Factors Related To Screening Of Cervic Carcinoma With Method IVA At Borongrappoa Health Center Bulukumba Regency

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ABSTRACT

Cervical cancer screening is one way of examining cells for the identification of malignant cells in the cervix at an early stage, by taking cervical cells through a cotton swab and then examining them carefully under a microscope to see the changes that occur in cells. The research method is quantitative research with a cross sectional study approach. The sampling technique used was purposive sampling. The sample consisted of 118 case groups and 118 control groups. The results showed that marriage story had a relationship with Cervical Carcinoma Screening with the IVA Method at the Borongrappoa Health Center, Bulukumba Regency in 2018 with a p_value of 0.00 less than 0.05, meaning there was a relationship. Knowledge has a relationship with Cervical Carcinoma Screening With the IVA Method at the Borongrappoa Health Center, Bulukumba Regency in 2018 with a p_value of 0.00 less than 0.05, meaning there is a relationship. Motivation has a relationship with Cervical Carcinoma Screening With the IVA Method at the Borongrappoa Health Center, Bulukumba Regency in 2018 with a p_value of 0.00 less than 0.05, meaning there is a relationship. To the Borongrappoa Health Center, they pay more attention to WUS who have been married more than once because they are included in the risk group. WUS whose level of knowledge is still low so that screening participation increases by means of health promotion about cervical cancer.

Keywords: Screening Carcinoma; IVA

INTRODUCTION

Cervical cancer screening is one way of examining cells for the identification of malignant cells in the cervix at an early stage, by taking cervical cells through a cotton swab and then examining them carefully under a microscope to see the changes that occur in cells. Changes in cervical cells that are detected early, allow treatment to be carried out before these cells develop into cancer cells or malignant cells.

According to Hacker, (2010) Screening results are said to be abnormal if the cells originating from the cervix or cervix, the results of the examination are different from normal cells. The WHO publication regarding the results of cervical cell screening through various methods entitled "HPV and cervical cancer in the world" (2010), stated...
that: at the world level the population of women aged 15 years and over is 2,329.08 million who are threatened with cervical cancer, and 493,243 of them were diagnosed as cervical cancer, 273,505 died every year. Furthermore, it was stated that: Cervical cancer is the second most common cancer affecting women aged 15-44 years in the world. From the results of screening of 14595 cervical cancer patients, 87.2% included those with HPV with a Confidence Interval (CI: 86.7-87.8).

In the WHO report, 2010 also describes the distribution of cervical cancer screening results by continent as follows: In the United States the population of women aged 15 years and over and at risk for cervical cancer is 336,500 who are at risk of developing cervical cancer, and every year 86.532 million women diagnosed with cervical cancer, of which 38.436 million died from cervical cancer.

In Europe, the population of women aged 15 years and over and at risk for cervical cancer is 321.8 million and, and every year 59,931 million are diagnosed with cervical cancer, of which 29,812 million die from cervical cancer. In Africa, the population of women aged 15 years and over who are at risk for cervical cancer is 267.9 million and every year 78,897 million women are diagnosed with cervical cancer, of which 61,897 million die from cervical cancer.

In Oceania, the population of women aged 15 years and over who are at risk for cervical cancer is 12.6 million and every year 2002 women who are diagnosed with cervical cancer, of these 844 die from cervical cancer. In Asia, the population of women aged 15 years and over who are at risk for cervical cancer is 1390.4 million and every year 265.884 million women are diagnosed with cervical cancer, of which 142,735 die from cervical cancer. Especially in Indonesia, the population of women aged 15 years and over who are at risk for cervical cancer is 87.57 million and every year 15050 women are diagnosed with cervical cancer, and of that number 7566 die from cervical cancer. In terms of the order of cancer patients in Indonesia, cervical cancer ranks second in terms of incidence and mortality rates.

