Health Promotion Effort through Individual and Group Counseling on Knowledges of Pregnant Mothers on Prevention Mother to Child HIV Transmission (PMTCT) for Pregnant Mothers in Tamanan Kediri 2022

ABSTRACT

Cases of pregnant women who are HIV-AIDS positive have increased from 2017-2020. In 2017 there were 3,873 pregnant women with HIV positive. In 2018, there was an increase of 5,074 pregnant women who were HIV positive. An increase in cases also occurred in 2019 as many as 6,439 cases. In 2020 for the January-September period there were 5,828 cases of HIV positive pregnant women. Efforts to prevent mother-to-child transmission is with Prevention Mother To Child Transmission counseling (PMTCT). This study aims to determine the effect of health promotion through individual and group counseling on knowledge of pregnant women about PMTCT in Tamanan Village, Kediri City Tahun 2022. This research method uses pre-experiments through a two group pre-test-post-test approach with the number of samples is 32 pregnant women. The analysis used is the Wilcoxon test with research instruments in the form of a questionnaire that has been tested for validity. Results shows that there is an effect of health promotion through individual and group counseling on the knowledge of pregnant women about PMTCT with p value = 0.00. It is hoped that the results of this research can used as a reference for implementing the program counseling regarding PMTCT.

Keywords: PMTCT, Counseling, HIV, Knowledge

INTRODUCTION

The 2012 UNAIDS Global HIV Epidemic Report showed that the number of people living with HIV in the world reached 34 million people. About 50% of them are women and 2.1 million children are less than 15 years old. There are about 4 million people living with HIV and AIDS in the South and Southeast Asia region. According to the 2011 WHO/SEARO HIV and AIDS Program Progress Report, in the Southeast Asia region there are approximately 1.3 million people (37%) of women infected with HIV. The number of women infected with HIV from year to year is increasing, along with the increasing number of men who have unprotected sex, which in turn they transmit to other sexual partners. UNAIDS/WHO estimation data (2009) also estimate that 22,000 children in the Asia-Pacific region are infected with HIV and without treatment, half of these infected children die before their second birthday (Ministry of Health, RI, 2017). As of September 2020, cases of HIV and AIDS in Indonesia have spread to 418 out of 514 districts/cities (81%) in all provinces. The number of new case discoveries by province for the January - September 2020 period was 32,293 people. Cases of pregnant women who are HIV-
AIDS positive have increased from 2017-2020. In 2017 there were 3,873 pregnant women with HIV positive. In 2018, there was an increase of 5,074 pregnant women who were HIV positive. An increase in cases also occurred in 2019 as many as 6,439 cases. In 2020 for the January-September period there were 5,828 cases of HIV positive pregnant women (Kemenkes RI, 2020).

More than 90% of HIV-infected infants are infected by HIV-positive mothers. Transmission can occur during pregnancy, during delivery and during breastfeeding. Prevention of mother-to-child HIV transmission (PMTCT) is a very effective intervention to prevent this transmission. This effort is integrated with efforts to eliminate congenital syphilis, because syphilis increases the risk of HIV transmission in addition to causing various health problems to the mother and is also transmitted to infants such as HIV infection (Kemenkes RI, 2017). One method of health education that is applied to the prevention of HIV-AIDS is counseling. Counseling is a process of helping clients to solve problems in order to adapt themselves effectively to themselves and their environment, which is carried out by a counselor to clients together. where the client makes decisions on his own problems, both present and future life (Hendayani, 2017). Counseling is used in Voluntary Counseling and Testing (VCT), care, treatment and support for PLWHA and PMTCT. Counseling helps change behavior and increase knowledge about HIV-AIDS so that it can prevent transmission, especially from mother to child. The counseling provided must be carried out continuously and continuously with the hope that if the mother is infected, it can prevent transmission to her baby, but if it is not infected, it must be maintained so that it does not become infected (Hendayani, 2017).

Knowledge is the result of knowing, and this occurs after people have sensed a certain object. Sensing occurs through the human senses, namely the senses of sight, hearing, smell, taste and touch. Most of human knowledge is obtained through the eyes and ears (Notoatmodjo, 2010). According to previous research, there is a significant relationship between counseling on changes in the level of knowledge and attitudes of pregnant women in participating in the prevention of mother to child transmission (PMTCT) program I with the level of knowledge and attitudes about HIV. pregnant women in participating in the Prevention Of Mother To Child Transmission (PMTCT) Prong program (Simon, 2015).

Based on the results of previous studies, it was stated that the counseling method could be used for pregnant women in participating in the program to prevent mother-to-child transmission of HIV (PMTCT).

