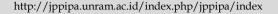


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# Implementation Triple Elimination Screening to Midwifes Knowledge About Risk Factors, Modes of Transmission and Impact of HIV, Syphilis, and Hepatitis B Type

Resi Galaupa<sup>1\*</sup>, Fatma Oktavia<sup>1</sup>, Ika Amelia<sup>1</sup>, Siti Nur Ichlas<sup>1</sup>, Tia Noviwarti<sup>1</sup>

<sup>1</sup> Undergraduate Midwifery Study Program, High School of Health Science, Abdi Nusantara-Jakarta

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Corresponding Author: Resi Galaupa ressigalaupa09@gmail.com

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Abstract: Triple Elimination program that aims to early detection of HIV, syphilis and Hepatitis B infection in pregnant women and is very important for all pregnant women because it can save the lives of mothers and children. This type of research is observational research, namely by distributing questionnaires to determine the effect of the implementation of triple elimination on the knowledge of midwives in Palembang City. The results showed that of the 50 respondents who were old, around 19 people with a percentage (38.0%). While the young ones only reached 31 people (62.0%). The results showed that of the 50 respondents, the majority had a D3 education with a total of 36 people or (72.0%). While in S1 education reached 7 people (14.0%). And 7 people or (14.0%) professional education. The results of the analysis using the Chi Squre test, obtained a p-value of 0.000 on midwife knowledge, at age obtained a p-value of 0.285 and at education obtained a p-value of 0.0.019, which means greater than> 0.05, it can be interpreted that H0 is accepted and Ha is rejected. The conclusion is that there is a significant relationship between age, education and midwife knowledge in implementing triple elimination.

Keywords: Hepatitis; Hiv; Risk Factors; Screening; Triple Elimination; Sifilis

## Introduction

Pregnant women are a vulnerable population, if infected with diseases such as HIV, Syphilis and Hepatitis B and can transmit them to their children (Cohn et al., 2021; Sebastião et al., 2020). This is a very dangerous thing that results in abortion, premature birth, chronic infections, growth and development disorders, child mortality and the potential to transmit to others. Transmission that can take place vertically from mother to baby which can occur during pregnancy, childbirth and breastfeeding (Bustami & Anita, 2020). Data from the Indonesian Ministry of Health (2017) recorded around 48,300 people infected with HIV, 21.8% infected with hepatitis B and 28,900 cases of syphilis infection with a disease prevalence of infection cases in pregnant women of 0.3%, 1.7% and 2.5% respectively (Kundaryanti & Suciawati, 2022).

Data currently shows that HIV, Syphilis and Hepatitis B infections in children are 90% due to transmission from the mother (Kundaryanti & Suciawati, 2022; WHO, 2021). The prevalence of these diseases in pregnant women is 0.3% HIV, 1.7% syphilis and 2.5% hepatitis. An effort to break a chain of transmission of HIV infection, Syphilis Elimination Implementation in Indonesia strengthened by PERMENKES No. 52 of 2017 concerning Elimination of Transmission of HIV, Syphilis and Hepatitis B from Mother to baby. Circular Letter No. HK.01.02 / MENKES /37/2017 on the Implementation of Triple Elimination in pregnant women is a package in Integrated ANC services so as to establish a minimum indicator coverage of 95% of all pregnant women who test for HIV, syphilis and Hepatiti B (Visser et al., 2019).

The role of midwives which is a Decree of the Indonesian Minister of Health Number HK.01.07 /

#### How to Cite:

MENKES / 2020 in the sixth area of midwife competence is health promotion and counseling. Based on these regulations, midwives are expected to be able to perform a maximum role in the competence of health promotion of pregnant women about a triple elimination program to prevent transmission from mother to baby (Puspasari, 2019). Triple Elimination is a program of efforts to eliminate infection with three infectious diseases at once that take place from mother to baby, namely HIV, Syphilis, Hepatitis B which are directly integrated in a mother and child program (Kunigara et al., 2022; Na'imah et al., 2023).

A Triple Elimination program that aims to early detection of HIV, syphilis and Hepatitis B infection in a pregnant woman and is very important for all pregnant women because it can save the lives of mothers and children. This examination can be done at the nearest health center at the earliest possible care visit. Based on the above background, the researcher is very interested in conducting research on "The Effect of Triple Elimination Screening Implementation on Midwives' Knowledge in Palembang City in 2023.