Anatomical Pathology Laboratory of CiptoMangunkusumo Hospital, conducted data collection in 2003, by screening using Screening as many as 2580 women and 2537 in 2004, showing the high incidence of cervical cancer in Indonesia and the cause is the lack of awareness of married women in Indonesia to check with screening as an effort to detect cervical cancer early.

Through regular screening examinations, it can help detect early cervical cancer
Screening examination is useful as a filter and tracer of cell changes towards malignancy at an early stage so that precancerous abnormalities can be detected while helping to reduce the cost of treatment which is relatively easier and cheaper (Hillegas, 2015). In addition, this examination can also detect viral infections such as the Human Papilloma Virus (HPV) and infections from bacteria that can cause sexually transmitted diseases such as Chlamydia and Gonorrhea.

The highest cancer in Indonesia in women is breast cancer and cervical cancer. While in men are lung cancer and colorectal cancer. Other data from Globocan estimates, International Agency for Research on Cancer (IARC) in 2012, the incidence of cancer in Indonesia is 134 per 100,000 population with the highest incidence in women being breast cancer at 40 per 100,000 followed by cervical cancer at 17 per 100,000 and colorectal cancer at 10 per 100,000 women. While in men the highest incidence is lung cancer 26 per 100,000, colorectal cancer 16 per 100,000 and prostate cancer 15 per 100.00 men. Based on data from the 2010 Hospital Information System, inpatient cases of breast cancer were 12,014 cases (28.7%), cervical cancer 5,349 cases (12.8%).

Cervical cancer is a cancer with a high prevalence in Indonesia in 2013, which was 0.8% and it is known that the age group of 25-44 years, and 45-54 years is an age group with a fairly high prevalence of cancer. (Infodatin, 2015), this data shows that the number of cases of cervical or cervical cancer is still quite high, and is the most common type of cancer suffered by Indonesian women. It is estimated that 40-45 new cases appear every day and about 20-25 women die every day due to cervical cancer.

The results of the 2013 Basic Health Research show that the prevalence of tumors/cancer in Indonesia is 0.8%. The highest figure is in the Special Region of Yogyakarta, North Maluku, and Riau Islands (1.5% of the population) and the lowest is in Papua Province (1.3%). The prevalence of tumor/cancer was higher in women (0.8 %) than in men (0.2 %).

According to Edianto (2011) more than 90% of the causes of cervical cancer (KLR) are Human Papilloma Virus (HPV) which is transmitted through sexual intercourse. In addition to HPV, several risk factors for cervical cancer (KLR) include; (1) The incidence is higher in those who are married than those who are not married, (2) women whose first coitus (Coitarche) is experienced at a very young age (<16 years), (3) Incidence increases with high parity, especially if the delivery distance is too long, close, (4) they
are from low socioeconomic groups (poor sexual hygiene), (5) sexual activity that has multiple partners (promiscuity), (6) often found in women who experience HPV infection (Human Papilloma Virus) - type 16 or 18, and (7) often in women who have a smoking habit.

Currently, several methods of early detection of cervical cancer are known, namely, pap smear test, IVA, enlargement of IVA with gynecology, colkoscopy, cervicography, thin prep and HPV test. However, in accordance with conditions in developing countries including Indonesia, using the IVA method, because the technique is easy and simple, the cost is low, the sensitivity is high, fast and accurate enough to find abnormalities at the stage of cell abnormalities (dysplasia) or before pre-cancer. However, the lack of awareness of women of childbearing age to perform early detection of cervical cancer makes this IVA examination less desirable.

IVA examination is an examination by a doctor / midwife or paramedic, on the cervix which is given 3-5% acetic acid by inspection with the naked eye. Precancerous lesions of uterine ectocervical tissue smeared with acetic acid (vinegar acid) will turn white (acetowhite). However, if a macroscopic lesion is found that is suspected to be cancer, the application of acetic acid is not done and the patient is immediately referred to a more complete facility (Sulistioiati, 2014).

