



# Analysis of Factors Influencing Pregnant Women's Participation HIV Screening in Indonesia

Nofa Anggraini<sup>1\*</sup>, Shilvah Susilawati<sup>1</sup>, Deviyana Nuraini<sup>1</sup>, Desi Davia<sup>1</sup>, Debby Hanna Rachmawati<sup>1</sup>, Nurlaela Srifatonah<sup>1</sup>, Annisa Dewita Putri<sup>1</sup>, Siti Herti Nurjanah<sup>1</sup>

<sup>1</sup>Midwifery Study Program, Sekolah Tinggi Ilmu Kesehatan Abdi Nusantara Jakarta, Jakarta, Indonesia.

Received: June 28, 2024

Revised: August 12, 2024

Accepted: November 25, 2024

Published: November 30, 2024

Corresponding Author:

Nofa Anggraini

[nofaanggraini06@gmail.com](mailto:nofaanggraini06@gmail.com)

DOI: [10.29303/jppipa.v10i11.8813](https://doi.org/10.29303/jppipa.v10i11.8813)

© 2024 The Authors. This open access article is distributed under a (CC-BY License)



**Abstract:** Indonesia is the third largest contributor of HIV/AIDS sufferers in Asia Pacific, after India and China. Several factors that can influence HIV screening in pregnant women include education, knowledge, attitudes about HIV screening, family support and support from health workers. This study aims to analyze the factors that influence the participation of pregnant women in HIV screening in Indonesia in 2024. This study uses a quantitative analysis method with a cross-sectional design. The research sample was 35 respondents in the first trimester of pregnancy using a purposive sampling technique. The research instrument used a questionnaire. The data used is primary data analyzed using the chi square test. The results of the univariate analysis showed that 62.90% of pregnant women underwent HIV screening, with a high level of education of 58.4%, good knowledge of 56.70%, positive attitudes of 58.00%, family support of 55.1%, and support from health workers of 55.90%. Pregnant women are expected to be able to actively seek information related to HIV screening other than from health workers or from various media so that they can have high participation in participating in the implementation of HIV screening examinations as an effort to detect HIV early.

**Keywords:** Attitudes; Education; Family support; Health worker support; HIV screening; Knowledge.

## Introduction

Human Immunodeficiency Virus (HIV) is a virus that infects white blood cells, resulting in decreased immunity and the potential to develop into Acquired Immunodeficiency Syndrome (AIDS). According to the World Health Organization (WHO), HIV/AIDS remains a serious global health problem, with 32 million deaths recorded from the disease worldwide (Gupta & Saxena, 2021). To date, HIV/AIDS is one of the most devastating epidemics and acts as a serious multinational challenge (Ministry of Health of the Republic of Indonesia, 2022).

In last years 2022, it is estimated that there will be 39 million people living with HIV globally, including 1.5 million children aged 0-14 years. 2022 will also record 1.3

million new HIV infections and 630,000 HIV-related deaths. Despite a global decline in the number of HIV-related deaths, prevalence remains high in many regions. In America, an estimated 3.8 million people are living with HIV, with 86% knowing their status, 71% receiving treatment, and 65% successfully suppressing their viral load. In Southeast Asia, approximately 3.9 million people are living with HIV, with 75% of them on antiretroviral therapy (ARV).

Indonesia is the country with the third highest number of HIV/AIDS cases in Asia Pacific after India and China. The Indonesian Ministry of Health noted that between January and September 2023, there were 515,455 HIV cases, with 88% confirmed by people living with HIV (PLHIV). However, only 40% of PLHIV

## How to Cite:

Anggraini, N., Susilawati, S., Nuraini, D., Davia, D., Rachmawati, D. H., Srifatonah, N., ... Nurjanah, S. H. (2024). Analysis of Factors Influencing Pregnant Women's Participation HIV Screening in Indonesia. *Jurnal Penelitian Pendidikan IPA*, 10(11), 8790-8798. <https://doi.org/10.29303/jppipa.v10i11.8813>

receive treatment. The majority of HIV sufferers in Indonesia are in the 25-49 year age group, followed by the 20-24 year age group. HIV cases in children and pregnant women were also recorded, with 2,133 pregnant women infected with HIV (Muhamad, 2023).

In Banten Province, it is estimated that there will be 17,68 HIV/AIDS sufferers in 2023. Lebak Regency reported 85 HIV positive cases and 37 AIDS cases, while the Warunggunung Community Health Center in Lebak Regency recorded 21 HIV positive cases, including 2 pregnant women (Lebak Regency Health Office, 2023). Serang City, which is one of the high-risk areas in Banten, reported 329 HIV cases from 1,173 tests, with the proportion of men being 182 cases and women being 147 cases. Walantaka Health Center in Serang City reported 33 HIV positive cases, including 5 pregnant women. In DKI Jakarta, in 2022 there will be 79,628 HIV cases, with 506 new cases. This figure will increase in 2023 to 80,000 cases, including 1,229 new cases, and 33,590 people on ARV treatment (DKI Jakarta Regional Office of the Ministry of Law and Security, 2023). The city of East Jakarta recorded 2,365 HIV/AIDS cases with 198 deaths at the end of 2022. In 2023, of the 6,626 people who underwent HIV testing, 149 HIV cases were found. East Cakung Community Health Center in East Jakarta reported 34 HIV cases, including 2 pregnant women.