## Method

This type of research is observational research, namely by distributing questionnaires (Daka et al., 2022). The type of research used in this study is descriptive research with a quantitative approach. The data taken, identified in the following order: data collection; data sorting; analysis; conclusion. There is a predetermined sequence in accordance with the empirical steps taken, namely as follows: Examination of data; suspected data findings; Data confirmation; Diagnosis; and Action. In the diagram can be described as the flow of research as follows, namely as follows Figure 1.

This population is a generalization area consisting of objects or subjects that have certain qualities and characteristics that researchers determine to study and draw conclusions (Sugiyono, 2010). Population is also all elements or individuals from which data or information will be collected. In this study the population was 500 midwives in Palembang City.

The sample is part of the number of characteristics possessed by the population. Sampling technique with purposive sampling method, namely deliberate sampling (Taherdoost, 2016) in accordance with the inclusion and exclusion criteria and obtained a sample size of 50 respondents. The sample size in this study was obtained with Arikunto's theory, the number taken was 10% of the population according to Arikunto (2010) theory which states that if the population is large> 100 then 10%-25% can be taken as a sample.

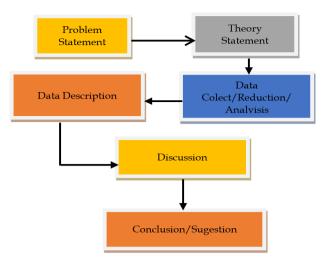


Figure 1. Logical Flow of Research

The data collection instrument used in this study is a questionnaire using google from Sileyew (2019) which contains 30 questions. The questionnaire used is in accordance with the conceptual framework and operational definitions. The data that has been processed and then analyzed is the last step of this research. Data analysis using SPSS steps.

## Univariate Analysis

This univariate analysis was carried out to determine the average willingness of midwives to conduct Triple Elimination Screening (Nasution, 2023). The data that has been obtained is tested for normality with the aim of knowing the pattern of data distribution. Chi Square test using IBM SPSS 25, and obtained normally distributed data with age data of midwife willingness 50 (100%) education of midwife willingness 50 (100%). Based on this data, the same frequency is obtained 50 with a mission of 0 in saying that the data is good and there is nothing wrong.

#### Bivariate Analysis

Based on the Fisher's Exact Test test, it was found that the value was 1,000, meaning that the p value was more than 0.05, it can be concluded that Ho was accepted and Ha was rejected, meaning that there was no significant relationship between age and midwife knowledge in performing triple elimination.

## **Result and Discussion**

Analysis Univariate

Implementation of Triple Elimination Screening

Based on the research results, 31 people (62%) had the effect of implementing triple elimination screening with categorization. 19 people (28%) did not carry out categorical triple elimination screening. And it can be concluded that there were more respondents who

carried out the Triple Elimination screening than those who did not.

In line with research conducted by (WD & Pamungkas, 2021) with the title Participation of Midwives in the Implementation of the Triple Elimination Program for HIV, Syphilis and Hepatitis B from Mother to Child on Lombok Island, it shows that 31 (73.8%) of the Triple Elimination Program have been implemented. Midwives are one of the health workers who really need to maintain the quality of midwifery care services as a form of professional responsibility to society. The quality of midwifery services can be evaluated from all aspects of the care provided based on established standards of care (Alba et al., 2019; McFadden et al., 2020). Supported by research by (Cummins et al., 2022), it is stated that the more a person obtains information from various sources, the more likely a person is to make good decisions about something (Symon et al., 2019).

In this case, more than 37 people carried out Triple Elimination screening or (74%) the implementation of triple elimination also had an impact on health services that were in accordance with established regulations. Researchers concluded that more people carried out Triple Elimination screening than did not.

Respondents' Knowledge in the Triple Elimination Program

From the research results it was found that out of 50 respondents. Those with good knowledge were around 28 people or (56%) respondents and with sufficient knowledge there were 12 respondents (24%) while those with less knowledge were 10 respondents (20%). So it can be concluded that statistically it can be interpreted that the p value is 0.000 which means less than <0.05, so H0 is accepted and Ha is rejected. The conclusion is that there is a significant relationship between midwives' knowledge in carrying out triple elimination.

