

# HEALTH EDUCATION ANALYSIS OF TRIPLE ELIMINATION OF HIV, SYPHILIS, AND HEPATITIS B TOWARDS INTEREST IN SCREENING OF PREGNANT WOMEN

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## ABSTRACT

**Background :** The triple elimination program for HIV, syphilis, and hepatitis B is a government program aimed at preventing vertical transmission of HIV, syphilis, and hepatitis B from mother to child.

**Method :** The method is one group pre-test post-test design. The research subjects were all pregnant women who visited according to the inclusion-exclusion criteria. The sample was selected by purposive sampling of 35 respondents.

**Result :** The results showed that most of the respondents had a moderate interest in screening before being given Health Education by 68.4% and after 100%. **Analysis :** Analysis with the Wilcoxon test found that there was an effect before and after being given Health Education on interest in screening for pregnant women other Value of  $p < 0.05$ .

**Discussion :** The discussion showed that there was a difference before and after being given Health Education about the Triple Elimination of HIV, Syphilis, and Hepatitis B in the interest in screening for pregnant women

**Keywords:** *Health Education, Screening, Pregnant, Triple Elimination Program*

## INTRODUCTION

Program 3 E (triple elimination of HIV, syphilis, and hepatitis B) is a government program that aims to prevent vertical transmission of HIV, syphilis, and hepatitis B from mother to child. The high cases of several infectious diseases of HIV, syphilis, and hepatitis B are diseases that can be transmitted from an infected mother to her child during pregnancy, childbirth, and breastfeeding, and cause illness, disability, and death, thus hurting the survival and quality of life of the child.

Based on data from the Ministry of Health (Kemenkes), in 2018 HIV tests on pregnant women were only around 13.38% (761,373) of the total number of pregnant women in Indonesia as many as 5,291,143 people. Of the number who underwent the test, 2,955 people were known to be HIV positive. Meanwhile, those who received ARV (antiretroviral) drug therapy to suppress the number of viruses (VL), were even less, namely only 893 pregnant women.

More than 90% of children are infected with HIV, Syphilis, and Hepatitis B from their mothers. HIV can be transmitted from an HIV-infected mother to her child during pregnancy, childbirth, and breastfeeding. The risk of HIV transmission is 3-5 times. If pregnant women infected with syphilis are not treated adequately, then 67% of pregnancies will end in abortion, stillbirth, or congenital syphilis (Kemenkes, 2015). In 2018, 1,805,993 pregnant women were tested for HIV. From the examination, 5,074 (0.28%) pregnant women were found to be HIV positive (Ministry of Health, 2018). Hepatitis B examination in pregnant women is carried out using the Rapid Diagnostic Test (RDT). The results of the RDT HBsAg examination found that as many as 30,965 (1.88%) pregnant women were detected with Reactive

(Positive) HBsAg (Directorate General of P2P, Ministry of Health RI, 2019).

The high prevalence of HIV infection, syphilis, and hepatitis B among pregnant women was 0.3%, 1.7%, and 2.5%, respectively. The risk of mother-to-child transmission for HIV is 20%-45%, for syphilis is 69-80%, and for hepatitis B is more than 90% (Pusdatin data, 2017).

With the increasing awareness of the program, it continues to increase; although there are still many obstacles to strategic and progressive control efforts. These cases are spread across all provinces and reported in almost all urban districts in Indonesia. It is known that more than 90% of HIV/AIDS, syphilis and hepatitis B infections in infants originate from their mothers and threaten their survival, thereby increasing the morbidity and mortality of infants, children, and toddlers. Elimination of Transmission of HIV/AIDS, Syphilis, and Hepatitis B, hereinafter referred to as Elimination of Transmission, is the reduction of transmission of HIV/AIDS, Syphilis, and Hepatitis B from mother to child. The risk of HIV/AIDS transmission to infants from mothers with HIV/AIDS is 5-10% intrauterine, 10-20% during delivery, and 10-15% during breastfeeding, while in syphilis and hepatitis B the risk of transmission is greatest during pregnancy.