MATERIALS AND METHODS
Design and Samples
The design of this study was a pre-experimental two-group pretest-posttest design. The independent variable in this study was knowledge of the prevention of HIV transmission from mother to child. The dependent variable in this study is the method of counseling in the prevention of HIV transmission from mother to child. The research instrument is a questionnaire sheet. The research site is in Tamanan Village, Kediri City in May 2022. The population in this study were pregnant women in Tamanan Village, Kediri City in May 2022. In this study, the sampling technique used the total population

Data Collection
Respondents were given a questionnaire about the prevention of HIV transmission from mother to child and then given health promotion through counseling methods. Health promotion is carried out for approximately 100 minutes. After that, a posttest was conducted to measure knowledge about the prevention of HIV transmission from mother to child

Data Analysis
Statistical tests for both variables used Wilcoxon test. All tests are done by using SPSS for Windows 24.
RESULTS

1. General Data

Table 1 Distribution of Respondents Frequency Based on Parity in Individual Counseling Group

| No. | Parity           | Frequency (n) | Prosentase (%) |
|-----|------------------|---------------|----------------|
| 1.  | Primipara        | 9             | 56.25          |
| 2.  | Multipara        | 7             | 43.75          |
| 3.  | Grandemultipara  | 0             | 0              |
|     | Total            | 16            | 100            |

The table above shows that most of the respondents are primiparas, namely 9 respondents (56.25%).

Table 2 Distribution of Respondents Frequency Based on Parity in Group Counseling

| No. | Parity           | Frequency (n) | Prosentase (%) |
|-----|------------------|---------------|----------------|
| 1.  | Primipara        | 10            | 62.5           |
| 2.  | Multipara        | 6             | 37.5           |
| 3.  | Grandemultipara  | 0             | 0              |
|     | Total            | 16            | 100            |

The table above shows that most of the respondents are primiparas, namely 10 respondents (62.5%).

Table 3 Distribution of Respondents Frequency Based on Education in Individual Counseling Group

| No. | Education       | Frequency (n) | Prosentase (%) |
|-----|-----------------|---------------|----------------|
| 1.  | No School       | 0             | 0              |
| 2.  | Primary High School | 0         | 0              |
| 3.  | Junior High School | 5          | 31.25          |
| 4.  | Senior High School | 9           | 56.25          |
| 5.  | College         | 2             | 12.5           |
|     | Total           | 16            | 100            |

The table above shows that most of the respondents have high school education, namely 9 respondents (56.25%).

Table 4 Distribution of Respondents Frequency Based on Education in Group Counseling

| No. | Education       | Frequency (n) | Prosentase (%) |
|-----|-----------------|---------------|----------------|
| 1.  | No School       | 0             | 0              |
| 2.  | Primary High School | 3          | 18.75          |
| 3.  | Junior High School | 8           | 50             |
| 4.  | Senior High School | 5           | 31.25          |
| 5.  | College         | 0             | 0              |
|     | Total           | 16            | 100            |

The table above shows that half of the respondents have a high school education, namely 8 respondents (50%).

Table 5 Distribution of Respondents Frequency Based on Work In Individual Counseling Group

| No. | Work            | Frequency (n) | Prosentase (%) |
|-----|-----------------|---------------|----------------|
| 1.  | IRT             | 10            | 62.5           |
| 2.  | Civil Servant   | 2             | 12.5           |
| 3.  | Private         | 4             | 25             |
| 4.  | Farmer/Labour   | 0             | 0              |
|     | Total           | 16            | 100            |

Based on the table above, most of the respondents are IRT, namely 10 respondents (62.5%).
Based on the table above, almost half of the respondents work as IRT, namely 9 respondents (37.5%).

2. Special Data

1) Distribution of Respondents Based on Knowledge Level of Pregnant Women Before Individual Counseling is Given about PMTCT

Based on table 7, it can be interpreted that half (50%) of the respondents who were studied before being given individual counseling about PMTCT had a sufficient level of knowledge.

2) Distribution of Respondents Based on Knowledge Level of Pregnant Women After Individual Counseling is Given about PMTCT

Based on table 8, it can be interpreted that most (62.5%) of the respondents who were studied after being given individual counseling about PMTCT had a good level of knowledge.

