

Levels Of Knowledge Of Pregnant Women About Sexually Transmitted Diseases And Triple Elimination Examination Compliance: A Correlation Study

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ABSTRACT

Triple Elimination Examination is one of the efforts to prevent transmission of HIV, Syphilis and Hepatitis B from mother to baby. The prevalence of HIV infection in pregnant women is 0.18%, and Hepatitis B in pregnant women is 1.6%. With the large population of Indonesia, the above figures are quite high, so it is necessary to educate the public about HIV, syphilis and hepatitis B. This study was conducted to determine the relationship between the level of knowledge of pregnant women about sexually transmitted diseases and compliance with triple elimination examinations at Bubutan Primary Health Care, Purworejo. This type of research was analytic observational (non-experimental), using a cross-sectional research design. The research subjects were 62 respondents, using purposive sampling technique. The results showed that pregnant women aged 20-35 years were 54.8%, housewives were 75.8%, parity <3 times were 72.6%, and pregnant women were 48.4 graduates from elementary/junior high school. Statistical test results showed that the proportion of pregnant women who lacked knowledge and did not comply in carrying out the Triple Elimination examination was 51.7%, while the proportion of pregnant women who had sufficient knowledge and adherence in carrying out the Triple Elimination examination was 20 respondents (80%). Test the hypothesis with the chi-square statistical test and obtain a p value of 0.005 (<0.05). There is a relationship between the level of knowledge of pregnant women about sexually transmitted diseases and compliance with the Triple Elimination examination at Bubutan Primary Health Center, Purworejo in 2022

Keywords : Knowledge level of pregnant women, Elimination mother-to-child transmission (EMTCT), HIV, Hepatitis B, Syphilis

INTRODUCTION

The current maternal mortality rate (MMR) is still far from the Sustainable Development Goals (SDGs) target of reducing the MMR to below 70 per 100,000 live births (KH) and reducing the infant mortality rate (IMR) to below 25 per 100,000 KH for the period 2016-2030. WHO launched the elimination of mother-to-child transmission of infectious diseases. The three diseases in focus are HIV, Hepatitis B, and Syphilis. The three diseases are infectious diseases that are endemic in the Asia and Pacific region.^{1,2}

The United Nations Programme on HIV and AIDS (UNAIDS) states that, in 2015, HIV patients globally reached around 36.7 million people and around 2.1 million of them were new cases. In 2016 it is estimated that new HIV infections in children

amounted to 160,000, and globally there are an estimated 3.1 million HIV-positive children. Mother-to-child transmission of HIV accounts for 9% of all new infections worldwide.^{3,4}

The purpose of HIV testing in pregnant women is to prevent HIV cases in babies born to mothers with HIV. HIV transmission from mother to baby can occur during pregnancy, during labor and during breastfeeding. HIV infection in infants can cause morbidity, disability and death, adversely affecting the survival and quality of life of the child. The National Program on Prevention and Control of Hepatitis B Virus currently focuses on prevention of Mother to Child Transmission (PMTCT) because 95% of Hepatitis B transmission is vertical, namely from Hepatitis B positive mothers to their babies. Early Detection of Hepatitis B (DDHB) activities have been implemented since 2015 in pregnant women in basic health services and its network. Pregnant women who suffer from syphilis, without adequate treatment, 67% of babies will be infected, some pregnancies will end in abortion, stillbirth or congenital syphilis. Similarly, mothers who suffer from hepatitis B, 95% of babies born will be infected and if the baby does not receive standard treatment, the baby will not be protected from hepatitis B.⁵⁻⁸

In the Indonesian Health Profile 2022 Human Immunodeficiency Virus (HIV), Syphilis, and Hepatitis B infections in children are more than 95% contracted from the mother. The prevalence of HIV infection in pregnant women is 0.25%, and Hepatitis B in pregnant women is 1.6%. With the large population of Indonesia, the above figures are high enough that more attention is needed to deal with it.^{9,10}

