



RELATIONSHIP OF KNOWLEDGE AND DISEASE THREATS IN LUSH AGE PARTNERS ON THE UTILIZATION OF IVA SERVICES IN THE WORK AREA OF WOTU HEALTH CENTER IN 2019

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Abstract:-

This study aims to determine the relationship between knowledge and threat of disease in fertile age couples (PUS) against the use of IVA services in Wotu Community Health Center Working Area in 2019. The study used a survey method with a Cross Sectional approach, where the independent variables and dependent variables will be collected and examined in at the same time. The method of sampling uses simple random sampling, so that the sample in this study amounted to 361 respondents. Data analysis is done using the SPSS program (Statistical Package for Social Sciences) version 21. The analytical method carried out consisted of univariate, bivariate and multivariate analysis methods. The results showed that there was a relationship between knowledge and threat of disease with the use of Visual Inspection services with Acetic Acid (IVA) for early detection of cervical cancer in Fertile Age Couples (EFA) in Wotu Health Center in 2019.

Keywords: knowledge, disease threat, utilization of IVA, couples of childbearing age.

INTRODUCTION:-

Cancer is still one of the leading causes of death worldwide. In Indonesia, cancer is a cause of death number 7 (seven) of all causes of death. Currently the Indonesian government has a number of cancer control policies and programs. This is supported by the issuance of the Republic of Indonesia's Minister of Health Regulation No. 34 of 2015 concerning the Management of Breast Cancer and Cervical Cancer which aims to improve early detection. In addition there was also IVA service training for health workers and provided cryotherapy tools to follow up on positive IVA results.

Early detection programs, mainly carried out in cervical cancer (cervix) because it is the highest type of cancer in Indonesia. The effort is in the form of cervical cancer screening using the Visual Acetic Acid (IVA) Inspection method. And the target of this program is women aged 30-50 years (Ministry of Health, 2015).

Cervical cancer is a malignant tumor of the cervix (cervix) as a result of uncontrolled tissue growth and damage to normal tissue around it. (Kumalasari, Andhyantoro, 2012).

The cause of this cervical cancer is Human Papiloma Virus (HPV). There are several risk factors that can cause a woman to be exposed to this Human Papilloma Virus (HPV), including getting married / starting sexual relations at a young age, the number of pregnancies / childbirth that is too frequent, sexual behavior that often changes partners, a history of infection in genital area and pelvic inflammation, smoking behavior and the use of contraceptive devices in uterus (Reeder et al., 2015).

Some precautions that can be taken in preventing cervical cancer, namely through primary prevention and secondary prevention. The most effective primary prevention in preventing cervical cancer is by giving HPV vaccine. Although it is very effective, but because the price is relatively expensive so it cannot be reached by the wider community. While secondary prevention is by conducting screening or early detection such as through inspection of Visual Acetic Acid. This screening activity is expected to reduce the incidence and mortality due to cervical cancer (Ministry of Health, 2015).

Early detection of cervical cancer using IVA, the effectiveness is almost the same as other cervical cancer early detection tests. In 2015, Paswan et al conducted a study and concluded that the IVA method was very helpful in reducing the incidence of cervical cancer in India. In addition, research conducted by Goyal et al (2015) states that IVA is a sensitive, practical and low-cost method for early detection of cervical cancer.

Although this method is easy, inexpensive and simple, it is still far from the expectation of early detection of cervical cancer in health facilities. According to the Indonesian Health Profile (2017) data, the achievement of national examination of cervical cancer early detection with IVA is still lacking. Of the total target of 37,415,483, the newly achieved target is 3,040,116 (2.98%) with a positive IVA of 105,418 (3.48%). For the province of South Sulawesi, from the target of 1,219,200 and up to 2017 new achievements were 58,015 (2.16%) with positive IVA 966 (1.67%). Whereas for East Luwu district, based on data from the Non-Communicable Disease Program (PTM), the target is 45,047 and until 2018 achievement of 3,401 (7.54%) with positive IVA 181 (5.32). And for the Wotu Community Health Center the target number is 5,027, the newly achieved target until 2018 is 433 (8.61%), with a positive IVA of 1 (0.23%).

