

KNOWLEDGE ABOUT HIV/AIDS WITH COMPLIANCE TO PROVIDER INITIATED TESTING AND COUNSELING IN 1ST TRIMESTER PREGNANT WOMEN

Ni Made Ayu Wulandari, Lina Darmayanti Bainuan, Sabrina Farani

Triatma Mulya University, Bali, Indonesia

Email: ayu.wulandari@triatmamulya.ac.id, lina.darmayanti@triatmamulya.ac.id,

sabrina.farani@triatmamulya.ac.id

Abstract

Human Immunodeficiency Virus-Acquired Immunodeficiency syndrome (HIV-AIDS) was one of disease that got special attention from the health world. The research was based on a large number of mothers still do not understand deeply about HIV/AIDS and do not follow PITC (Provider Initiated Testing and Counseling) so as not to be detected early possibility of the risk of transmission of HIV/AIDS from mother to baby. The purpose of this research was to know the correlation of knowledge about HIV/AIDS with the compliance to Provider From Testing And Counseling (PITC) on 1st trimester of pregnant women. The design used in this study was analytic approach with cross sectional correlation. The population in this research was all 1st trimester pregnant women in PPM (Private Practice Midwife) Mrs "W" of the Yehsumbul Village, Mendoyo sub district, Jembrana Regency, Bali province in December 2021 a number of 30 persons. This research sampling was total sampling. Data analysis used Spearman's rho test. The results suggested that nearly half (26.7%) of respondents who had less knowledge, had negative behavior in the following Provider From Testing and Counseling (PITC). The results of the analysis of data obtained p value = 0.002 or less of $\alpha = 0.05$ means there was a correlation between the knowledge about HIV/AIDS with the compliance to PITC on 1st trimester pregnant mothers In PPM Mrs "W" Yehsumbul Village, Mendoyo sub district, Jembrana, Bali province Year 2021. Based on the results of the research, then the Midwife must provide more intense communication, counseling, and education to pregnant women in 1st trimester of the ANC with integrated Provider From Testing and Counseling (PITC).

Keywords: knowledge of hiv/aids; pitc; 1st trimester pregnant mothers

Introduction

Human Immunodeficiency Virus Acquired Immunodeficiency Syndrome (HIV/AIDS) was one of the diseases that received special attention worldwide health. The number of women infected with HIV-AIDS from year to year was increasing, along with the increasing number of men who had unsafe sexual relations who would transmit HIV-AIDS in sexual partners. In the first trimester of pregnancy, HIV-AIDS was not only a threat to the safety of the mother's life, but also affected the fetus because of transmission that occurs from mother to child (Kemenkes RI, 2011a). The number of

women infected with HIV from year to year was increasing, along with the increasing number of men who had sex unsafe sex, which would transmit HIV to their sexual partners. In a number of developing countries, HIV/AIDS was girl to mother leading cause of reproductive age death. Pregnant HIV infection could be life-threatening the life of mothers and mothers could transmit the virus to their babies (Kemenkes RI, 2013).

Global HIV-AIDS epidemic report (United Nations Program on HIV/AIDS/UNAIDS, 2012) shows that there were 34 million people living with HIV/AIDS worldwide. 50% including women and 2.1 million children aged less than 15 years. In Southeast Asia there were approximately 4 million people with HIV-AIDS. The report development of HIV/AIDS in South Asia Regional Office (Kemenkes RI, 2011b) shows that about 1.3 million people (37%) women had been infected with HIV (Kemenkes RI, 2016).

Profile Health Indonesia noted that in 2016, the number of cases of mother-to-child transmission of HIV/AIDS was 3.8% of the total number of new HIV/ AIDS cases in Indonesia. In Bali Province in 2021 there were 2,367 new cases (Kemenkes RI, 2017). The proportion of HIV/ AIDS transmission from mother to child in Bali Province in 2017 in 2016 was 1.03%, and developed into AIDS at the age of 4 years as many as 3.52% (Dinkes Provinsi Bali, 2016). The proportion of HIV/AIDS transmission from mother to child in Bali Province in 2021 was 2.70%, and developed into AIDS at the age of 4 years as much as 2.94% (Dinkes Jembrana, 2018).