3) Effect of Health Promotion through Individual Counseling on knowledge of pregnant women about PMTCT

Table 9 Frequency Distribution of Respondents' Characteristics Based on the Effect of Health Promotion through Individual Counseling on the knowledge of pregnant women about PMTCT

$p$ value = 0.01 $\alpha= 0.05$
Based on table 9 above that the level of knowledge of pregnant women before being given individual counseling about PMTCT can be interpreted, namely half (50%) of the respondents have a sufficient level of knowledge and a small portion (31.25%) of the respondents have a low level of knowledge and (18.75%) have a good level of knowledge. While the level of knowledge of pregnant women after being given individual counseling about PMTCT can be interpreted that most (62.5%) of the respondents have a good level of knowledge and a small portion (25%) have a sufficient level of knowledge and (6.7%) have a high level of knowledge lack of knowledge.

Based on the results of statistical tests using the Wilcoxon signed rank test, it is known that the p value of 0.01 is smaller than the value of α = 0.05 (0.01 < 0.05) so that H0 is rejected and H1 is accepted, meaning that there is an Effect of Individual Counseling on Knowledge Level of Pregnant Women about PMTCT in Tamanan Village, Kediri City in 2022.

4) **Distribution of Respondents Based on Knowledge Level of Pregnant Women Before Group Counseling is Given about PMTCT**

Table 10 Frequency Distribution of Respondents’ Characteristics Based on Knowledge Level of Pregnant Women Before Group Counseling is Given about PMTCT in Tamanan Village, Kediri City

| No. | Knowledge | Frequency(n) | Prosentase (%) |
|-----|-----------|--------------|----------------|
| 1.  | Good      | 2            | 12.5           |
| 2.  | Enough    | 10           | 62.5           |
| 3.  | Not Enough| 4            | 25             |
| Total |          | 16           | 100            |

Based on table 10, it can be interpreted that most (62.5%) of the respondents who were studied before being given group counseling about PMTCT had a sufficient level of knowledge.

5) **Distribution of Respondents Based on Knowledge Level of Pregnant Women After Group Counseling is Given about PMTCT**

Table 11 Frequency Distribution of Respondents’ Characteristics Based on Knowledge Level of Pregnant Women After Group Counseling is Given about PMTCT in Tamanan Village, Kediri City

| No. | Knowledge     | Frequency(n) | Prosentase (%) |
|-----|---------------|--------------|----------------|
| 1.  | Good          | 11           | 68.75          |
| 2.  | Enough        | 3            | 18.75          |
| 3.  | Not Enough    | 2            | 12.5           |
| Total |             | 16           | 100            |

Based on table 11, it can be interpreted that most (68.75%) of the respondents who were studied after being given group counseling about PMTCT had good level of knowledge.

6) **Effect of Health Promotion through Group Counseling On Knowledge of Pregnant Women About PMTCT**

Table 12 Frequency Distribution of Respondents’ Characteristics Based on the Effect of Health Promotion through Group Counseling On The Knowledge of Pregnant Women About PMTCT

| Group Counseling | Knowledge Level | Total |
|------------------|-----------------|-------|
|                  | Good   | Enough | Not Enough |       |
| Sebelum          | F   | %    | F   | %   | F   | %   | Total |
|                  | 2   | 12.5 | 10  | 62.5| 4   | 25  | 16   | 100  |
| Sesudah          | 11  | 68.75| 3   | 18.75| 2   | 12.5| 16   | 100  |

*p value = 0.001 α= 0.05

Based on table 12 above that the level of knowledge of pregnant women before being given group
counseling about PMTCT can be interpreted, most (62.5%) of the respondents have a sufficient level of knowledge and a small portion (25%) of the respondents have a low level of knowledge and (12.5%) have a good level of knowledge. While the level of knowledge of pregnant women after being given group counseling about PMTCT can be interpreted that most (68.75%) of the respondents have a good level of knowledge and a small portion (18.75%) have a sufficient level of knowledge and (12.5%) have a high level of knowledge lack of knowledge.

Based on the results of statistical tests using the Wilcoxon signed rank test, it is known that the p value of 0.001 is smaller than the value of \( = 0.05 \) (0.001 < 0.05) so that H0 is rejected and H1 is accepted, meaning that there is an effect of group counseling on the level of knowledge of pregnant women about PMTCT in Tamanan Village, Kediri City in 2022.