From these data, it appears that the achievement of IVA is still very low, which is below 10%. Whereas the IVA target is 100% per 5 (five) years. And to date, entering the second year (two), the national IVA achievement is only 2.98%, South Sulawesi province is 2.16%, east luwu district is 5.32% and for wotu health center has only reached 8.61% . So that the target for 5 years can not be achieved. Whereas from the results of IVA examination that has been done, there has been a positive IVA detected, which means that pre-cervical cancer has been indicated.

LITERATURE REVIEW:-

Early detection / screening is a simple and easy examination or test effort in a healthy population, which aims to differentiate between sick and at risk people from healthy communities (Ministry of Health, 2015). There are several early detection methods that can be used to detect cervical cancer, among others: Pap smears, cervicography, colposcopy, HPV, IVA, IVAM, thin-layer pap smear preparation and VILI (Kumalasari & Andhyantoro, 2012).

At present, the government has launched a method of early detection of cervical cancer that can be done in health facilities, especially at the Puskesmas level, namely by the IVA method (Visual Acetic Acid Inspection). This method, supported by the issuance of the Minister of Health Regulation of the Republic of Indonesia Number 34 of 2015 concerning the Management of Breast Cancer and Cervical Cancer (Minister of Health Regulation 34 of 2015).

Visual inspection with acetic acid is a visual examination of the cervix or vision with the naked eye to detect abnormalities after applying acetic acid or vinegar (3-5%) to the cervical area. On this examination, the abnormal area will change color with a firm border to white (acetowhite), which indicates that the cervix may have precancerous lesions (Reference Book of the Ministry of Health, 2015).

Cervical cancer is a malignant tumor in the cervical region (cervix) because of uncontrolled tissue growth and damage to normal tissue around it (Kumalasari & Andhyantoro, 2012). Cervical cancer often occurs at the age of 45 years and peaks at the age of 55 years (Department of Health, 2015).

Health behavior according to Skinner in Notoatmodjo is the response or reaction of someone (organism) to stimuli or objects related to illness and disease, health care systems, food and beverages and the environment.

The Health Believe Model developed by Rosenstock in Thaha R (2018) The "Social Sciences and Behavior Module" states that the goals of HBM are developed to explain and predict preventive health behaviors and disease behavior and disease behavior. And the focus is on the relationship of health behavior, practice and utilization of health services, and general health motivation for the purpose of distinguishing sickness and sickness behavior.

HBM has been applied to all health behavior studies and states that a person's motivation to conduct health behavior can be divided into three main categories, namely: individual perceptions, behavior modification and possible actions. Individual perceptions are factors that influence perceptions of illness

or disease and face the importance of individual health, vulnerability and perceived severity. Modifying behavior includes demographic variables, perceived threats and cues to act. Possible actions, discuss possible health behavioral factors. And these factors are the basis for the possibility of individuals to take preventative health measures suggested.

METHODOLOGY:-

The study used a survey method with a Cross Sectional approach, which is an independent variable and the dependent variable will be collected and examined at the same time. The population in the study was a fertile age couple (PUS) who lived in the working area of Wotu Health Center. The population in this study was 3677 people. In this study the determination of the number of samples using Slovin Formula. The method of sampling uses simple random sampling, so that the sample in this study amounted to 361 respondents.

Data collection techniques in this study use primary data and secondary data. Primary data is data obtained directly from the results of interviews and observations from respondents, while secondary data is data obtained through service documents in the form of IVA service reports at the KIA / KB Police in the Wotu Community Health Center work area.

Data that has been verified is then inputted into the computer for analysis. Data analysis was carried out using the SPSS program (Statistical Package for Social Sciences) version 21. The analysis method carried out consisted of univariate and bivariate analysis methods. This study uses a cross sectional study, while the analysis of the effect of independent variables on the dependent variable uses a bivariate test.

RESULTS:-

Characteristics of Respondents

The characteristics of the respondents in this study were explained based on age, age at first marriage, number of children, recent education, employment and ethnicity of the respondents.

