Correlation Of Pregnant Woman' Self-Efficacy With Behaviour In Utilizing Vct Services

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ABSTRACT: Background: One of the efforts to prevent HIV transmission is through Voluntary Counseling and Testing (VCT) services. VCT program is a counseling process that takes place before, during, and after a person has a blood test to find out whether he has been infected with HIV or not. A person's behavior in utilizing health services such as VCT can be influenced by self-efficacy. This study aims to analyzed thecorrelation of pregnant woman' self-efficacy with behaviour in utilizing VCT services in Banyuwangi.  
Methods: This type of research is observational analytic. The research was carried out in three sub-districts (Banyuwangi, Singojuruh, and Genteng) in May-November 2018. The study population was all pregnant women who were targeted by the Public Health Services in these three sub-districts in 2018. The studies sample was determined by several inclusion criteria. Sampling was used proportional random sampling.  
Result: Characteristics of pregnant women according to age and education in behaving using the most VCT services are 26-34 years (52.8%) and high school (45.6%). The majority of respondents' self-efficacy in utilizing VCT was classified as bad. The percentage of respondent with bad self-efficacy was 54.9% and respondent with good self-efficacy was 48.4%.  
Conclusion: The pregnant woman' self-efficacy was correlated with behaviour in utilizing
VCT services (0,016). The conclusion of this study is that self-efficacy in pregnant women can influence behavior in utilizing VCT services.

Keywords: Voluntary Counseling and Testing, Self-efficacy, HIV/AIDS, Pregnant Women

1. INTRODUCTION

HIV is a virus that attacks white blood cells (lumphosit) in the body which results in a decrease in the human immune system, causing Acquired Immunodeficiency Syndrome (AIDS). HIV / AIDS is the first cause of death in infectious diseases (1). HIV disease that was originally acute and deadly turned into a chronic disease that can be managed. However, living with chronic illness leaves other problems that require adjustments both physically, psychologically, socially, and spiritually (2).

Globally there are 36 million people with HIV worldwide, in South and Southeast Asia there are approximately 5 million people with HIV. Indonesia is one of the countries with the fastest addition of HIV / AIDS cases in Southeast Asia, with an estimated increase in the incidence of HIV infection of more than 36%. The HIV / AIDS epidemic in Indonesia is growing the fastest among countries in Asia (3). From 1989 to 2014 there were 150,396 HIV cases, 55,799 AIDS cases and 9,796 cases leading to death (4). In Indonesia the highest percentage of HIV infection age was reported in the age group of 25-49 years (68%), followed by the age group of 20-24 years (18.1%) (5).

Women become vulnerable populations infected and transmitted. The case of HIV / AIDS in women is 44.1% and among them is the reproductive age of 73.7%. This large enough number will automatically increase the likelihood of HIV-AIDS transmission from pregnant women to babies conceived (6). Until now there are 10 provinces in Indonesia which have an average prevalence of HIV / AIDS above the national prevalence of 7.72 per 100,000 population. East Java is the second largest after DKI Jakarta (7). HIV cases in Banyuwangi cause problems, because until 2017 the highest HIV sufferers according to the profession were housewives, especially pregnant women.

The risk of HIV transmission from mother to baby ranges from 24-25% but this risk can be lowered one of them through voluntary HIV counseling and testing services. Indonesia has developed HIV prevention efforts through the services of Voluntary Counseling and Testing (VCT). Based on the policy of the Minister of Health Number 21 of 2013 concerning HIV / AIDS Prevention Article 17, it is stated that all pregnant women who carry out pregnancy checks are required to take VCT as an effort to prevent and transmit HIV from mothers to their children (8). So, women play a pivotal role in the prevention of mother-to-child transmission and are, more often than men, the caregivers for those living with HIV/ AIDS (9).

VCT is an entry point to help people get access to all services, both information, information, education, ethics or psychosocial support. With open access, the need for accurate and accurate information on prevention of HIV / AIDS transmission will be achieved so that behaviors can be directed more healthfully (5).