In accordance with research conducted by (Petralina, 2020). Said that the results showed 28 (66.7%) respondents had good knowledge. It can be seen from the p value = 0.00, which means that there is a significant relationship between knowledge implementation of Triple Elimination screening (Asih, 2021; Inayah, 2022; Pitaloka, 2020; Sabilla et al., 2020). Knowledge is an intellectual ability that a person must have. That knowledge affects individual behavior in terms of utilization of health services in the community. This research is also supported by (Kundaryanti & Suciawati, 2022). Knowledge affects the Triple Elimination examination. Knowledge about early detection of risk factors for Triple Elimination is needed by midwives in implementing Triple Elimination in pregnant women who visit health services (Puspitasari et al., 2022). Knowledge is obtained by respondents during midwife education (Notoatmodjo, 2010). One of the studies conducted by Tufa et al. (2020). Stating that there is a significant relationship between knowledge and midwife behavior in infection prevention (WHO, 2020).

In this case, the group of respondents who had good knowledge was more about 28 people or (56%) respondents. Knowledge also affects the implementation of Triple Elimination screening. In this case the researcher can conclude that knowledge affects the implementation of Triple Elimination screening.

Judging from the number of respondents with good knowledge more than sufficient knowledge and less. That is as many as 28 people or (56%) respondents who have good knowledge. So it can be concluded statistically there is a significant relationship between knowledge on the process of implementing Triple Elimination screening can be seen from the p value: 0.000.

Bivariate Analysis

Age

The results showed that of the 50 respondents, 34 were older with a percentage of (68.0%). While the young ones only reached 5 people (32.0%). So it can be concluded statistically that the p value is 0.050, which means it is greater than> 0.05, it means that H0 is accepted and Ha is rejected, the conclusion is that there is a significant relationship between the age of the midwife and the implementation of triple elimination screening.

In line with research by WD & Pamungkas (2021). The results showed that the age of most respondents was in the older group> 30 years or (88.1%). Saying that a more mature age greatly influences the participation of midwives. Someone who has a sufficient age will have a safe and mature mindset with this age influencing the knowledge gained so that he will receive knowledge well (Zhao et al., 2019). Saying the age of the most respondents in the old group is around (57.6%).

In this case the age group shows more in old age, namely> 30 years around 34 people with a percentage (68.0%). Age also affects respondents' knowledge. In this case the researcher concluded that age affects the implementation of Triple Elimination screening. Judging from the number of respondents who are older than young. 34 people with a percentage (68.0%). While those aged young only reached 5 people (32.0%). So it can be concluded statistically that age affects the implementation of Triple Elimination screening with (p value 0.050).

Education

The results showed that of the 50 respondents, the majority had a D3 education with a total of 35 people or (70.0%). While in S1 education reached 9 people (18.0%).

And 6 people or (12.0%) professional education. This means that education affects knowledge, the higher the education, the more likely a person is to receive good information from other people or the mass media. Education is a process to change the attitudes and behavior of a person or group of people in an effort to mature humans through teaching and training efforts. Education in general is any planned effort to influence other people, whether individuals, groups, or communities so that they do what is expected by the perpetrators of education. The formal education that a person takes is basically a process towards intellectual maturity, for that education cannot be separated from the learning process.

In this case, in terms of education, it shows that there are more respondents with D3 education, compared to S1 and Profession. With a total of about 35 people or (70.0%) respondents with D3 education. In this case the researcher concluded that education affects the implementation of Triple Elimination screening.

Judging from the number of respondents with D3 education around 35 or (70.0%). Compared to S1 and Professional education. So it can be concluded statistically that education affects the implementation of Triple Elimination screening with the number (p value 0.360).

## Conclusion

The results showed that of the 50 respondents who were old, around 19 people with a percentage (38.0%). While the young ones only reached 31 people (62.0%). The results showed that of the 50 respondents, the majority had a D3 education with a total of 36 people or (72.0%). While in S1 education reached 7 people (14.0%). And 7 people or (14.0%) professional education. The results of the analysis using the Chi Squre test, obtained a p-value of 0.000 on midwife knowledge, at age obtained a p-value of 0.285 and at education obtained a p-value of 0.0.019, meaning that it is greater than > 0.05, it can be interpreted that H0 is accepted and Ha is rejected. The conclusion is that there is a significant relationship between age, education and midwife knowledge in implementing triple elimination. It is hoped that health workers can improve the quality of service and their willingness to carry out triple elimination screening at health facilities. It is hoped that the results of this study can be used as information and scientific references for libraries in the influence of the implementation of triple elimination screening on the willingness of midwives.

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#### **Conflicts of Interest**

In this research, there is no tug of interest and or hidden interests among the researchers. In addition, this research is also not an order from any funder because it is an independent research, or in other words, the research team itself plays a role in preparing proposals, selecting topics, conceptualizing problems, collecting data, analyzing problems, drawing conclusions until the publication stage in this journal.

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