Minister of Health Regulation Number 52 of 2017 concerning 3E (Triple Elimination): an examination of every pregnant woman for HIV/AIDS, syphilis, and hepatitis B which is one proof of the Indonesian state's commitment to this problem to reduce the number of new infections in newborns thus breaking the chain of transmission from mother to child. Efforts to eliminate transmission of HIV/AIDS, Syphilis and Hepatitis B

infections are carried out jointly because HIV/AIDS, Syphilis, and Hepatitis B infections have relatively the same transmission patterns, which are transmitted through sexual intercourse, exchange/blood contamination, and vertically. from mother to child. To reduce the risk of transmission, it is necessary to carry out safe obstetrical management, which includes antenatal care, safe planned delivery, and postnatal care. Antenatal care includes the benefits of routine testing for HIV/AIDS, Syphilis, and Hepatitis B for pregnant women. Management of delivery includes explaining the advantages and disadvantages of the preferred method of delivery for mothers with HIV/AIDS, Syphilis, and Hepatitis B. While postnatal care includes hygiene and health care during the puerperium, contraceptive methods that can be chosen, explaining referrals to health care providers for pregnant women with HIV/AIDS, Syphilis and Hepatitis B.

Therefore it is necessary to prevent and control HIV/AIDS, syphilis, and hepatitis B with a priority to break the chain of transmission comprehensively to achieve the target of 3 Zeros, namely zero new infection (decrease in the number of new cases,

as low as possible), zero death (decreased mortality). zero stigmas and discrimination (reducing the level of discrimination as low as possible), and improving the quality of life.

Tulungagung Regency based on SIHA data from January to August 2018 the number of pregnant women was 16,662 people, and the number of pregnant women tested for HIV was 5061 people and it was stated.

## METHODE

This research is a descriptive-analytic study with a pre-experimental method with a cross-sectional approach with a one-group pre-test and post-test design. The research subjects were all pregnant women who visited the Simo Health Center UPT according to the inclusion-exclusion criteria. The sample was selected by purposive sampling as many as 35 respondents. The dependent variable of this study is health education about the triple elimination of HIV, syphilis, and hepatitis B, while the independent variable is interest in screening. The data collection instrument used a questionnaire and the research data analysis used the Wilcoxon test, where this technique used SPSS1.8 computer assistance ASIC.

**Tabel 1.** General data

Age (year)	Frekuensi	Prosentase (%)
21-30	21	60
31-35	7	20
36-40	6	17,1
> 40	1	2,9
<b>Education</b>		
SD	5	14,3
SMP	4	11,4
SMA	23	65,7
PT	3	8,6
<b>Profession</b>		
ART	19	54,2
Swasta/Wiraswasta	16	45,8

**Table 2.** Interest in screening pregnant women before and after being given Health Education about triple elimination of HIV, syphilis, and hepatitis B

Minat	Before		After	
	Frekuensi	Prosentase (%)	Frekuensi	Prosentase (%)
Hight	0	0	35	100
Medium	24	68,6	0	0
Low	11	31,4	0	0

Based on the data in Table 2. it is known that the respondents of pregnant women at the Simo Health Center UPT who had a low level of interest in screening before the intervention were 11 respondents (31.4%), then after the intervention decreased to 0 respondents (0.0%). While respondents who had a moderate level of interest in screening before the intervention were 24 mothers (68.6%), then after the intervention increased to 23 mothers (65.7%). Respondents who had a high level of interest in screening before the intervention were 0 respondents (0.0%), then after the intervention increased to 35 respondents (100%). Thus overall there has been an increase in interest in screening pregnant women at the Simo Health Center UPT after being given health education about the triple elimination of HIV, Syphilis, and Hepatitis B.