Determinant factors of HIV/AIDS in pregnant women were due to unhealthy sexual relations. Vaginal penetration or anal unprotected against HIV individual infection. Contact sexual that oral or mouth direct (mouth to penis vagina) was included to risk category low prevalence of HIV. The level of risk depends on the amount of virus that comes out and enters a person's body, such as in cuts/scrapes in the mouth, bleeding gums, and or dental disease in the mouth or on the genitals. In addition, transmission from blood could occur if the donor's blood was not screened for HIV testing, reuse of needles and injection syringes, or the use of other medical devices that could penetrate the skin (Kemenkes RI, 2013).

Determinant factors of HIV transmission from mother to baby were divided into 3 factors, as many as maternal factors, infant factors, and obstetric action factors. The most important factor influencing the risk of mother-to-child transmission of HIV was HIV levels (viral load) in the mother's blood at the time of delivery and HIV levels in breast milk when the mother breastfeeds her baby. Generally, one or two weeks after a person was infected with HIV, HIV levels would rapidly increase in a person's body. If the mother suffers from Sexually Transmitted Infections (STIs) or other reproductive infections, HIV levels would increase, there by increasing the risk transmission of HIV to infants (Setiyawati & Meilani, 2015).

The risk of HIV transmission through breastfeeding would increases if there were problems with the mother's breast, such as mastitis, abscesses and sores on the nipples. Babies who were born prematurely and had low birth weight were thought to be more

susceptible to contracting HIV because the baby's organ systems were not well developed, such as the skin and mucosal systems. Most of the transmission of HIV from mother to baby occurs during delivery, because during delivery the pressure on the placenta increases which could cause a connection between the mother's blood and the baby's blood. This was more common if the placenta was inflamed or infected. In addition, during delivery the baby was exposed to the mother's blood and mucus in the birth canal. The skin of newborns was still very weak and more easily infected when in contact with HIV. The impact of HIV infection on mothers and babies was a systemic decline in health, decreased quality of life, increased maternal and infant morbidity and mortality (Kemenkes RI, 2013).

All infants born to HIV mothers should be given prophylactic ARV (Zidovudin) from the first day (12 hours of age) for 6 weeks. 12 months old, all babies born from HIV mothers should be referred to the nearest hospital for monitoring and receive follow-up care. Efforts to prevent mother-to-child transmission of HIV are: carry out 4 prong activities that refer to WHO recommendations 2010, where basically all pregnant women were offered an HIV test, antiretroviral (ARV) administration to HIV-positive pregnant women, selection of appropriate contraception for HIV-positive women, selection of safe delivery for HIV-positive pregnant women, and providing the best food for babies born to HIV-positive mothers (Kemenkes RI, 2013).

Based on the above background, the researcher was interested in examining the correlation between knowledge about HIV/AIDS and following behavior Provider Initiated Testing and Counseling (PITC) for pregnant women in the 1st trimester at PPM Mrs "W" Yehsumbul Village, Mendoyo District, Jembrana Regency, Bali Province in 2021.

Research Methods

The design used in this study was analytic approach with cross sectional correlation. The population in this research was all pregnant women 1st trimester in PPM Mrs "W" of the Yehsumbul Village, Mendoyo sub district, Jembrana Regency, Bali province in December 2021 a number of 30 persons. This research sampling was total sampling. Data processing is done by editing, coding, scoring in this study for variable knowledge about HIV/AIDS was given a score of 1 if the answer was correct and 0 if the answer was wrong. The knowledge criteria score is good if 76 – 100%, enough if 56 – 75%, and less if < 56%. Scoring behavior according to Hidayat (2014) used a Likert scale as follows: if the position statement strongly agrees: 4, agrees: 3, disagrees: 2, strongly disagrees:1, and a negative statement means that strongly agree:1, agree: 2, disagree: 3, strongly disagree: 4. Then interpreted if the score $T \geq$ group mean, meant positive behavior, and if T score < group mean, meant negative behavior. Data analysis used. Spearman's rho test.