There are still many women who have not done early detection of cervical cancer for various reasons. According to Wahyuni’s research (2013), the influence of knowledge factors (p value: 0.000 and OR: 0.265), attitudes (p value: 0.000 and OR: 2.191), husband’s support (p value: 0.000 and OR: 3.050) and peer support towards early detection behavior of cervical cancer in Ngampel District, Kendal Regency, Central Java. Meanwhile, the factors of age, education, economy, and affordability showed no effect on early detection behavior carried out by WUS.

Data obtained from the South Sulawesi Provincial Health Office (2018) The number of women of childbearing age is 415,175 people. There were 10,986 people who did cervical cancer screening. Positive IVA 370 people and 10 people affected by cervical cancer. In January - March 2019 there were 3,341 people who did cervical cancer screening examinations, Positive IVA 95 people. (South Sulawesi Provincial Health Office, 2018).

Bulukumba City Health Office, in Get the number of women of childbearing age 16,485. There were 1,639 people who did cervical cancer screening. Positive IVA 47
people and 6 people affected by cervical cancer. In January - March 2019, there were 423 people who did cervical cancer screening examinations, and none of them had a positive IVA. (Bulkanba City Health Office).

Borongrappoa Health Center is one of the health centers that has a fairly wide working area, which is located in the city of Bulukumba. The data obtained, in 2018 who conducted cervical cancer screening examinations as many as 170 people and 1 person detected cervical cancer from the total number of women of childbearing age (WUS), which was 3886 people, which means only 4.3% of the total WUS in the working area of the Puskesmas. Borongrappoa, this shows that the participation rate of WUS to perform Screening with the IVA method is very low.

**METHODS**

This type of research is quantitative research with a cross sectional study approach. The sampling technique used was purposive sampling, with criteria for inclusion and exclusion. The sample consisted of 118 case groups and 118 control groups. Data analysis using chi square

**RESULTS**

Based on table 1, the largest age group is the age group >25 years, namely 66 respondents (55.9%) while the age group <25 years is 52 respondents (44.1%). Based on marital history, most of the marital history is not at risk, namely 95 respondents (80.5%) while respondents who are at risk are 23 respondents (19.5%).

**Table 1. Distribution of Respondents by Age Group and Marriage History in Women of Childbearing Age in the Borongrappo Health Center Area**

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Frequency (F)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt; 25 years old</td>
<td>52</td>
<td>44.1</td>
</tr>
<tr>
<td>&gt;25 years old</td>
<td>66</td>
<td>55.9</td>
</tr>
<tr>
<td><strong>marriage history</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No risk</td>
<td>95</td>
<td>80.5</td>
</tr>
<tr>
<td>Risky</td>
<td>23</td>
<td>19.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>118</td>
<td>100</td>
</tr>
</tbody>
</table>
### Table 2. Distribution of Respondents' Answers About Knowledge of Women of Childbearing Age in the Borongrappo Health Center Area

<table>
<thead>
<tr>
<th>No</th>
<th>Question</th>
<th>Yes</th>
<th>%</th>
<th>No</th>
<th>%</th>
<th>ρ Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Have you ever heard of or done cervical cancer screening?</td>
<td>44</td>
<td>37,3</td>
<td>74</td>
<td>62,7</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Pap Smear, IVA and HPV test is an early examination of cervical cancer.</td>
<td>37</td>
<td>31,4</td>
<td>81</td>
<td>68,6</td>
<td>0.000</td>
</tr>
<tr>
<td>3</td>
<td>Those who can screen for cervical cancer are all sexually active women for 3 years except menopause.</td>
<td>52</td>
<td>44,1</td>
<td>66</td>
<td>55,9</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Cervical cancer screening is carried out every year</td>
<td>38</td>
<td>32,2</td>
<td>80</td>
<td>67,8</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Cervical cancer screening can treat cervical cancer</td>
<td>53</td>
<td>44,9</td>
<td>65</td>
<td>55,1</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Cervical cancer screening function detects cervical cancer early</td>
<td>39</td>
<td>24,6</td>
<td>89</td>
<td>75,4</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Cervical cancer screening can be done in hospitals and health centers</td>
<td>68</td>
<td>57,6</td>
<td>50</td>
<td>42,4</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>One of the conditions for screening is, 24 hours before taking the test it is forbidden to have sexual intercourse</td>
<td>53</td>
<td>44,9</td>
<td>65</td>
<td>55,1</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Cervical cancer is cancer that attacks the neck/mouth of the womb</td>
<td>57</td>
<td>48,3</td>
<td>61</td>
<td>51,7</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Cervical cancer can be cured</td>
<td>52</td>
<td>44,1</td>
<td>66</td>
<td>55,9</td>
<td></td>
</tr>
</tbody>
</table>