Triple Elimination is a program that aims to achieve and maintain mother-to-infant elimination of HIV/AIDS, Hepatitis B, and Syphilis. In order to achieve better health for women, children, and their families through a coordinated approach, in 2020 51.37% of pregnant women carried out Early Detection of Hepatitis B from the total target number of pregnant women in 2020 of 5,221,784 pregnant women. This achievement still does not reach the target, namely Early Detection of Hepatitis B at least 80% of pregnant women are examined integrated with HIV and Syphilis (triple elimination). During 2020 there were 2,404,754 pregnant women tested for HIV in Indonesia. Of these examinations, 6,094 (0.25%) pregnant women were HIV positive. Provinces with the highest percentage of HIV-positive pregnant women were West Papua Province at 2.56%, Riau Islands at 2.32% and Papua at 0.88%.^{6,11-13}

Central Java Province has 35 districts that have health facilities, namely 534 health centers and 123 hospitals. The number of HIV AIDS cases in Central Java in 2022 was 3538 cases. Based on the health profile of Purworejo Regency, the number of HIV cases in 2020 was 64 cases, then in 2021 it decreased to 47 cases, but in 2022 it increased to 81 cases. The Purworejo Regency area consists of 16 sub-districts, where the highest HIV cases are in Purwodadi District with 87 cases.¹⁴

The results of a preliminary study conducted at the Bubutan Health Center, Purwodadi District, Purworejo Regency found that pregnant women with HIV positive in 2021 were 10 cases, then in 2022 there were 11 cases. Hepatitis cases in pregnant women in 2021 were 7 cases, then in 2022 it increased to 9 cases.¹⁴

Pregnant women had not received sufficient information about triple elimination checks obtained from health workers, print media and electronic media. Thus, more intensive efforts are needed to increase the coverage of screening pregnant women in ANC, followed by increased access to therapy and early detection in infants, so that the triple elimination target can be achieved. The ANC behavior of pregnant women can be improved through several strategies that are grouped into three by WHO, namely by using enforcement, regulation, and education.^{10,15,16}

Knowledge and sources of information about triple elimination in pregnant women are associated with the prevention of mother-to-child transmission of HIV/AIDS. Pregnant women who have a low level of triple elimination knowledge tend to have a negative attitude about triple elimination screening examination. Most pregnant women do not care about their condition and screening. The low knowledge of pregnant women about HIV/AIDS results in the attitude of pregnant women who do not want to carry out HIV/AIDS screening.^{7,17}

MATERIAL AND METHOD

This type of research is analytic observational (non-experimental) with a cross sectional research design. This research was conducted at the Bubutan Health Center Work Area, Purworejo Regency in August 2022 to March 2023. The sample in this study were 62 respondents. Samples that meet the inclusion and exclusion criteria will then be selected by purposive sampling method. In this study, pregnant women were given a questionnaire on the level of knowledge about sexually transmitted diseases to fill out. Then the researcher looked at the MCH book records regarding compliance with triple elimination checks. The variables studied include the independent variable, namely the level of knowledge of pregnant women about sexually transmitted diseases and the dependent variable, namely compliance with triple elimination checks. The data that has been collected is then given a code, then the data is processed using the SPSS application, using the chi-square statistical test with a 95% confidence degree ($\alpha = 0.5$)

RESULTS AND DISCUSSION

The characteristics of the respondents were based on the results of the respondents' answers relating to the description of the pregnant women's age, occupation, parity, and education.

Table 1. The characteristics of respondents

Variable	Category	Frequency (f)	Percentage (%)
Pregnant mother's age	<20 years	8	12,9
	20-35 years	34	54,8
	>35 years	20	32,3
	Total	62	100
Occupation of pregnant	mother	47	75,8
	Housewife		
	PNSTNI/POLRI	9	14,5
	Private Employee	6	9,7
	Total	62	100
Parity	≤3 times	45	72,6
	>3 times	17	27,4
	Total	62	100
Education of pregnant women	Basic education (SD/SMP)	30	48,4
	Secondary education (SMA/SMK)	20	32,3
	Higher education	12	19,4
	Total	62	100

The characteristics of research respondents at the Bubutan Health Center, Purworejo Regency are that most are between 20-35 years old 34 respondents (54.8%), have jobs as housewives 47 respondents (75.8%), 45 respondents (72.6%) have been pregnant <3 times, and most have completed basic education (elementary / junior high school) 30 respondents (48.4%).

Table 2. Knowledge level of pregnant women about sexually transmitted diseases

Knowledge level of pregnant women about sexually transmitted	Frequency (f)	Percentage (%)
Less	29	46,8
Enough	25	40,3
Good	8	12,9
Total	62	100

The proportion of the highest level of knowledge is the level of knowledge less as many as 29 respondents (46.8%). Thus, most of the respondents in Bubutan Health Center have less knowledge about Sexually Transmitted Diseases.