In West Java, data from SIHA in October 2023 recorded 7,383 HIV cases and 1,617 AIDS cases from January to September. In Karawang Regency, there was an increase from 38,418 cases in 2022 to 38,518 cases in 2023, with 82% of sufferers having received treatment, although the target of 95% has not been achieved. Wanakerta and Telukjambe Timur Health Centers in Karawang recorded 111 and 113 HIV cases respectively in 2023, including pregnant women. In Bekasi City, there were 753 HIV/AIDS cases in 2023, down from 922 cases in 2022, showing a decrease of 169 cases. Kali Baru Community Health Center reported 44 HIV positive cases, including 2 pregnant. In South Sumatra, there were 680 HIV cases in 2023, an increase from 639 cases in 2022. In Muara Enim Regency, 56 HIV cases were found in 2023, including 11 cases at the Tanjung Agung Community Health Center, with 1 pregnant woman.

Government efforts to address HIV include the triple elimination program, which involves premarital counseling and screening for early detection of HIV, syphilis, and hepatitis B. However, social stigma and lack of public knowledge about HIV testing remain major obstacles. According to Lawrence Green's theory quoted by Notoatmodjo (2020), factors such as education, knowledge, attitudes, family support, and support from health workers influence participation in HIV testing. Previous research shows a significant relationship between knowledge, attitudes and family

support and participation in HIV testing (Berutu, 2022; Dewi et al., 2022; Harahap et al., 2021; Wiyanti et al., 2024).

Preliminary studies at various Community Health Centers show that many pregnant women have not undergone HIV screening due to lack of knowledge, family support and information from health workers. Most mothers who do not participate in screening have low education and face stigma related to HIV positive results. With this background, researchers are interested in conducting a study entitled "Analysis of Factors that Influence Pregnant Women's Participation in HIV Screening in Indonesia in 2024" to evaluate the factors that influence pregnant women's participation in HIV screening and identify strategies to increase awareness and involvement them in efforts to prevent HIV/AIDS.

## Method

The time of the research was carried out in May-June 2024. The research sites were carried out at Warunggunung Community Health Center, Lebak Banten Regency, Cakung Community Health Center, East Jakarta, Tanjung Agung Community Health Center, Muara Enim Regency, South Sumatra, Kali Baru Health Center, Medan Satria District, Bekasi, West Java, Wanakerta Community Health Center, Telukjambe District, West Karawang, West Java, Teluk Jambe Community Health Center, East Telukjambe, Karawang, West Java and Walantaka Community Health Center, Walantaka District, Serang City, Banten. Sampling in this study used a proportional stratified random sampling technique. The reason for taking this research is because the achievement of HIV screening targets for pregnant women is still low. The instrument used was a questionnaire. The independent variables studied were education, knowledge, attitudes, family support and support from health workers. The dependent variable studied was the participation of pregnant women in HIV screening. The design of this research is quantitative analytic with a cross sectional design. Data management was carried out using univariate and bivariate methods using the chi-square test with computer assistance with the SPSS 25.0 program.

## Result and Discussion

### Result

The participation of pregnant women in HIV screening carried out in several regions in Indonesia with an average of 35 respondents in the area studied, the results were obtained from the Warunggunung Community Health Center, Lebak Regency, Banten, the highest number of people undergoing HIV screening,

namely 21 respondents (60.0%), from The Cakung Health Center, East Jakarta, had the highest participation of pregnant women in carrying out HIV screening, namely 20 respondents (57.1%) from the Tanjung Agung Community Health Center, Muara Enim Regency, South Sumatra, with the highest participation in HIV screening, namely 24 respondents (68.6%) from the Kali Baru District Health Center. Medan Satria Bekasi, West Java, had the most HIV screening, namely 24 respondents (68.6%) from the Wanakarta Health Center, West Telukjambe District, Karawang, West Java, the most HIV screening, namely 25 respondents (71.4%) from Teluk Jambe Health Center, East Telukjambe, Karawang, Java. The West had the most HIV screening, namely 20 respondents (57.1%), and from the Walantaka Community Health Center,

Walantaka District, Serang City, Banten, the most HIV screening was 20 respondents (57.1%).

**Table 1.** Frequency Distribution of Pregnant Women's Participation in HIV Screening in Indonesia in 2024

Participation of Pregnant Women in HIV Screening	Frequency (f)	Percentage (%)
Checking	154	62.9
Didn't Check	91	37.1
Amount	245	100

Based on the research results in Table 1, it is known that of the 245 pregnant women, the majority underwent HIV screening, 154 people (62.9%). The results from each research site can be seen in Table 1.