### Table 3. Distribution of Respondents' Answers About Motivation in Women of Childbearing Age in the Borongrappo Health Center Area, Bulukumba City

<table>
<thead>
<tr>
<th>No</th>
<th>Question</th>
<th>Yes</th>
<th>%</th>
<th>No</th>
<th>%</th>
<th>ρ Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Mother feels the need to do cervical cancer screening, because she doesn’t want to get cervical cancer</td>
<td>51</td>
<td>43,2</td>
<td>67</td>
<td>56,8</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Cervical Cancer Screening Examination needs to be done even at your own expense</td>
<td>57</td>
<td>48,3</td>
<td>61</td>
<td>51,7</td>
<td>0.000</td>
</tr>
<tr>
<td>3</td>
<td>Cervical Cancer Screening is done at will</td>
<td>48</td>
<td>40,7</td>
<td>70</td>
<td>59,3</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Mothers get a lot of information about the importance of screening for cervical cancer so that mothers are interested in getting tested</td>
<td>51</td>
<td>43,2</td>
<td>67</td>
<td>56,8</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Mother did Cervical Cancer Screening because of the urge to be a healthy husband’s companion</td>
<td>36</td>
<td>30,5</td>
<td>82</td>
<td>69,5</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Mothers go for an examination because of the urge to detect uterine cancer early on</td>
<td>55</td>
<td>46,6</td>
<td>63</td>
<td>53,4</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Every 6 months, Mother will do KLR after the age of 40 years</td>
<td>53</td>
<td>44,9</td>
<td>65</td>
<td>55,1</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>If the vaginal discharge, the mother will immediately screen</td>
<td>57</td>
<td>48,3</td>
<td>61</td>
<td>51,7</td>
<td></td>
</tr>
</tbody>
</table>
DISCUSSION

Relationship of Marriage History to Cervical Carcinoma Screening with IVA Method

Based on the table, it is known that of the 16 respondents who had screened for cervical carcinoma using the IVA method, 56.2% were the risk group, while only 43.8% were the non-risk group. Meanwhile, of the 102 respondents who had never screened for cervical carcinoma using the IVA method, 13.7% were at risk and 86.3% were not at risk.

Based on the results of the chi square, the value of $= 0.000$ ($\rho < 0.05$). This means that there is a relationship between marital history and cervical carcinoma screening using the IVA method at the Borongrappoa Health Center. In this study, of the 16 respondents who had screened, 9 of them were those whose marriage history had been married more than once or were included in the risk group category. Referred to as a risk group because women with high sexual activity, and often change partners. Changing partners will allow the transmission of venereal diseases, one of which is the Human Papilloma Virus (HPV). This virus will change the cells on the surface of the mucosa to divide into more and uncontrollably so that it becomes cancer. The rest are 7 respondents who have been screened but are not included in the risk category, namely those who have been married no more than once.

Awareness of groups at risk for screening, triggered by the awareness of these groups that they are more likely to get cervical cancer, after receiving attention from related health workers, and those who are not included in the category of risk groups but do screening, based on good motivation and knowledge of cervical cancer.