**DISCUSSION**

Pregnancy is the growth and development of the intrauterine fetus starting from conception and ending until the onset of labor (Fauzia, 2017). During pregnancy, the mother experiences physiological and psychological changes where in the process of adjusting to this new situation it often causes anxiety (Martalisa, 2013). Pregnancy, also known as gravidity or pregnancy, is the time during which one or more babies develop inside a woman. Multiple pregnancies involve more than one child, such as with twins. Pregnancy can occur by sexual intercourse or assisted reproductive technology. It usually lasts about 40 weeks from the last menstrual period and ends with delivery. This is more than nine months of the month, where each month is about 29½ days. When measured from fertilization it is about 38 weeks (266 days). An embryo is a developing offspring during the first eight weeks after conception, after which, the term fetus is used until birth when the patient refers to the fetus as a "baby". Early pregnancy symptoms may include missed periods, tender breasts, nausea and vomiting, hunger, and frequent urination. Pregnancy may be confirmed with a urine pregnancy test, most often first by the patient at home and then at the doctor's office with a series of blood tests. Both urine and blood tests detect the presence of a hormone called Human Chorionic Gonadotropin (hCG). It's a hormone produced by the placenta as soon as the embryo attaches to the uterine lining and builds up quickly in your body in the first few days of pregnancy. It is this rapid hormonal shift that triggers most of the symptoms of pregnancy (Obrowski, 2016). Efforts to control HIV/AIDS are carried out as an effort to increase correct and comprehensive knowledge regarding the prevention of HIV/AIDS transmission, eliminate stigma and discrimination through health promotion. One of the integrated health promotions in health services is antenatal care checks (Permenkes RI, 2013). The Mother-to-Child HIV Transmission Prevention Program (PPIA) has proven to be a very effective intervention to prevent mother-to-child transmission of HIV (Kemenkes RI, 2013). Interventions that are easy and able to carry out, can reduce up to 50% of the process of HIV transmission from mother to child. Primary prevention, which is carried out for couples of childbearing age, is a counseling activity which is another alternative to intervention measures taken (Depkess RI, 2008). Primary prevention in reproductive age is an important approach for PMTCT (Baek and Rutenberg, 2010). PPIA efforts are carried out through comprehensive and sustainable HIV prevention and treatment activities.

To support the government program, it is necessary to make efforts to increase the knowledge of pregnant women about PMTCT, one of which is by providing health promotion through counseling. Counseling is a process of helping clients to solve problems so they can adapt effectively to themselves and their environment, which is carried out by a counselor to clients together, where clients make decisions about their own problems, both present and future. The purpose of counseling is to provide assistance to the client's development and understanding of health problems. Explore all abilities or weaknesses (bio-psycho-social-spiritual) that the client has to deal with his health problems. And the client is responsible for his choices and decisions that have an impact on himself and his environment (Priyanto, 2012). The function of counseling is prevention, meaning that guidance and counseling is an effort to prevent problems from arising. Understanding of the client's self, especially by the client himself or the client's family, the client's environment, especially the client himself, the client's family, the repair function is how the client can solve and overcome the problems encountered. Maintenance and development is counseling implies that the counseling services provided are beneficial for clients in maintaining and developing their whole personality with confidence, direction, and sustainability. The advocacy function is a defense condition against denial of the rights and interests of education, information, development, biological-psychological-social-spiritual (bio-psycho-socio-spiritual)
Health promotion through counseling is expected to increase the knowledge of pregnant women about PMTCT so that pregnant women understand the impact and dangers of HIV AIDS transmission.

Knowledge of pregnant women is getting better because there are several factors, namely education, occupation, parity, age, experience, beliefs, resources Information, environment, socio-cultural. One of them education, education can be obtained formally and non-formal, formal education is obtained by follow the program that has been planned structured by an institution, department or ministry of a country. While non-formal education knowledge obtained from the daily life of various experience either experienced or learned from somebody. Health education about PMTCT is very affect the knowledge of pregnant women. Health education is an activity that can increase knowledge.

The results of this study are in accordance with research conducted by Simson, et al (2015) which states that there is a difference in the level of knowledge of pregnant women before and after being given counseling from less knowledgeable to good knowledge from 16% to 100% (Simson, 2015). Other research that is in line with the results of this study is the research of Rochmawati (2016), regarding the effect of health education on knowledge and behavior to prevent HIV transmission from mother to child (PPIA) it was found that increased knowledge after being given education health is better than knowledge before given health education have knowledge sufficient, so that it can be concluded that giving health education can have a significant impact on significant effect on knowledge and prevention behavior mother-to-child transmission of HIV (Rochmawati, 2016). Research conducted by Hendayani (2017) on the effectiveness of counseling on knowledge of pregnant women about PMTCT also showed that there was an increase in knowledge of pregnant women about PMTCT before being given counseling and after being given counseling with p value = 0.00.

CONCLUSION

Based on the results of research conducted in Tamanan Village, Kediri City, it can be concluded that there is an effect of health promotion through individual and group counseling on the level of knowledge of pregnant women about PMTCT. Suggestions for future researchers should researchers continue research using other health promotion methods and compare the results with previous research because the information received by pregnant women is easier to accept and more varied.

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CONFLICTS OF INTEREST

The author declares that they have no conflict of interest

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