The increase in HIV / AIDS in Indonesia and especially in Banyuwangi does not only occur in high-risk groups. HIV / AIDS cases are increasing every year in the group of housewives
of reproductive age and a high risk of transmission through mother to child. Currently pregnant women are encouraged to do VCT to find out their HIV status. VCT program is a counseling process that takes place before, during, and after a person has a blood test to find out if he has been infected with HIV. VCT aims to make someone aware of the client's health condition early on, and can anticipate the worst possible for him if the test results are positive. In addition, VCT can also be used to obtain information about HIV or help someone find appropriate services and assistance (10). However, there are still many people who do not do VCT services that are already available. According to Bandura's Theory states that human behavior is influenced by confidence in him (self efficacy) so that it will determine their health status. Self-efficacy refers to the belief in the extent to which an individual estimates his ability to carry out the tasks required to achieve a certain result. Beliefs about all of these abilities include confidence, ability to adapt, cognitive capacity, intelligence and capacity to act in stressful situations. It is this belief that influences the behavior of the individual (11). This theory starts from what he thinks, believes, and feels which will influence how he behaves. This belief influences client behavior, somehow adhering to medication, utilizing health services, learning to accept oneself and being open, stress management in the face of stigma, etc. Based on these data it is necessary to conduct research on the extent of the relationship of self-efficacy of pregnant women with the behavior of VCT service utilization in Banyuwangi.

2. MATERIALS AND METHODS

Research Design
This type of research is observational analytic conducted by observing or measuring variables without giving treatment or intervention to obtain information about diseases that occur in the community by looking for and analyzing relationships and interactions between risk factors with the effects or observed events (12). The design that used in this study is cross sectional, because the exposure and disease studied can be measured simultaneously when observations take place on individuals from a single (homogeneous) population that takes place at a time (13).

This research was conducted in 3 sub-districts in Banyuwangi Regency which oversee Public Health Centers (PHC) in their working areas, such as Sobo, Singotrunan, Kertosari, Singojuruh, Genteng Kulon, and Kembiritan in May until November 2018. The independent variable in this research is self-efficacy while the dependent variable is the behavior in utilizing VCT services.

Population and Sampling
The population of this research is all pregnant women in 2018 in the working area of the Sobo PHC, Singotrunan PHC, Kertosari PHC, Singojuruh PHC, Genteng Kulon PHC, and Kembiritan PHC. The sample of this research were pregnant women in the population area with 3 sample inclusion criteria, such as pregnant women in good health, pregnant women who were willing to become respondents, and pregnant women who had been examined for her pregnancy.
The determination of the minimum sample size in a cross sectional study was calculated using the following formula (14):

\[ n = \frac{Z^2 (1 - \frac{\alpha}{2})(p)(q)}{(d)^2} \]

Explanation:
- \( n \): cross sectional research sample size
- \( Z^2 1 - \alpha/2 \): Z statistic on standard normal distribution at \( \alpha \) level of 0.05 = 1.96
- \( p \): 0.5
- \( q \): 0.5
- \( d \): large errors that can be accepted, usually used a level of confidence or \( \alpha = 0.05 \)

Based on this formula, the minimum sample size in this research was 384 people.

The sampling technique used in this research was proportional random sampling. Sampling is done by taking subjects from each strata or each region is determined to be balanced with the number of subjects in each strata or region (15) then a sampling technique is simple random sampling which is this technique is divided into 2 ways, that are by raffling (lottery technique) or using a table of numbers or random numbers (16). Using a proportional random sampling technique, it can be determined the sample size in each PHC work area according to Sugiyono (17), that are 72 people at Sobo and Singojuruh PHC, 60 people in Singotrunan PHC, 41 people in Kertosari PHC, 70 people in Genteng Kulon PHC and 69 people in Kembiritan PHC.

**Data Collection**

Primary data is data collected by the researchers themselves or data obtained directly from the subject of research. Primary data excavation is done through interviews with respondents, namely pregnant women with instruments used questionnaires made by researchers. Data collection is conducted in a month months in October 2018. Data collection was carried out for 10-20 minutes for each respondent to be interviewed and fill out questionnaires.

While, secondary data is data that is already available before the researcher collects data. The data can be obtained from the relevant agencies, such as a name' list of pregnant women living in the local sub-district, health profile of the PHC, and data on morbidity in the obtained PHC.