**Table 2.** Frequency Distribution of Pregnant Women's Participation in HIV Screening in Indonesia in 2024

Participation of Pregnant Women in HIV Screening	Checking		Didn't Check		Total	
	N	Percentage %	N	Percentage %	N	Percentage %
Warunggunung Community Health Center, Lebak Regency, Banten	21	60.0	14	40.0	35	100
Cakung Health Center, East Jakarta	20	57.1	15	42.9	35	100
Tanjung Agung Community Health Center, Muara Enim Regency, South Sumatra	24	68.6	11	21.4	35	100
Kali Baru Health Center, Medan Satria District, Bekasi, West Java	24	68.6	11	21.4	35	100
Wanakarta Health Center, West Telukjambe District, Karawang, West Java	25	71.4	10	28.6	35	100
Teluk Jambe Health Center, East Telukjambe, Karawang, West Java	20	57.1	15	42.9	35	100
Walantaka Health Center, Walantaka District, Serang City, Banten	20	57.1	15	42.9	35	100
Amount	154	62.9	91	37.1	245	100

**Table 3.** Frequency Distribution of Pregnant Women's Participation in HIV Screening

Variable	Frequency (f)	Percentage (%)
Education		
High	143	58.4
Low	102	41.6
Knowledge		
Good	139	56.7
Not enough	106	43.3
Attitude		
Positive	142	58.0
Negative	103	42.0
Family Support		
Support	135	55.1
Does not support	110	44.9
Health Worker Support		
Support	137	55.9
Does not support	108	44.1
Amount	245	100

Based on the research results in table 3, it is known that of the 245 pregnant women, the majority were

respondents with higher education, 143 people (58.4%), 139 people (56.7%), with good knowledge, 142 people (58.0%) with a positive attitude), families supported 135 people (55.1%), and health workers supported 137 people (55.9%). The results from each research site can be seen in the Table 4.

*Discussion*

*Frequency Distribution of Frequency of Pregnant Women's Participation in HIV Screening in Indonesia in 2024*

Based on the research results, it was found that in 2024 the majority of pregnant women in Indonesia would undergo HIV screening as many as 154 people (62.9%). Based on the results of research on the participation of pregnant women in HIV screening carried out in several regions in Indonesia with an average of 35 respondents in the area studied, the results were obtained from the Warunggunung Community Health Center, Lebak Regency, Banten, with the most HIV screening being checked, namely 21 respondents

(60.0%) , from the Cakung Community Health Center, East Jakarta, the highest number of pregnant women participated in HIV screening, namely 20 respondents (57.1%) from the Tanjung Agung Community Health Center, Muara Enim Regency, South Sumatra, the highest number of participants undergoing HIV screening, namely 24 respondents (68.6%) from the Kali Community Health Center Baru, Medan Satria Bekasi District, West Java, had the most HIV screening, namely 24 respondents (68.6%) from the Wanakerta Health Center, West Telukjambe District, Karawang, West Java, the most HIV screening, namely 25 respondents (71.4%) from Teluk Jambe East Telukjambe Community Health Center. Karawang, West Java, had the most HIV screening, namely 20 respondents (57.1%), and from the Walantaka Community Health Center, Walantaka District, Serang City, Banten, the most HIV screening was 20 respondents (57.1%).

HIV screening is an HIV testing service under the Health and Counseling Service Provider Initiative (TIPK) or Voluntary Counseling Test (VCT) is a government policy to be implemented in health services so that all health workers must recommend HIV testing for at least pregnant women. The implementation of HIV testing needs to be adjusted to the principle that the patient has received sufficient information and agreed to the HIV test and all parties maintain confidentiality. According to the VCT guidelines, the principles of VCT counseling services are voluntary HIV testing, mutual trust and guaranteed confidentiality, maintaining an effective counselor-client relationship, testing is one of the components of VCT (Ministry of Republic of Indonesia, 2022). According to Lawrence Green's theory, there are several factors that cause HIV screening in pregnant women, including education, knowledge, attitudes, family support and support from health workers (Notoatmodjo, 2020).

In accordance with the results of research by Haryadi et al. (2020), her research shows that the majority of pregnant women undergo screening, 74.3%. Likewise with the research results in their research based on HIV screening tests, the majority of mothers carried out HIV screening tests, namely 63.1%. Another study conducted by Sabilla et al. (2020) showed that 86% had an HIV testing visit.

Based on research results supported by theory and previous research results show that the majority of pregnant women undergo HIV screening. This indicates that pregnant women voluntarily want to carry out HIV screening tests and trust health workers to do so because they maintain confidentiality so that a good relationship is established between mothers and health workers. Other factors are caused by mothers having higher

education, good knowledge, positive attitudes, and families who support carrying out HIV screening.