Results and Discussion

A. Results

Table 1
Characteristic Frequency Distribution (N=30)

| Characteristics | Frequencies | Percentage (%) |
|-----------------------------------|-------------|----------------|
| Age | | |
| < 20 years | 2 | 6 |
| 20-35 years old | 20 | 67 |
| > 30 years | 8 | 27 |
| Education | | |
| Elementary (Elementary school) | 3 | 10 |
| Intermediate (Junior-High School) | 23 | 77 |
| College (College) | 4 | 13 |
| Profession | | |
| Does Not Work | 22 | 73 |
| Private | 5 | 17 |
| Civil Servant | 1 | 3 |
| Entrepreneur | 2 | 7 |
| Farmer | 0 | 0 |
| Parity | | |
| Primipara | 9 | 30 |
| Multipara | 20 | 67 |
| Grandemultipara | 1 | 3 |
| Total | 30 | 100 |

Characteristics respondent based on age suggested that most of the 20 people (67%) of the respondents were aged 20-35 years. Characteristics of respondents based on education shows that almost all of them, as many as 23 people (77%) of respondents with secondary education (high school). Characteristics of respondents based on work show that that most of the 22 people (73%) of the respondents did not work. Characteristics respondent based on parity show that most of the 20 respondents were (67%) multipara.

Table 2
Frequency Distribution of Respondents Based on Knowledge of HIV/AIDS and Behavior Follow PITC (N=30)

| Variable | Frequencies | Percentage (%) |
|---------------------------------|-------------|----------------|
| Knowledge About HIV/AIDS | | |
| Good | 7 | 23 |
| Moderate | 14 | 47 |
| Less | 9 | 30 |
| Compliance to PITC | | |
| Positive | 13 | 43 |

Knowledge About HIV/Aids with Compliance To Provider
Initiated Testing and Counseling In 1st Trimester Pregnant Women

| | | |
|----------|----|-----|
| Negative | 17 | 57 |
| Total | 30 | 100 |

Based on table 2 shows that almost half, as many as 14 people (47%) of respondents had sufficient knowledge about HIV/AIDS, and most of them, as many as 17 people (57%) of respondents had negative behavior in follow Provider Initiated Testing and Counseling (PITC).

Table 3
Cross-Tabulation of Knowledge about HIV/AIDS
and Following Behavior PITC

| Knowledge About HIV/AIDS | Behavior PITC | | | | Total | |
|-----------------------------|---------------|-------------|----------|-----------------------------|-------|-----|
| | Positive | | Negative | | | |
| | f | % | f | % | f | % |
| Good | 6 | 20 | 1 | 3 | 7 | 23 |
| Moderate | 6 | 20 | 8 | 27 | 14 | 47 |
| Less | 1 | 3 | 8 | 27 | 9 | 30 |
| Total | 13 | 43 | 17 | 57 | 30 | 100 |
| P value= 0.002 | | $\alpha=05$ | | Coefisien correlation=0,541 | | |

Table 3 suggested that almost half (27%) of respondents who had less knowledge, had negative behavior in follow *Provider Initiated Testing and Counseling (PITC)*. Test results *Spearman Rho* suggested that the result *pvalue*= 0.002 or less than = 0.05, and a correlation coefficient of 0.541 which means that H0 rejected and H1 accepted, it means that there was a moderate correlation between knowledge about HIV/AIDS with compliance to *Provider Initiated Testing and Counseling (PITC)* at PPM Mrs "W" Village Yessumbul, Mendoyo District, Jembrana Regency, Bali Province in 2021.

B. Discussion

1. Knowledge About HIV/AIDS

The results suggested that almost half of respondents had sufficient knowledge about HIV/AIDS, as many as 14 people (47%). Knowledge influenced by various factors including education, information/mass media occupation, social, cultural and economic, environment, experience, and age (S Notoatmodjo, 2014).

Respondent's knowledge was influenced by age, education, occupation and experience which was known from parity, because the experience of pregnant women was known from what the mother has done in previous pregnancies.