Validity is a measure that shows the validity of an instrument. An instrument is said to be valid if it’s able to measure what it wants to be able to reveal data from variables that are properly examined. In this case the researcher used the questionnaire as an instrument. In order for the compiled questionnaire to be arranged properly, it needs to be tested. To determine the level of validity of the instrument, the instrument was tested first on a number
of people who had the same characteristics as the population. If \( r \text{ count} > r \text{ table} \) at \( df = n-2 \) and \( \alpha = 0.05 \) then the instrument is said to be valid.

While, reliability is an index that shows the extent to which an instrument as a measuring instrument can be trusted to be used as a data collection tool because the instrument is good. Reliability test was carried out using alpha cronbach. Instruments are said to be reliable if alpha values are more than 0.6 (18).

**Data Analysis**

In this study, data processing was carried out using a computer program, namely SPSS Statistics 23 with the following steps, such as editing, coding tabulation and data entry. Data analysis in this research was carried out in 2 forms, namely univariate analysis and bivariate analysis. Univariate analysis is an analysis conducted to describe each variable from the research results. This analysis is written in the form of frequency distribution and percentage of each variable (19).

While the statistical bivariate analysis according to Arikunto (2002)(18) can be used to explain the closeness of the relationship between two variables. The accuracy of the use of this coefficient depends on the type of data that will be searched for. Before the statistical tests were carried out, normal tests were carried out beforehand to find out whether the data obtained were normal or abnormal with the Kolmogorov Test. The statistical test in this study for data is not normally distributed using the chi-square test.

**Ethical Considerations**

Ethical approval was obtained from Health Research Ethics Committee, Faculty of Public Health Airlangga University with ethical approval number: 524-KEPK. Permission to collect data in PHC was obtained from Airlangga University Banyuwangi Campus with number: 1338/UN.3.1.16/LT/2018. All the respondents who agreed to participate in the study signed an informed consent statement voluntarily, and the anonymity and confidentiality of each respondent has also been guaranteed and stated in the informed consent.

### 3. RESULTS

**Respondents Characteristics**

1. **Respondents Distribution According to Age**

The respondents' age is divided into 3 categories, including: 17-25 years, 26-34 years, and \( \geq 35 \) years. The most of respondents' age is 26-34 years. For more details can be seen in table 1.

<table>
<thead>
<tr>
<th>Age</th>
<th>n</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>17-25 years</td>
<td>125</td>
<td>32.6</td>
</tr>
<tr>
<td>26-34 years</td>
<td>203</td>
<td>52.8</td>
</tr>
<tr>
<td>( \geq 35 ) years</td>
<td>56</td>
<td>14.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>384</strong></td>
<td><strong>100.00</strong></td>
</tr>
</tbody>
</table>

Based on table 1 shows that among 384 people, the percentage of respondents aged 17-25 years is 32.6%, the percentage of respondents aged 26-34 years is 52.8% and age \( \geq 35 \) years is 14.6%.
2. Respondents Distribution According to Self Efficacy
Self-efficacy of respondents is divided into 2 (two) categories, including: bad and good. Most respondents' self-efficacy is bad. For more details can be seen in table 2.

Table 2. Distribution of respondents according to self-efficacy.

<table>
<thead>
<tr>
<th>Self-efficacy</th>
<th>n</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bad</td>
<td>211</td>
<td>54.9</td>
</tr>
<tr>
<td>Good</td>
<td>173</td>
<td>45.1</td>
</tr>
<tr>
<td>Total</td>
<td>384</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Based on table 2 shows that among 384 people, the percentage of respondents with bad self-efficacy is 54.9% and the percentage of respondents with good self-efficacy is 48.4%.

Correlation of Self-Efficacy with Behaviour in Utilizing VCT Services
Based on the data collection results, it's known that respondents who have bad self-efficacy behave using VCT by 50.2%, while those who do not use VCT are 49.8%. Respondents who have good self-efficacy who behaved utilizing VCT by 63%, while those who didn't use VCT services were 37%. To analyse the relationship of self-efficacy with behavior utilizing VCT can be seen in table 3.

Table 3. Correlation of self-efficacy with behavior in utilizing VCT services.