#### *Frequency Distribution of Pregnant Women's Participation in HIV Screening Based on Education in Indonesia in 2024*

Based on the research results, it was found that the largest number of pregnant women in Indonesia in 2024 were 143 respondents (58.4%). Based on the results of research on the participation of pregnant women in HIV screening based on education carried out in several regions in Indonesia with an average of 35 respondents in the area studied, the results were obtained from the Warunggunung Community Health Center, Lebak Regency, Banten, the largest number of respondents with higher education, namely 21 respondents (60, 0%), from the Cakung Community Health Center, East Jakarta, the majority were respondents with higher education, namely 20 respondents (57.1%) from the Tanjung Agung Community Health Center, Muara Enim Regency, South Sumatra, the majority were respondents with higher education, namely 18 respondents (51.4%) From the Kali Baru Community Health Center, Medan Satria Bekasi District, West Java, the largest number of respondents were with higher education, namely 21 respondents (60.0%) from the Wanakerta Community Health Center, Telukjambe Barat District, Karawang, West Java, the largest number were respondents with higher education, namely 23 respondents (65.7% ) from the Teluk Jambe Health Center, East Telukjambe, Karawang, West Java, the majority were respondents with higher education, namely 20 respondents (57.1%), and from the Walantaka Health Center, Walantaka District, Serang City, Banten, the majority were respondents with higher education, namely 20 respondents (57.1 %).

Education influences the learning process, the higher a person's education, the easier it is for that person to receive information. Ignorance can be caused by low education, someone with too low an education level will find it difficult to receive messages, digest the messages and information conveyed. This knowledge is obtained both formally and informally. Meanwhile, mothers who have a higher level of education are generally open to accepting changes or new things to maintain their health (Wawan & Dewi, 2010). Notoatmodjo (2020), said that changes or actions to maintain and improve health produced by health education are based on knowledge and awareness through the learning process so that this behavior is expected to last a long time and persist because it is based on awareness.

In accordance with the research results of Haryadi et al. (2020), her research shows that the higher education category is 94.2%. In their research based on maternal education, most of them were higher

education, namely 68.3%. Likewise with the research results of Sabilla et al. (2020) based on the highest frequency of education categorized as high, namely SMA 75.0%.

Based on research results supported by theory and previous research results show that the majority of pregnant women have higher education, in this case a high school education. Mothers who have higher education will easily receive information and be rational in making decisions and actions. It is hoped that mothers with higher education will tend to carry out HIV screening examinations during pregnancy in the hope that their health can be detected, especially in relation to HIV disease which can be transmitted through sexual intercourse as well as the fetal placenta so that the unborn baby will be infected (Lingen-Stallard et al., 2016).

#### *Frequency Distribution of Pregnant Women's Participation in HIV Screening Based on Knowledge in Indonesia in 2024*

Based on the research results, it was found that the majority of pregnant women in Indonesia in 2024 would have good knowledge, as many as 139 people (56.7%). Based on the results of research on the participation of pregnant women in HIV screening based on knowledge carried out in several regions in Indonesia with an average of 35 respondents in the area studied, the results were obtained from the Warunggunung Community Health Center, Lebak Banten Regency, the most respondents with good knowledge, namely 20 respondents (57, 1%), from the Cakung Community Health Center, East Jakarta, the majority were respondents with good knowledge, namely 21 respondents (60.0%) from the Tanjung Agung Community Health Center, Muara Enim Regency, South Sumatra, the largest number were respondents with good knowledge, namely 19 respondents (54.3%) from the Kali Baru Community Health Center, Medan Satria Bekasi District, West Java, the majority were respondents with good knowledge, namely 18 respondents (51.4%) from the Wanakerta Community Health Center, Telukjambe Barat District, Karawang, West Java, the largest number were respondents with good knowledge, namely 22 respondents (62.9% ) from the Teluk Jambe Community Health Center, East Telukjambe, Karawang, West Java, the majority were respondents with good knowledge, namely 19 respondents (54.3%), and from the Walantaka Health Center, Walantaka District, Serang City, Banten, the majority were respondents with good knowledge, namely 20 respondents (57.1 %).

Cognitive knowledge is a very important domain in shaping one's actions. Behavior that is based on knowledge, awareness and positive attitudes is more lasting than behavior that is not based on knowledge.

Kartini et al. (2023) stated that knowledge about HIV is a vserly important aspect in increasing access to HIV services and changing risk behavior. Factors that influence a person's knowledge include education, information, environment and experience. In accordance with the research results of Yanti et al. (2022) the majority of pregnant women have good knowledge of 75.4%. The research results of Afrina et al. (2022), the majority of pregnant women have good knowledge of 64.8%. Likewise, according to the research results of Sirait (2023), the majority of pregnant women have good knowledge of 67.3%. Knowledge influences the mother's participation in undergoing HIV screening examinations (Ristriyani et al., 2018).