Table 1 Age-Based Distribution, First Age of Married Times, Latest Education, and Occupation in Fertile Age Couples in the Wotu Health Center Working Area in 2019

Characteristics	N	%
1. Age		
30-40	236	65.37
41-50	125	34.63
Total	361	100.00
2. Age at marriage		
<20 years old	157	43.49
20-35 years old	202	55.96
>35 years old	2	0.55
Total	361	100.00
4. Education		
Not completed in primary school	14	3.88
Elementary school	148	41.00
Junior high school	87	24.10
Senior High school	90	24.93
Diploma	4	1.11
Bachelor	18	4.99
Total	361	100.00
5. Work		
Does not work	325	90.03
Government employees	2	0.55
Private employees	15	4.16
Entrepreneur	19	5.26
Total	361	100.00
Total	361	100.00

Source: 2019 primary data

Based on Table 1 shows the results of the distribution of respondents for the distribution of age of fertile age couples (PUS), obtained results that most respondents aged between 30 to 40 years as many as 236 people or 65.4% of the total respondents. The rest are 41 to 50 years old, 125 or 34.6%.

Distribution for the age of marriage at EFA, the results showed that the majority of respondents aged 20-35 years of marriage were 202 people or 56% of the total respondents of the study. While the rest, having a marriage age of less than 20 years as many as 157 people or 43.5% and the least is the age of more than 35 years as many as 2 people or 0.6%.

Distribution for education at EFA, the results showed that the educational background of the study respondents was mostly graduates from the Elementary School (SD) as many as 148 people or 41% of the total respondents. For those who take compulsory education for 9 years, 24.9% of the total respondents. And the least are those who study Diploma, namely 4 people or 1.1% of the total respondents.

The distribution for work in EFA, results showed that most of the EFA jobs were not working or having the status of a housewife as many as 324 subjects or 89.8%. While the least is working as a civil servant, namely 2 people or 0.6%.

Univariate Analysis

Descriptive analysis is done to explore the characteristics of the sample or other variables that support the sample. Descriptive analysis is used to see the extent to which other variables play a role in influencing the existence of the sample. The following are descriptive statistics from the research data obtained, which include knowledge, perceptions of individual vulnerability, perceptions of disease severity, perception of disease threats, exposure to information about IVA, perceptions of benefits received, perceptions of barriers received, and utilization of IVA services.

Table 2 Distribution Based on Utilization of IVA Services, Knowledge and Perception of Threats on Fertile Couples (PUS) in Wotu Community Health Center Working Area in 2019

Variable	Category	N	%
IVA Utilization	Yes	47	13.02
	No	314	86.98
	Total	361	100.00
Knowledge	Bad	203	56.23
	Good	158	43.77
	Total	361	100.00
Perception of Threats of Disease	Low	188	52.08
	High	173	47.92
	Total	361	100.00

Source: 2019 primary data

Based on Table 2, the results of the distribution of utilization of IVA services for fertile age couples are known to use 47 people or 13%, while those who do not utilize 314 people or 87%. Knowledge distribution on fertile age couples (PUS) who have bad knowledge is 203 people or 56.2% and those who have good knowledge 158 people or 43.8%. Distribution of the results of perceptions of disease threats to fertile age couples (PUS) with a low category of 188 people or 52.1%. While the low category has 173 people or 47.9%.

Bivariate Analysis

Bivariate analysis was carried out to test the independent variables, namely knowledge, perception of vulnerability, perception of seriousness, perceived threat, exposure to information, perceived benefits and perceived barriers received with the dependent variable namely the use of IVA services. The bivariate test used was crosstab analysis with the Chi-Square test.

Table 3 The Relationship between Knowledge and Threat Perception on Fertile Age Couples to the Utilization of IVA Services in Wotu Community Health Center Working Area in 2019

Utilization of IVA								
	Knowledge	Yes		No		Total		<i>p-value</i>
		N	%	N	%	N	%	
Knowledge	Not Good	6	1.66%	197	54.57%	203	56.23%	0,000
	Good	41	11.36%	117	32.41%	158	43.77%	
	Total	47	13.02%	314	86.98%	361	100.00%	
Perception of Threats of Disease	Low	0	0.00%	188	52.08%	188	52.08%	0,000
	High	47	13.02%	126	34.90%	173	47.92%	
	Total	47	13.02%	314	86.98%	361	100.00%	

Source: 2019 primary data

Based on Table 3, the results show that fertile age couples who have poor knowledge there are 203 people (56.23%) with 1.66% who use IVA services and 54.57% do not use IVA services. While EFA who has good knowledge there are 158 people (43.77%) with 11.36% who use IVA services and 86.98% do not use IVA. The value of p-value obtained is 0,000 which is smaller than 0.05 so it can be concluded that there is a relationship between knowledge variables and utilization of IVA services.