The results suggested that most of the respondents were aged 20-35 years, as many as 20 people (67%). Age affects a person's perception and mindset. The older they get, the more their grasping power and mindset would develop so that the knowledge gained was getting better. At middle age, individuals would play a more active role in society and social life, and do more activities preparation for the sake of success effort adjust self towards old age Ability intellectual, solving problem and to decline at this age (Budiman & Riyanto, 2013).

According to researcher, maternal age which was the optimal age in intellectual ability so they could think logically eventhough they had never heard about *Provider Initiated Testing and Counseling* (PITC) before. Thus, respondents could answer questions in questionnaire quite well. Mothers who had less knowledge were classified as 20-35 years old and more than 35 years old. Mother's age was approaching late adulthood which if not supported by higher education would be difficult.

The results suggested that almost all respondents had secondary education (high school) that was 23 people (77%). Education affected to the learning process, the higher a person's education, the easier it was for that person to receive information. Higher education makes a person more tend to get information, both from other people and from the mass media. The more information entered, the more knowledge gained about health (Budiman & Riyanto, 2013). Increased knowledge was not absolutely obtained from formal education, but could also be obtained in non-formal education (Soekidjo Notoatmodjo, 2016).

According to researchers, education intermediate channels from the formal channels would make it easier for respondents to understand and absorb the information they get from outside. Information about Provider Initiated Testing and Counseling (PITC) was not always obtained from formal education, especially in secondary education, but could be obtained from higher formal education in the health sector. Mother's knowledge was limited to what they get at a glance from health workers or from electronic media which were not obtained in detail so that most mothers had sufficient knowledge.

Mother with low education could even had sufficient knowledge because of information about *Provider Initiated Testing and Counseling* (PITC) could be accessed via the internet which was currently widespread in the wider community. While mother with middle education still had knowledge less because they not ever got previous information and being passive, not trying to find information.

The results suggested that most of the respondents did not work, as many as 22 people (73%). A person who does not work has poor access to various forms of information, including According to obtained health (Setiyawati N, 2015). According to researchers, knowledge could from various access including from the work environment. A person's work was very influential knowledge, because gathering with other people could be used as a means of exchanging ideas and information about health. Mother with profession as Civil servants had knowledge good, caused in civil servant environment could exchange health information including: *Provider Initiated Testing and Counseling* (PITC). Meanwhile, there was less knowledge of housewives who do not work so that the information obtained was limited if it was not from the mother herself who was actively seeking health information from other access or sources.

The results suggested that most of the respondents were multiparous, as many as 20 people (67%). Experience as a source of knowledge was a way of obtaining

the truth of knowledge by repeating the knowledge gained in solving problems faced in the past. The learning experience in work that was developed would provide professional knowledge and skills, and could develop decision-making abilities which were a manifestation of the integration of scientific and ethical reasoning that departs from real problems (S Notoatmodjo, 2014).

According to the researcher, multiparous mothers already had experience with HIV/AIDS, because according to service standards midwifery that every pregnant woman has the right to get information about sexually transmitted diseases including HIV/AIDS so that mothers who already had at least 1 child or were pregnant with a child tend to had better knowledge than mothers who were pregnant for the first time.

2. Compliance to PITC

The results suggested that most of them had negative compliance to Provider Initiated Testing and Counseling (PITC) was mild, as many as 17 people (57%). Factors that had health behavior were predisposing factors (*Predisposing factors*) which was manifested in beliefs, beliefs, values and also demographic variations, such as: economic status, age, gender and family structure. This factor was more from within the individual; enabling factors (*Enabling Factors*) manifested in the physical environment, including various kinds of facilities and infrastructure, for example: funds, transportation, facilities, government policies and so on; and upporting factors (*reinforcing factors*) include: attitude and behavior factors community leaders, religious leaders, attitudes and behavior of officers including officers health, laws and regulations regulations from both the central and local government related to health (S Notoatmodjo, 2014).

According to the researcher, respondents who had negative behavior were caused by various factors, Among them was the age at which older mothers tend to feel that they were more at risk than younger ones because the frequency and intensity and duration of sexual intercourse were longer than younger ones, so they tend to refuse to had sex.