Based on the research results supported by theory and the results of previous research, the researchers assume that the majority of mothers have good knowledge because mothers have high education, making it easier for mothers to receive information. Moreover, during the visit the mother will receive information from health workers about the importance of carrying out HIV screening tests so that the mother has good knowledge, in fact the mother gets this information apart from health workers and also from various media (Leziak et al., 2021). It can be seen from the results of the questionnaire that most mothers already know about the causes of HIV due to having more than one partner and having sexual relations without using a condom. Mothers also know about one of the prevention efforts, namely HIV screening as an effort to prevent transmission of the disease caused by because of sexual relations. Mothers also know that HIV screening can be done on women and men. The conditions are different for mothers with low knowledge, this is caused by the lack of information that mothers receive, especially regarding HIV.

#### *Frequency Distribution of Pregnant Women's Participation in HIV Screening Based on Attitudes in Indonesia in 2024*

Based on the research results, it was found that 142 pregnant women in Indonesia in 2024 would have a positive attitude (58.0%). Based on the results of research on the participation of pregnant women in conducting HIV screening based on attitudes carried out in several regions in Indonesia with an average of 35 respondents in the area studied, the results were obtained from the Warunggunung Community Health Center, Lebak Regency, Banten, the most respondents with a positive attitude, namely 19 respondents (54, 3%), from the Cakung Community Health Center, East Jakarta, the majority were respondents with a positive attitude, namely 23 respondents (65.7%) from the Tanjung Agung Community Health Center, Muara Enim Regency, South Sumatra, the largest number were respondents with a

positive attitude, namely 23 respondents (65.7%) from the Kali Baru Community Health Center, Medan Satria Bekasi District, West Java, the largest number of respondents were with a positive attitude, namely 20 respondents (57.1%) from the Wanakerta Health Center, West Telukjambe District, Karawang, West Java, the largest number were respondents with a positive attitude, namely 23 respondents (65.7%) from the Teluk Jambe Community Health Center, East Telukjambe, Karawang, West Java, the majority were respondents with a positive attitude, namely 20 respondents (57.1%), and from the Walantaka Health Center, Walantaka District, Serang City, Banten, the majority were respondents with a positive attitude, namely 18 respondents (51.4%).

Attitude is a person's reaction to a stimulus or various objects, such as carrying out HIV screening, then a person's attitude can be assessed from the way he takes action, how he makes assessments, and practices what he knows (Tjipundi, 2022). Gerungan (2021) explains that attitude formation is influenced by various factors, namely internal and external factors (Fuspita et al., 2019). Internal factors include personal experiences and emotional states. Increasing the number of visits can reflect a caring response or positive attitude towards the health of oneself and the fetus. Meanwhile, negative attitudes towards visiting make pregnant women lose their motivation (Rahyani et al., 2019).

In accordance with the results of Emilia (2021), the number of respondents with a good attitude was (60%). Likewise with the research results, shows that the characteristics of respondents based on attitudes towards HIV screening examinations are that the majority of respondents have a positive attitude (51.2%). The results of further research were carried out by Sirait (2023) showed that the majority of respondents had a positive attitude of 83%.

Based on research results supported by theory and previous research results, researchers assume that the majority of pregnant women have a positive attitude. This is because pregnant women have good knowledge regarding the use of HIV screening which mothers gain through information and experience. It can be seen from the results of the questionnaire that the majority of mothers stated that in an effort to prevent disease transmission before marriage, mothers did not have sexual relations, did not have multiple partners and mothers knew that using condoms was an effort to prevent HIV, as well as not consuming drugs and as an effort to detect Early prevention of HIV is by carrying out HIV screening during pregnancy.

*Frequency Distribution of Pregnant Women's Participation in HIV Screening Based on Family Support in Indonesia in 2024*

Based on the research results, it was found that the largest number of pregnant women in Indonesia in 2024 with supporting families was 135 people (55.1%). Based on the results of research on the participation of pregnant women in HIV screening based on family support which was carried out in several regions in Indonesia with an average of 35 respondents in the area studied, the results were obtained from the Warunggunung Community Health Center, Lebak Banten Regency, the largest number of respondents with family support, namely 19 respondents (54.3%), from the Cakung Community Health Center, East Jakarta, the majority were respondents with supportive families, namely 20 respondents (57.1%) from the Tanjung Agung Community Health Center, Muara Enim Regency, South Sumatra, the largest number were respondents with supportive families, namely 20 respondents (57.1%) from the Kali Baru Health Center, Medan Satria Bekasi District, West Java, the largest number of respondents with a supportive family, namely 19 respondents (54.3%) from the Wanakerta Health Center, West Telukjambe District, Karawang, West Java, the largest number of respondents with a good supportive family, namely 21 respondents (60.0%) from the Teluk Jambe Community Health Center, East Telukjambe, Karawang, West Java, the largest number of respondents with a supporting family, namely 18 respondents (51.4%), and from the Walantaka Community Health Center, Walantaka District, Serang City, Banten, the largest number of respondents with a supporting family, namely 18 respondents (51.4%).