The results of hypothesis testing with the Wilcoxon test showed a p-value =  $0.000 < (0.05)$  so the research hypothesis was accepted. This means that there is an effect of health education on the triple elimination of HIV, syphilis, and hepatitis B on interest in screening pregnant women at UPT Simo Health Center, Tulungagung Regency.

something, it cannot be expected that he will succeed well in learning it. Conversely, if someone learns with

## DISCUSSION

Hasil penelitian terhadap minat skrining Ibu Hamil di UPT Puskesmas Simo before being given health education about triple elimination of HIV, syphilis and hepatitis B, it showed that of the 35 mothers who were respondents, most of them had a moderate interest as many as 24 respondents (68.6%) and a small part had low interest, namely 11 respondents (31.4%). This is because most of the respondents who have moderate interest have been exposed to various types of laboratory tests that must be carried out during pregnancy through the Integrated ANC examination. While a small proportion of respondents who have less interest are due to having never been exposed, lack information about laboratory examinations for pregnant women, and do not understand Integrated ANC because it is still the first time to check their pregnancy.

According to Saraswati (2013), interest is a high tendency of the heart toward something that arises because of the need, which is felt or not felt, or the desire for certain things. Kurniawan (2011) suggests that interest affects the process and results, if someone is not interested in learning

interest, it can be expected that the results will be better.

In the opinion of researchers, lack of knowledge or information affects

generating interest. Providing health education about

triple elimination of HIV, syphilis and hepatitis B plays an important role in a growing interest in screening for pregnant women.

The results of the study on the interest in screening pregnant women at the Simo Health Center UPT after being given health education about triple elimination of HIV, syphilis, and hepatitis B showed that of the 35 mothers who became respondents, 35 respondents had a high interest in total (100%). This is because the majority of respondents became aware of the importance of screening during pregnancy as evidenced by all pregnant women who were respondents as many as 35 respondents had high interest after receiving health education about triple elimination of HIV, syphilis, and hepatitis B doing triple elimination screening.

According to Shah (2011), the factors that generate interest can be classified into internal factors and external factors. Internal factors come from within a person. These internal factors include attention, curiosity, motivation, and needs (motives). While external factors are encouragement from parents, the availability of facilities and infrastructure or facilities, and environmental conditions.

According to the researcher, the curiosity of the respondents and the sense of needing maximum service and supported by laboratory service facilities that encourage interest in screening at a relatively affordable cost.

The results of this study indicate that there is an effect of health education on the triple elimination of HIV, syphilis, and hepatitis B on interest in screening pregnant women at UPT Simo Health Center, Tulungagung Regency. The effect is positive in the form of increased

interest in screening pregnant women between before and after being given health education.

According to (Kemenkes, 2017) Elimination of Transmission of HIV, Syphilis, and Hepatitis B, hereinafter referred to as Elimination of Transmission, is the reduction of transmission of HIV, Syphilis, and Hepatitis B from mother to child.

The results of this study support the results of previous research conducted by Wardhani RK, Dynasty VB, and Azizah EN (2019) which stated that Pregnant Women's Knowledge of HIV has a relationship with Interest in Checking HIV (PMTCT). The results of Siti Arifah's research (Midwifery Thesis, 2018), stated that there was a significant influence on the Knowledge Level of Pregnant Women About Voluntary Counseling And Testing (VCT) Examinations. Similarly, the results of research by Masta Melati Hutahae and Eka Ristin Tarigan (2019) show that there is an influence of husbands' support on high work mobility and pregnant women's attitudes toward HIV testing.

The provision of health education about triple elimination of HIV, syphilis, and hepatitis B at the Simo Health Center UPT, Tulungagung Regency is considered quite successful, because it has been proven to be able to increase interest in screening pregnant women. The knowledge gained from the health education is then actually implemented by pregnant women, namely by agreeing to the informed consent and screening for the 3E laboratory examination.

## CONCLUSION

1. Most of the respondents who were pregnant women at UPT Puskesmas Simo, Tulungagung Regency had an interest in screening before health education



- was at a moderate level, namely as many as 24 mothers (68.6%).
2. Most of the respondents who were pregnant women at UPT Puskesmas Simo, Tulungagung Regency after health education had an interest in screening at a high level, namely as many as 35 mothers (100%).
  3. There is an effect of health education on the triple elimination of HIV, syphilis, and hepatitis B on interest in screening pregnant women at UPT Simo Health Center, Tulungagung Regency. This is evidenced by the  $p\text{-value} = 0.000 < (0.05)$  so that the research hypothesis is accepted. The effect is positive in the form of increased interest in screening pregnant women between before and after being given health education.

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