<table>
<thead>
<tr>
<th>Self-efficacy</th>
<th>Behaviour in Utilizing VCT</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not Utilize</td>
<td>Utilize</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Bad</td>
<td>10</td>
<td>49.8</td>
</tr>
<tr>
<td>Good</td>
<td>64</td>
<td>37.0</td>
</tr>
<tr>
<td>Total</td>
<td>16</td>
<td>44.0</td>
</tr>
</tbody>
</table>

After analysis using the chi-square test, the results of p value = 0.016 < 0.05, which means there is a correlation between self-efficacy and behaviour in utilizing VCT.

4. DISCUSSION
The observation shows that most of the respondents have good self-efficacy in utilizing VCT. Self-efficacy refers to the confidence in the extent to which individuals estimate their ability to carry out their duties or perform a task needed to achieve a certain outcome. Self-efficacy is a key component of health behaviour change (20). Self-efficacy possessed by someone can be used to predict healthy behaviour and can facilitate modification of one's behaviour. People are more likely to adopt health behaviours if they think they will succeed. Self-
efficacy is used as a disease control mechanism and is used as a predictor of success in lifestyle changes.

A person's behavior is always influenced by factors from within and outside the individual. Human behavior comes from the urge that is in a person to meet his needs. Humans in their lives have a desire for optimal health so that if the body feels symptoms that interfere with their health, it will try to take preventive or medicinal measures. The desire to perform these actions is part of the behavior of human life. According to Sudarman (2008)(21), with the encouragement from within humans it causes a person's desire to take special actions or behaviors that lead to his goals. Self-efficacy is used as a disease control mechanism and is used as a predictor of success in lifestyle changes. A person who has strong self-efficacy is likely to be able to take certain actions while someone with low self-efficacy is likely to experience obstacles to taking certain actions(22).

One of the dimensions of self-efficacy in a person is strength, which emphasizes the level of individual strength on his beliefs. Self-efficacy shows that the actions taken by individuals will produce results that are expected by individuals. self-efficacy is the basis for him doing hard efforts, even when obstacles. Thus it is clear that high self-efficacy is needed for pregnant women, in particular, because this will affect attitudes towards the health of their babies (23).

Self-ability (self-efficacy) is a self-assessment, whether it can do good or bad actions, right or wrong, can or cannot be as required. As is the case with pregnant women, where pregnant women who have high self-efficacy to carry out an HIV test, they will always work hard to make it happen, namely doing the HIV test. Pregnant women who have a good self-efficacy will be more likely to reach the goal and greater to adopt or recommend behaviour. A mother who has high confidence feels confident that she will succeed, so she will carry out her duties quickly and confidently. In this case pregnant women who have an effort to improve their health and their children by preventing HIV threats will be able to carry out their effort by utilizing VCT services.

Pregnant women who suffer from HIV will feel intellectual anxiety and fear for the future. Apart from participants' knowledge of mother-to-child transmission, most of them were afraid and worried about the transmission of the virus and the future of children (24). Research conducted in Florida, Connecticut and New York City found 86% of pregnant women reported having taken an HIV test. Acceptance tests were found to be related to strong beliefs about the test benefits, knowledge of vertical transmission, the availability of test service providers, and social support. In line with Minnie's (2008)(25) research that a prominent reason why pregnant women decided to be tested was that they wanted to know their HIV status for their baby’s sake. This may indicate that the motivation was based on the women’s knowledge about the measures that can be taken to prevent mother-to-child transmission of HIV, as well as a sense of responsibility concerning the baby’s welfare.

While women who rejected the test said that they did it because they didn't consider themselves at risk for HIV or they faced administrative difficulties with some aspects of the testing process such as scheduling, and limited availability of counselling pre-tests (26). Research in Bali has been conducted to find out the reason for pregnant women refusing to test for HIV. Ariani (2012) (27) study stated that the reason for pregnant women not to take an HIV test is because the strong patriarchal culture influences the acceptance of pregnant
women on HIV testing, the stigma in society about HIV and the perception of pregnant women that they are less at risk of HIV infection.

5. CONCLUSION
In this research we know that the most of respondents’ distribution according to self-efficacy is bad. The bad self-efficacy of pregnant women in Banyuwangi affects the utilization of VCT services. Based on the results of research shows that any relationship between self-efficacy and behaviour in using VCT. So, when pregnant mother have a bad self-efficacy it can influence the behaviour of pregnant mother in utilizing VCT services at Banyuwangi to prevent transmission of HIV/AIDS to their children

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6. REFERENCES