Knowledge is the result of a person knowing about certain matters through his five senses, such as the senses of sight, hearing, smell, taste and touch. Most human knowledge is obtained through the eyes and ears. Factors that influence a person's knowledge are age, education, occupation, parity, and source of information. Age is the age of a person starting from the time of birth until repeated years. The more age, the level of maturity and strength of a person will be more mature in thinking and working. Age affects a person's capacity and mindset. The older the age, the more developed the power of capture and mindset the knowledge gained is getting better.^{8,17}

Table 3. Triple Elimination Check Compliance

Triple Elimination Check Compliance	Frequency (f)	Percentage (%)
Yes	42	67,7
No	20	32,3
Total	62	100

Table 4. Cross Table of Knowledge Level of Pregnant Women about Sexually Transmitted Diseases with Compliance of Triple Elimination Checkup

Knowledge level	Triple Elimination Check Compliance				Total		P value
	Yes		No		f	%	
	f	%	f	%			
Less	14	48,3	15	51,7	29	100	0,005
Enough	20	80	5	20	25	100	
Good	8	100	0	0	8	100	
Total	42	67,7	20	32,3	62	100	

Table 4 shows that the proportion of pregnant women who have poor knowledge and are not compliant in conducting triple elimination checks is 51.7%, greater than pregnant women who have sufficient knowledge as much as 20%. While the proportion of pregnant women who are knowledgeable and compliant in conducting

triple elimination checks is 20 respondents (80%), greater than pregnant women with good knowledge as many as 8 respondents (100%) and pregnant women with poor knowledge as many as 14 respondents (48.3%).

The low level of visits by pregnant women to perform triple elimination checks is related to the level of knowledge of pregnant women. There is a relationship between knowledge and compliance with triple elimination checks, knowledge is also influenced by education. The higher a person's level of education, the better their knowledge and insight.^{7,17}

Hypothesis testing with the chi-square statistical test obtained a p-value of 0.005 (<0.05). This shows that statistically there is a relationship between the level of knowledge of pregnant women about sexually transmitted diseases with compliance with triple elimination checks.

The low level of visits by pregnant women to conduct triple elimination checks is related to the level of knowledge of pregnant women. Another study, stated that there was an influence between knowledge and compliance with triple elimination checks, where knowledge is also influenced by education where the higher a person's level of education the better his knowledge and insight.¹⁶⁻¹⁸

Compliance is one of the health maintenance behaviors, namely a person's efforts to maintain health or maintain health so as not to get sick and healing efforts when sick. In addition, the definition of compliance is the level of patient behavior aimed at instructions or instructions given in any form of therapy determined either diet, exercise, medication, or keeping appointments with doctors.^{15,19}

At every level of MCH services, health workers in health care facilities are required to conduct HIV, syphilis, and Hepatitis B tests to all pregnant women at least once as part of routine laboratory examinations during antenatal examinations at the first visit (K1) until the time of delivery. HIV, syphilis, and hepatitis B testing is done at the first visit in the first trimester (1-12 weeks gestation).^{6,19,20}

Respondents who did not know about triple elimination and examination compliance could also be caused by a lack of information sources obtained either from midwives, the surrounding environment or social media. Another factor that can influence respondents' actions in conducting triple elimination checks is factors within the pregnant woman. Therefore, in order for pregnant women to get enough information sources, it is important for midwives or health workers to provide a thorough explanation before asking pregnant women's consent to conduct a triple elimination examination.^{5,19,21}

CONCLUSION

There is a relationship between the level of knowledge of pregnant women about sexually transmitted diseases (HIV, Syphilis, Hepatitis B) with compliance with triple elimination checks at the Bubutan Health Center, Purworejo Regency.

AUTHORS' CONTRIBUTIONS

Conception and design: Elo Mariyah, Nur Djanah

Analysis and interpretation of the data: Elo Mariyah, Nur Djanah

Drafting of the article: Elo Mariyah, Nur Djanah

Critical revision of the article for important intellectual content: Elo Mariyah, Nur Djanah

Final approval of the article: Nur Djanah

Collection and assembly of data: Elo Mariyah

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