Family support is assistance that is emotionally beneficial and provides a positive influence in the form of information, instrumental assistance, emotions and assessments provided by family members consisting of husband, parents, parents-in-law and other relatives (Nasir, 2019). The support of husbands and families plays a very important role in paying attention to the nutritional intake needed by pregnant women (Pike et al., 2021), because husbands and families are the closest family members and can be trusted to provide support to pregnant women (Milayanti, 2019). The higher the support provided by the family, the higher the mother's desire to maintain her health. This can make mothers feel safe, comfortable and happy in living their lives.

In accordance with the research results of Dwiyantri (2022), the majority of pregnant women receive support from their families, 67.8%. The results of another study, Tawanti (2023), found that the majority of pregnant women received support from the family, 64.7%. Likewise, Wenny et al. (2016) found that the majority of pregnant women received support from their families, 76.4%.

Based on the research results supported by theory and the results of previous research, the researchers assume that the majority of pregnant women receive support from the family to carry out HIV screening, this indicates that the family already knows about the importance of carrying out HIV screening as an early detection effort in preventing disease transmission through sexual intercourse. This can be seen from the results of the questionnaire, the majority of mothers received information from their families about HIV disease and how to prevent it, one of which is by carrying out HIV screening. The family also recommended that he carry out an HIV screening examination and even accompany him when he was examined at a health facility. Having strong support from the family will make mothers feel comfortable and safe when carrying out health checks, especially HIV screening.

#### *Frequency Distribution of Pregnant Women's Participation in HIV Screening Based on Support from Health Workers in Indonesia in 2024*

Based on the research results, it was found that the largest number of pregnant women in Indonesia in 2024 will be 137 people (55.9%). Based on the results of research on the participation of pregnant women in HIV screening based on the support of health workers which was carried out in several regions in Indonesia with an average of 35 respondents in the area studied, the results were obtained from the Warunggunung Community Health Center, Lebak Banten Regency, the largest number of respondents with supporting health workers, namely 18 respondents. (51.4%), from the Cakung Health Center, East Jakarta, the majority were respondents with supporting health workers, namely 19 respondents (54.3%) from the Tanjung Agung Community Health Center, Muara Enim Regency, South Sumatra, the most respondents with supporting health workers, namely 21 respondents (60.0%) from the Kali Baru Community Health Center, Medan Satria Bekasi District, West Java, the largest number of respondents with supporting health personnel, namely 22 respondents (62.9%) from the Wanakerta Community Health Center, West Telukjambe District, Karawang, West Java, the largest number of respondents with supporting health personnel, namely as many as 20 respondents (57.1%) from the Teluk Jambe Health Center, East Telukjambe, Karawang, West Java, the most respondents with supporting health workers, namely 19 respondents (54.3%), and from the Walantaka Health Center, Walantaka District, Serang Banten City, the most respondents with health workers. supports, namely 18 respondents (51.4%).

Health workers have an influence on the community in utilizing health services. This influence is

in the form of support from health workers which is a driving factor in the use of HIV screening tests. Support from health workers, especially in the form of information support about how HIV is transmitted and how to prevent it, as well as providing motivation to the community to carry out voluntary HIV screening tests. It is hoped that health workers will increase socialization about the importance of HIV screening examinations (Firdaus, 2020).

In accordance with the results of Berutu (2022), it shows that the majority of pregnant women receive support from health workers, 67.8%. This is in accordance with research by Umami (2019) which concluded that the majority of pregnant women received support from health workers at 74.5%. Novita (2017) shows that the majority of pregnant women receive support from health workers at 76.3%.

Based on the research results supported by theory and the results of previous research, researchers assume that the majority of pregnant women receive support from health workers, this indicates that health workers play an active role in providing counseling, information and motivation related to HIV screening. Most pregnant women receive support from health workers because pregnant women undergo examinations at health facilities so that they will get information about HIV disease and its transmission, and they are advised by health workers to carry out HIV screening examinations, they will even be given time to ask questions. when difficulties are found in receiving information, pregnant women will get clear information from the source, namely health workers who function as counselors, communicators and facilitators.

## **Conclusion**

In 2024, the participation rate of pregnant women in Indonesia in carrying out HIV screening will reach 62.9%, indicating increased awareness and participation in early detection of this virus. This is a positive step in efforts to address the spread of HIV among pregnant women and ensure better health for mothers and their babies. However, further analysis shows that several key factors influence this participation rate. Education plays an important role, with pregnant women who have a high level of education being recorded as having the most HIV screening, reaching 58.4%. Higher education is often associated with better knowledge of the importance of HIV testing, as well as better access to health information and resources. This suggests that improving education among pregnant women can improve participation rates in HIV screening. In addition, good knowledge about HIV also influences participation. Around 56.7% of pregnant women with

good knowledge about HIV carry out screening. This knowledge includes an understanding of how HIV can affect their health and that of their baby, as well as the benefits of early treatment.

#### Acknowledgments

We would like to express our deepest gratitude to our advisor who has guided us throughout the research process and to the respondents who have made significant contributions to the success of this study. Your support, guidance, and participation have been invaluable, and we greatly appreciate your effort and dedication. Thank you for your continuous encouragement and for making this research possible.

