

# The Relationship Between Family Role and Healthcare Workers' Role with HIV/AIDS Transmission Prevention Behavior among Freelance Women Workers in Konawe Regency

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## ABSTRACT

**Background:** HIV/AIDS is a global health issue with an increasing prevalence rate. Freelance Women Workers (FWW) are a vulnerable group to HIV/AIDS transmission due to limited access to health information and medical services. The role of family and healthcare workers plays a crucial part in shaping HIV/AIDS prevention behaviors among FWW. However, there is still a lack of understanding regarding the relationship between these two factors and prevention behaviors, particularly in Konawe Regency.

**Objective:** This study aims to analyze the relationship between the role of family and healthcare workers with HIV/AIDS prevention behaviors among FWW in Konawe Regency.

**Method:** This research employed a quantitative design with a cross-sectional approach. The sample consisted of 90 FWW selected using an accidental sampling technique. Data were collected through a closed-ended questionnaire and analyzed using the Chi-Square test with a 5% significance level.

**Results:** The findings indicate that family support has a significant relationship with HIV/AIDS prevention behaviors among FWW ( $p\text{-value} < 0.05$ ). Respondents who received family support were more likely to engage in good preventive behaviors compared to those who did not receive support. Additionally, the role of healthcare workers also influenced prevention behaviors, as FWW who received guidance and healthcare services from medical personnel were more likely to adopt effective prevention measures ( $p\text{-value} < 0.05$ ).

**Conclusion:** Family and healthcare workers play an essential role in shaping HIV/AIDS prevention behaviors among FWW. Therefore, a more comprehensive intervention strategy is required to enhance family involvement and optimize the role of healthcare workers in HIV/AIDS prevention programs.

**Keywords:** HIV/AIDS, Family Role, Healthcare Workers, Freelance Women Workers

## INTRODUCTION

HIV/AIDS is one of the major global health issues, with a prevalence that continues to increase yearly (Robbins et al., 2014;

Rogers et al., 2016). HIV, short for Human Immunodeficiency Virus, attacks the human immune system, making the body vulnerable to various infectious diseases.

Meanwhile, AIDS, or acquired immunodeficiency syndrome, is the final stage of HIV infection, marked by the appearance of symptoms and diseases due to a weakened immune system. However, not all individuals with HIV will reach the AIDS stage, depending on disease management and treatment received (Ramezani Tehrani & Malek Afzali, 2008; Ranebennur et al., 2014).

HIV/AIDS is often described as an iceberg phenomenon, where the number of officially detected cases represents only a small portion of the total cases in the community. Many individuals are unaware that they are infected, leading to underreporting or delayed treatment. This phenomenon highlights the urgent need for early detection efforts and increased public awareness of HIV/AIDS (Prabhu & van Wagoner, 2023; Qashqari et al., 2022).

Globally, the HIV epidemic has affected 88.4 million people since its first discovery. By the end of 2023, approximately 39.9 million people were living with HIV, with 65% of cases in Africa. Southeast Asia ranks second with 3.8 million cases, followed by America with 3.5 million cases. Additionally, in 2023, 1.3 million people were newly infected with HIV, and 630,000 people died from complications related to the disease (Singh & Singh, 2021).

In Indonesia, the number of HIV/AIDS cases continues to rise annually. In 2022, 52,955 new cases were recorded, marking a significant increase compared to the previous year. As of March 2023, the total reported HIV cases reached 377,650 (Kemenkes, 2023). Although there has been a decline in AIDS cases, HIV remains a major challenge in Indonesia, particularly among high-risk populations such as commercial sex workers, drug users, and other key populations (Nubed & Akoachere, 2016).

Southeast Sulawesi has reported a significant increase in HIV/AIDS cases. In 2021, there were 414 cases, which increased to 637 cases in 2023. Konawe Regency recorded an increase from 9 cases in 2021 to

12 cases in September 2024. Most cases were reported among men, although the number of infected women also requires special attention.

Globally, HIV/AIDS transmission occurs mainly through unprotected sexual contact (69%), the use of unsterile needles (24%), and other factors such as blood transfusions and mother-to-child transmission. Vulnerable populations, including Freelance Women Workers (FWW), are at high risk due to limited access to healthcare services, education, and social stigma (Papworth et al., 2013; Paulus et al., 2020).