In addition, the limitations of facilities and infrastructure for HIV testing also affect the behavior of pregnant women in the first trimester in following *Provider Initiated Testing and Counseling* (PITC) because the facilities were difficult to obtain would make pregnant women reluctant to do *Provider Initiated Testing and Counseling* (PITC). The most important thing was the attitude and behavior of health workers, if there was no initiation from health workers, pregnant women would also not participate *Provider Initiated Testing and Counseling* (PITC).

3. Knowledge Correlation About HIV/AIDS With Compliance To PITC

The results suggested that almost half (27%) of respondents who had less knowledge had negative behavior in follow *Provider Initiated Testing and Counseling* (PITC). Test results *Spearman Rho* show that the result *pvalue* = 0.002 or less than = 0.05, and a correlation coefficient of 0.541 which means that H₀ rejected and H₁ accepted, it means that there was a moderate correlation between

knowledge about HIV/AIDS with compliance to *Provider Initiated Testing and Counseling* (PITC) at PPM Mrs "W" Yehsumbul Village, Mendoyo District, Jembrana Regency, Bali Province in 2021.

Pregnancy was an excellent time to discuss prevention of HIV infection because many women would be in contact with health services during pregnancy. Prevention of transmission HIV-AIDS performed with program *antenatal care* (ANC) or care before birth. Unit Maternal and child health services were at the forefront of efforts to prevent transmission from HIV-positive mothers to their children. There were several factors that determine the motivation of pregnant women in The prevention of HIV transmission to infants includes knowledge, attitudes, the role of the husband, and the role of officers health. Knowledge affects pregnant women in the use of services *Provider Initiated Testing and Counseling* (PITC), pregnant women were aware of the dangers of HIV but their awareness about prevention of HIV transmission from mother to baby was lacking and only a few pregnant women know about *Provider Initiated Testing and Counseling* (PITC) (Setiyawati & Meilani, 2015).

According to researcher, mother that had good knowledge, tend to have positive compliance to Provider Initiated Testing and Counseling (PITC) because the basis of someone doing an action was because of knowledge, so his behavior depends on how well knowledge, how a person would behave if he does not know what he would do. However, some pregnant women who had good knowledge turns out to had negative behavior in follow Provider Initiated Testing and Counseling (PITC) because they were afraid to know the results, or feel that they were at risk so that they were afraid to accept the fact if it was later known that the results would be positive, and also because they feel that they were healthy and had never done anything that could transmit HIV/AIDS so that the mother feels that she does not need to do anything. *Provider Initiated Testing and Counseling* (PITC).

This result contrary with research conducted (Nurmasari et al., 2016) regarding the correlation between the level of knowledge of pregnant women about HIV/AIDS with the behavior of PITC examinations at the Sleman Health Center Yogyakarta which stated that most respondents had good knowledge about HIV/AIDS as many as 50 respondents (69.4%). Most of the respondents conducted PITC examination as many as 71 respondents (98.6%). There was no correlation between the level of knowledge of pregnant women about HIV/ AIDS with PITC examination behavior at Puskesmas Sleman Yogyakarta ($pvalue=0.243 >005$). there was a correlation knowledge of pregnant women Conclusion no between levels about HIV/AIDS with PITC examination behavior inTC Puskesmas Sleman Yogyakarta.

Conclusion

Conclusion result research this almost half of pregnant women in the first trimester at PPM Mrs "W" Yehsumbul Village, Mendoyo District, Regency of Jembrana, Bali Province in 2020 had sufficient knowledge about HIV/AIDS, as many as 14 respondents (47%), Most of the first trimester pregnant women at PPM Mrs "W" Yehsumbul Village, Mendoyo District, Jembrana Regency, Bali Province in 2021 had negative behavior in follow *Provider Initiated Testing and Counseling* (PITC) that was 17 respondents (57%). There was a correlation between knowledge about HIV/ AIDS with compliance to *Provider Initiated Testing and Counseling* (PITC) at PMB Mrs "W" Yehsumbul Village, Mendoyo District, Jembrana Regency, Bali Province in 2021.

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