#### Author Contributions

The following statements should be used Conceptualization NA, SS, DN, DD, DHR, NS, ADP, SHN contributed to the data collection process, data processing, article writing.

#### Funding

This research was funded by personal funds.

#### Conflicts of Interest

The authors declare no conflict of interest.

#### References

- Afrina, V., Prasetyo, B., & Dewanti, L. (2022). Analisis Sikap dan Pengetahuan Calon Pengantin terhadap Pemeriksaan HIV Pranikah. *Original Research Indonesian Midwifery and Health Sciences Journal*, 6(4), 392–401. Retrieved from <https://doi.org/https://callforpaper.unw.ac.id/index.php/semnasdancfpbidanunw/article/view/405>
- Berutu, N. K. (2022). *Faktor Yang Berhubungan Dengan Pemanfaatan Pemeriksaan HIV Oleh Ibu Hamil Pada Program Kesehatan Ibu dan Anak Puskesmas Deli Tua Kabupaten Deli Serdang* [Universitas Islam Negeri Sumatera Utara]. Retrieved from <http://repository.uinsu.ac.id/16672/>
- Dewi, S., Ruhjana, M. A. N., Suprayitno, E., & others. (2022). *Hubungan dukungan keluarga terhadap perilaku pencegahan HIV-AIDS pada remaja: literature review* [Universitas' Aisyiyah Yogyakarta]. Retrieved from <https://digilib.unisayogya.ac.id/6458/>
- Dwiyanti, S. S. (2022). Peranan Dukungan Sosial Terhadap Pemanfaatan Layanan VCT dengan Pendekatan Theory of Planned Behavior (TPB). *Preventif: Jurnal Kesehatan Masyarakat*, 13(4), 526–537. <https://doi.org/10.22487/preventif.v13i4.340>
- Emilia, N. (2021). Faktor-Faktor Yang Mempengaruhi Perilaku Ibu Terhadap Ketepatan Kunjungan Antenatal Care Di Puskesmas Bulurokeng Tahun 2020. *Universitas Islam Negeri Alauddin Makassar*. Retrieved from <https://core.ac.uk/download/pdf/482474965.pdf>
- Firdaus, R. J. (2020). *Pengaruh Media Video Edukasi Terhadap Intensi Dan Perilaku Tes HIV Pada Ibu Hamil Di Kecamatan Patrang Kabupaten Jember* [Fakultas Keperawatan Universitas Jember]. Retrieved from <https://repository.unej.ac.id/handle/123456789/101606>
- Fuspita, Y., Yona, S., & Waluyo, A. (2019). HIV testing of housewives with HIV in Lampung, Indonesia: A qualitative study. *Enfermeria Clinica*, 29, 879–884. <https://doi.org/10.1016/j.enfcli.2019.04.133>
- Gerungan. (2021). *Psikologi Sosial*. Refika Aditama.
- Gupta, P. K., & Saxena, A. (2021). HIV/AIDS: current updates on the disease, treatment and prevention. *Proceedings of the National Academy of Sciences, India Section B: Biological Sciences*, 91(3), 495–510. <https://doi.org/10.1007/s40011-021-01237-y>
- Harahap, Y. W., Elfiquh, M. A., & Kesuma, R. N. (2021). *Hubungan Pengetahuan Dan Sikap Calon Pengantin Tentang HIV/AIDS Dengan Pelaksanaan Tes HIV Knowledge, Attitude of Brides and Voluntary Counselling Test HIV*. <https://doi.org/10.51933/health.v6i2.531>
- Haryadi, Y., Sumarni, S., & Angkasa, M. P. (2020). Jenis Pekerjaan Dan Tingkat Pendidikan Mempengaruhi Kepatuhan Minum Obat Antiretroviral (Arv) Pada Pasien Hiv/Aids. *Jurnal Lintas Keperawatan*, 1(1). <https://doi.org/10.31983/jlk.v1i1.6446>
- Kartini, K., Mien, M., Sugarni, M., Rosanty, A., Lestari, D. R., Apriyanti, A., Aswita, A., Purnamasari, Y., Harlis, W. O., Rohmawati, W. (2023). *Obstetri dan Ginekologi Untuk Mahasiswa Kebidanan*. Eureka Media Aksara.
- Leziak, K., Dahl, C. M., Jackson, J. A., Miller, E. S., & Yee, L. M. (2021). HIV knowledge and attitudes among minority pregnant patients and their non-pregnant partners in an urban hospital clinic. *Sexual and Reproductive Healthcare*, 30(April), 100656. <https://doi.org/10.1016/j.srhc.2021.100656>
- Lingen-Stallard, A., Furber, C., & Lavender, T. (2016). Testing HIV positive in pregnancy: A phenomenological study of women's experiences. *Midwifery*, 35, 31–38. <https://doi.org/10.1016/j.midw.2016.02.008>
- Notoatmodjo, S. (2020). *Promosi kesehatan dan ilmu perilaku*. Jakarta: Rineka Cipta.
- Novita, R. (2017). *Faktor-faktor perilaku yang berhubungan dengan pemanfaatan layanan Voluntary Counseling and testing (VCT) pada komunitas lelaki seks lelaki (LSL) di kota Bukittinggi tahun 2017* [STIKes PERINTIS PADANG].