In the perception of threats, the results of fertile age (PUS) couples who have low threat perceptions are 188 people (52.08%) with 0.00% who use IVA services and 52.08% do not use IVA services. Whereas EFA that has a high threat perception there are 173 people (47.92%) with 13.02% who use IVA services and 34.90% do not utilize IVA services. And based on the p-value obtained by 0,000 which is smaller than 0.05, it can be concluded that there is a relationship between the perceived threat variables and the utilization of IVA services.

DISCUSSION:-

Relationship of Knowledge with IVA Utilization

In this study, it was found that the results of the statistical test obtained $p = 0,000$, which means that well-informed fertile age couples (PUS) about cervical cancer would be more likely to use IVA services than those with poor knowledge. PUS knows and understands that cervical cancer is a malignant disease that attacks the cervix and women and is at risk for women who already have a partner.

Research conducted by Mirayashi, et al (2015) and involving 88 respondents also found that there was a significant relationship between the level of knowledge about cervical cancer and participation in IVA examination ($p = 0.009$). The same research conducted by Lubis, et al. (2016) also found the same thing, that there was a significant relationship between knowledge with the participation of EFA mothers for IVA tests at Helvetia Community Health Center in 2016 with $p = 0.001$.

According to the theory of Lawrence Green in Notoatmodjo (2012) states that behavior can be formed from 3 factors and one of them is predisposing factors such as knowledge. Knowledge is the result of sensing or the result of knowing someone about objects through their senses so as to produce knowledge that is determined by the intensity of attention, and perception of the object. So when someone wants to adopt a new behavior, that person must know the benefits of behavior for himself and also his family. One of the factors that influence knowledge includes education. It is said that the higher the level of education of a person, the easier it will be to receive information about objects or related to knowledge. Knowledge in general can be obtained from information obtained both from the mass media and from other people.

Research conducted by Rahma and Prabandari (2012) shows that the higher the education of a person, the higher the interest in conducting an IVA Test while the lower one's education is, the greater the interest in IVA Test examination.

According to Rogers in Notoadmodjo (2012) it is stated that before a person adopts a behavior, in that person a sequential process occurs which is abbreviated as AIETA, which means: 1). Awareness (consciousness), which is where the person knows the stimulus first, 2). Interest, where the person feels interested in the stimulus, 3). Evaluation (weighing whether or not the stimulus is for him, 4). Trial, people start trying these behaviors and 5). Adoption, the person has behaved according to his knowledge,

awareness and attitude towards the stimulus. If acceptance of behavior through a process like this, then the behavior will last. And conversely if behavior is not based on knowledge and awareness, then the behavior will not last long.

Relationship Diseases of Threat Perception with IVA Utilization

In this study it was found that, out of 361 respondents there were 188 people with low threat perception and 173 people with high threat perception with those who used IVA as many as 47 people. The results of the statistical test showed that there was a relationship between the perception of disease threats to the utilization of IVA services and the statistical test in getting $p = 0,000$ less than $0,005$. In this study, respondents understood that when there were symptoms such as vaginal discharge, it would be a threat to him to get cervical cancer. And besides that, they also understand that when they get cervical cancer their activities are disrupted because cervical cancer is a disease that is difficult / unable to heal again.

Perception of threat is the individual's perception of the possibility of getting an illness. And this perception will encourage someone to prevent a disease. However, when the threat is too large it will cause a person's fear of taking action because they feel that they are helpless.

CONCLUSION:-

From the results of the research and discussion, it can be concluded that there is a relationship between knowledge and utilization of Visual Inspection services with Acetic Acid (IVA) for early detection of cervical cancer in fertile age couples (EFA) in Wotu Health Center in 2019. On the other hand, no there is a relationship between the perception of the threat of disease with the use of Visual Inspection services with Acetic Acid (IVA) for early detection of cervical cancer in Fertile Age Couples (EFA) at Wotu Health Center in 2019.

Thus the need to make efforts to increase public knowledge, especially WUS about cervical cancer and IVA examination through a health promotion program improvement program by the health center in the form of counseling, socialization and counseling for WUS, as well as the use of effective communication media tools in accordance with the targeted information delivery method.

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