education levels were reviewed below Table 1.

<table>
<thead>
<tr>
<th>Characteristics of Respondents</th>
<th>N = 93</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20-35 years old</td>
<td>57</td>
<td>61.2</td>
</tr>
<tr>
<td>36-45 years old</td>
<td>36</td>
<td>38.8</td>
</tr>
<tr>
<td>Level of education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary School</td>
<td>13</td>
<td>13.9</td>
</tr>
<tr>
<td>Junior High School</td>
<td>30</td>
<td>32.2</td>
</tr>
</tbody>
</table>
Table 1 showed the most aged characteristics at the age of respondents 20-35 years with 57 people or 61.2%. The last level of education on most respondents was senior high school with 47 people or 50.5%. Respondents who did not work were amounted to 75 people or 80.7%, while those working in the informal sector were 9 people and the formal sector were 9 people or 19.3%.

The scoring of the questionnaire was categorized based on perceived of behavior control of respondents with good and sufficient category Table 2.

Table 2 explained that the respondents who had perceived of behavior control either amounted to 67 people or 72%, while those with perceived of behavior control amounted to 26 people or 28%.

Based on Table 3, the age with a significance value of 0.004 which meant less than 0.05, it could be stated that age significantly affects the perceived of behavioral control of female in early detection of cervical cancer.
Table 4. Influence of Employment Status to Perceived of Behavioral Control Early Detection of Cervical Cancer

<table>
<thead>
<tr>
<th>Employment status</th>
<th>Correlation</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived of Behavioral Control</td>
<td>10.065</td>
<td>0.002</td>
</tr>
</tbody>
</table>

Based on Table 4, the employment status with a significance value of 0.002 which meant less than 0.05, it could be stated that the status of work significantly influenced the perceived of behavioral control on female in the early detection of cervical cancer.

Table-5. Perceived of Behavior Control Influence to Cervical Cancer Early Detection Intention

<table>
<thead>
<tr>
<th>Variabel</th>
<th>β</th>
<th>Sig</th>
<th>OR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived of Behavior Control</td>
<td>2.672</td>
<td>0.000</td>
<td>14.467</td>
</tr>
</tbody>
</table>

The result of logistic regression on perceived of behavior control with p = 0.000 (p <0.05) indicated that perceived of behavior control was a factor influencing female intention in performing early detection of cervical knickers through AVI method. OR = 14.467 indicated that female who had perceived of behavior control both have a positive intention to perform early detection of cervical cancer through AVI method 14,467 times compared with female who having perceived of behavior control enough.

5.0 DISCUSSION

Perceived of behavioral control was the control of a person to perform a behavior. The existence of the perception control of a behavior would refer to a person's beliefs about the existence of obstacles or support that facilitate or inhibit the implementation of a behavior. The results of the study in Table-3 showed that age affected the perceived of behavioral early detection of cervical cancer in female. Characteristics of a person, such as age, could affect the perceived of behavioral control so that female of different ages would had different perceived of behavioral controls. Age was also a factor that could affect the knowledge, capture, and mindset of a person. As one gets older, the capture powered and the mindset would grow (Nurhidayat, 2001).

The results of this study also indicated that the level of education affected the perceived of behavioral control on early detection of cervical cancer in female. A good level of education could affect a person's knowledge in receiving and understanding information. The information would be processed into a female's thoughts on whether female were difficult or easy to perform AVI examinations. Various information, supporters, and inhibitors would
form a perceived of behavioral control. With sufficient level of education, various obstacles allowed to be addressed and the form of ease would be obtained in conducting AVI examination. Perceived could be influenced by several interpersonal factors, including: education level, development level, socio-economic situation, emotion, gender, physical health status, values and beliefs, and roles performed in the community (Nurhidayat, 2001).

The results of this study in Table-4 indicated that the employment status affected the perceived behavioral control of early detection of cervical cancer in female. A person with a sufficient level of knowledge would had a job in accordance with his knowledge. Employment status factors would affect a person's perceptions. Female workers had a good perceived behavioral control compared to female who did not work in early detection of cervical cancer.

Most of the respondents were housewives or unemployed, so they have a high enough activity to took care of the household, children, and husband. They as respondents received less information about early detection of cervical cancer. In line with Robbins's research, environmental factors such as work were among the factors that influenced a person's perceptions. Other researchers also mentioned that the environment in which a person works directly or indirectly could cause a person to have a lot of experience and knowledge (Robbins, 2001).

Perceived of behavior control was the state of a person who felt that a behavior would be done or not done based on her control. Perceived of behavior control was determined by two components, namely control beliefs and perceived power. Control beliefs in this study were the belief of female about things that support or inhibit to performed early detection of cervical cancer. Supporting things could be considered as there were environmental conditions of the home and family that supported the examination of cervical cancer, there were facilities that were affordable for self-examination, there was transportation to went to the facility, and there were activities related to the prevention of cervical cancer. This support could be described by the response to the control beliefs statement. Statement number 28 "The female would do the examination if there was a husband or family who deliver" got the "strongly agree" response at most. This was in line with Ajzen's theory that the inhibiting factors and the support of an individual to perform a behavior were influenced by various factors that could increase or decrease the degree of difficulty in behavior. The existence of a husband or family who escorted female to perform AVI and waited until the examination results were known to reduce anxiety so as to lower the level of difficulty experienced (Ajzen and Fishbein, 2001).

Perceived power in this study was about the strength or confidence in self to perform early detection of cervical cancer through AVI method. Perceived power was the power of the individual against the supporting and inhibiting factors. The results of interviews of female who conducted the AVI examination, they did not experience barriers that prevented them to
conduct the examination so they could actualize their intentions to conduct AVI examination. There were times when a female felt the fear of AVI examination procedures, especially for female who had never done a similar examination. These fears were an obstacle they could overcome by thinking about their health interests and putting aside the fear.

The percentage of respondents in the study who had perceived of behavior control in either category was 72%. These results indicated that respondents felt confident and able to make efforts to prevent cervical cancer through AVI method that was supported by various factors. Regression test results also showed that perceived of behavior control significant effected on the female’s intention in early detection of cervical cancer through AVI method. Based on these results, it could be concluded that the better perceived of behavior control of the decision to check themselves, the better the intention would arise. Inverted when perceived of behavior control was not good or feel unsure and unable, the intention to perform early detection of cervical cancer through AVI method will not arise.

6.0 Conclusion

Study concluded that were significant influenced between perceived of behavioral control with female’s intention in early detection of cervical cancer by AVI method.

7.0 Recomendation

Creating a family atmosphere and the immediate environment that was aware and concerned about health, especially female's reproductive health, through the provision of facilities and assistance and providing good understanding and true to the community about early detection of cervical cancer, could increase the support for female to take early detection of cervical cancer and perceived of behavior control in female so that would have an impact on the increase of female's intention to take AVI examination.

Acknowledgement

I am highly thankful to all the people who have helped this research and publication process

Declaration

Author(s) declare that all works are original and this manuscript has not been published in any other journals. There was no financial support of any organization for this work.
References