- <http://repo.upertis.ac.id/282/>
- Pike, V., Kaplan Ramage, A., Bhardwaj, A., Busch-Hallen, J., & Roche, M. L. (2021). Family influences on health and nutrition practices of pregnant adolescents in Bangladesh. *Maternal & Child Nutrition*, 17, e13159. <https://doi.org/10.1111/mcn.13159>
- Rahyani, N. K. Y., Erawati, N. L. P. S., Suindri, N. N., Utarini, N. G. A. E., & Partini, I. G. N. S. (2019). Kesadaran Ibu Hamil Mendeteksi Dini Kondisi Patologis dan Kegawatdaruratan Selama Kehamilan Sampai Bayi Baru Lahir di Puskesmas Mengwi I Tahun 2018. *Jurnal Pengabmas Masyarakat Sehat*, 1(2), 87-94. Retrieved from <https://shorturl.asia/TEKHR>
- Ristriyani, R., Nur Rachmawati, I., & Afiyanti, Y. (2018). Status disclosure and the acceptance of women living with HIV. *Enfermeria Clinica*, 28, 195-198. [https://doi.org/10.1016/S1130-8621\(18\)30066-4](https://doi.org/10.1016/S1130-8621(18)30066-4)
- Sabilla, F. F., Agustina, T., Lestari, N., & Raharja, S. (2020). Hubungan Tingkat Pendidikan Dan Usia Ibu Hamil Terhadap Perilaku Kunjungan Pemeriksaan Triple Eliminasi Di Puskesmas Sumberlawang Sragen. *Jurnal Kebidanan Indonesia*, 11(2), 93-101. Retrieved from <https://www.jurnal.stikesmus.ac.id/index.php/JKebIn/article/view/377>
- Sirait, S. H. (2023). Analisis Keikutsertaan Skrining HIV Pada Ibu Hamil. *Jurnal Ilmiah PANNMED (Pharmacist, Analyst, Nurse, Nutrition, Midwifery, Environment, Dentist)*, 18(2), 346-353. Retrieved from [https://www.researchgate.net/publication/373889802\\_Analisis\\_Keikutsertaan\\_Skrining\\_HIV\\_Pada\\_Ibu\\_Hamil](https://www.researchgate.net/publication/373889802_Analisis_Keikutsertaan_Skrining_HIV_Pada_Ibu_Hamil)
- Tawanti, I. (2023). Faktor-Faktor Yang Berhubungan Dengan Perilaku Calon Pengantin Terhadap Pelaksanaan Skrining Pranikah: Implementation of Premarital Screening. *Indonesian Journal of Midwifery Scientific*, 2(1), 14-21. <https://shorturl.asia/Ygs5B>
- Tjipundi, S. T. (2022). *Assessment of knowledge, attitude and practices of male adults regarding the uptake of HIV counselling and testing in Opuwo district, Kunene region, Namibia* [University of Namibia]. Retrieved from [https://repository.unam.edu.na/bitstream/handle/11070/3640/tjipundi\\_attitude\\_2022.pdf?sequence=1](https://repository.unam.edu.na/bitstream/handle/11070/3640/tjipundi_attitude_2022.pdf?sequence=1)
- Umami, D. A. (2019). Hubungan Dukungan Suami Dan Dukungan Petugas Kesehatan Terhadap Perilaku Pemeriksaan Iva Di Puskesmas Padang Serai. *Journal of Midwifery*, 7(2). <https://doi.org/10.37676/jm.v7i2.906>
- Wawan, A., & Dewi, M. (2010). *Teori dan pengukuran pengetahuan, sikap dan perilaku manusia* (Vol. 12). Yogyakarta: Nuha Medika.
- Wenny, D. M., Wijayanti, Y., & Hakimi, M. (2016). Faktor yang memengaruhi partisipasi ibu hamil melakukan skrining HIV di puskesmas Yogyakarta. *Berita Kedokteran Masyarakat*, 32(11), 435-442. Retrieved from <https://shorturl.asia/TQL70>
- Wiyanti, Z., Astuti, A. W., Kit, A., & Fatimah, S. (2024). Model of health services for future parents: a scoping review. *Jurnal Cakrawala Promkes*, 6(1), 36-47. <https://doi.org/10.12928/jcp.v6i1.9883>
- Yanti, D., Supiyah, S., & Mesalina, R. (2022). Faktor-Faktor yang Berhubungan Dengan Penerimaan KIE Kesehatan Reproduksi dan Seksual Bagi Calon Pengantin. *Jurnal Sehat Mandiri*, 17(2), 18-33. [10.33761/jsm.v17i2.607](https://doi.org/10.33761/jsm.v17i2.607)