This study is not in line with Yuliwati’s research (2012), regarding factors related to WUS behavior in early detection of cervical cancer using the IVA method in the Prembun Health Center area in 2012, with a $p$-value of 0.649.

The Relationship of Knowledge to Cervical Carcinoma Screening with the IVA Method

Based on the table, it is known that of the 16 respondents who had performed cervical carcinoma screening using the IVA method, 93.8% had good knowledge, while only 6.2% had poor knowledge. Meanwhile, of the 102 respondents who had never screened for cervical carcinoma using the IVA method, 27.5% had good knowledge and 72.5% had poor knowledge.

Based on the results of the chi square, the value of $= 0.000$ ($\rho < 0.05$).
This means that there is a relationship between knowledge of cervical carcinoma screening using the IVA method at the Borongrappoa Health Center. In this study, where WUS who had carried out early detection of cervical cancer were more WUS who had good knowledge as many as 15 people. The rest there is 1 person who has poor knowledge, this can happen because there are other factors outside of knowledge that can encourage someone to do screening, such as family support, an invitation from a friend, or being motivated by seeing other people doing screening. While WUS who have never done early detection of cervical cancer are still many WUS who have less knowledge, namely as many as 74 people. This can lead to low IVA visits. In addition, based on the results of research where WUS who have good knowledge are as many as 28, but do not want to do it because it is influenced by other factors such as socio-cultural or family support, thus influencing respondents' decisions in early detection of cervical cancer. To address this, it is better to do more health education or promotion by health workers or local government regarding the importance of early detection of cervical cancer.

The lack of public knowledge and awareness of health and disease can result in diseases that occur in the community which are often difficult to detect. Even people find it difficult or unwilling to be examined. This will cause people to not get proper health services.

This is in line with Indah Kurniawati's research (2015), on the effect of knowledge, motivation and husband's support on IVA examination behavior in the group of women of childbearing age at the Kedungrejo Health Center. The results of this study are relevant to Desi's research (2016) at the Padang Pasir Public Health Center that there is a significant relationship between knowledge and WUS action in early detection of cervical cancer using the IVA method. The results of this study are also in line with research conducted by Sri (2012) in Ngampel District, Kendal Regency, Central Java, showing that knowledge has a significant relationship with early detection behavior of cervical cancer.

**The Relationship of Motivation to Cervical Carcinoma Screening with the IVA Method**

Based on the table, it is known that of the 16 respondents who had performed cervical carcinoma screening using the IVA method, 87.5% had good motivation, while only 17.5% had poor motivation. Meanwhile, out of 102 respondents who had never done cervical carcinoma screening using the IVA method, 35.5% had good motivation
and 64.5% had poor motivation.

In this study, there were 14 respondents who had good motivation and had been screened, but there were 2 respondents who had good motivation but did not do screening. This is because women who have good motivation for health values do not always manifest in real situations (behavior), because Good motivation will be followed by behavior that refers to other people's experiences or is based on a person's many or little experiences, such as fear of trying or bad experiences from other people who have done it.

Meanwhile, motivation is not good for cervical cancer early detection, related to their low knowledge and not knowing the purpose and benefits of IVA examination. This research is in line with research conducted by Suarniti,

**CONCLUSIONS**

Marital status has a relationship with Cervical Carcinoma Screening With the IVA Method at the Borongrappoa Health Center, Bulukumba City with a p-value of 0.00 less than 0.05, meaning there is a relationship. Knowledge has a relationship with Cervical Carcinoma Screening With the IVA Method at the Borongrappoa Health Center, Bulukumba City with a p-value of 0.00 less than 0.05, meaning there is a relationship. Motivation has a relationship with Cervical Carcinoma Screening With the IVA Method at the Borongrappoa Health Center, Bulukumba City.

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