FWW includes women working in the informal sector, such as daily laborers, domestic workers, and commercial sex workers. In Indonesia, the number of FWW increased to 12.57 million in 2023, with significant growth in Southeast Sulawesi. FWW face social and economic challenges that can increase the risk of HIV/AIDS transmission (UNSAID, 2021).

In Konawe Regency, the number of HIV/AIDS cases was recorded at 12 cases in 2024, most of which came from high-risk groups such as sex workers. FWW, working in the informal sector, including sex workers, are highly vulnerable to HIV/AIDS transmission. Limited access to information and healthcare services, along with social stigma, exacerbates this risk. Low knowledge about HIV/AIDS among FWW often results in ineffective prevention behaviors. Therefore, it is crucial to understand the factors influencing HIV/AIDS prevention behaviors among FWW in Konawe Regency to enhance prevention efforts effectively.

## **MATERIALS & METHODS**

### **Study Design**

This study used a quantitative design with a cross-sectional approach. This approach allows the measurement of variables at a specific time to determine the relationship between independent and dependent variables.

## Study Setting

The study was conducted in Konawe Regency, specifically in Morosi, Sampara, and Pondidaha Districts. These locations were chosen due to their diverse populations, which are considered high-risk for HIV/AIDS transmission. The research was conducted from November 2024 until completion.

## Participants

The study population consisted of 737 FWW in Konawe Regency. A sample of 90 respondents was selected using an accidental sampling technique, which involved selecting respondents based on availability and willingness to participate.

## Variables and Research Instruments

The study variables consisted of independent and dependent variables. The independent variables were family roles and healthcare workers' roles, while the dependent variable was HIV/AIDS prevention behavior. Each variable was measured using 10 questions in a questionnaire. Data collection was conducted using a validated closed-ended questionnaire. The questionnaire included questions assessing family roles, healthcare workers' roles, and HIV/AIDS prevention behavior. Each question was scored using a Likert scale, where respondents' answers were categorized into two objective criteria: "Good" and "Poor." Respondents with higher total scores were categorized as

"Good," while those with lower scores were categorized as "Poor." The instrument was designed to obtain accurate and relevant data for the research objectives.

## Data Collection

Data were collected by distributing questionnaires directly to respondents. Before completing the questionnaire, respondents were given an information sheet and asked to sign an informed consent form to confirm their participation. Trained researchers and enumerators provided instructions on how to complete the questionnaire to ensure data accuracy. This process was conducted while maintaining respondents' confidentiality and comfort.

## Data Analysis

Data analysis was conducted in two stages: univariate and bivariate analysis. Univariate analysis was used to describe the characteristics of each variable in the form of frequency distribution and percentages. Subsequently, bivariate analysis was performed using the Chi-Square test to examine the relationship between the independent variables (family roles and healthcare workers' roles) and the dependent variable (HIV/AIDS prevention behavior). A significance level of 5% was used. Data analysis was performed using SPSS version 23 to ensure accuracy and ease of processing.

## RESULT

**Table 1. Respondents' Characteristics**

Characteristic	Frequency (n)	Percentage (%)
<b>Age</b>		
15 – 24 years	21	23.3
25 – 34 years	55	61.1
35 – 44 years	12	13.3
≥ 45 years	2	2.2
<b>Educational Level</b>		
Elementary School	2	2.2
Junior High School	9	10
Senior High School	63	70
College	16	17.8
<b>Marital Status</b>		
Married	33	36.7
Single	35	38.9

Table 1 shows that the majority of respondents were in the 25–34 age group, while other age groups had a smaller proportion. In terms of education, most respondents had a high school education, while only a few had elementary or higher education. Regarding marital status,

respondents were almost evenly split between those who were married and those who were single. These findings provide a general overview of respondents' characteristics that may influence their HIV/AIDS prevention behavior.

**Table 2. Distribution of Research Variables**

Variable	Category	n	%
Family Role	Supportive	78	86.7
	Less Supportive	12	13.3
Healthcare Workers' Role	Supportive	42	46.7
	Less Supportive	48	53.3
HIV/AIDS Prevention Behavior	Good	74	82.2
	Poor	16	17.8

Table 2 shows that most respondents received support from their families and healthcare workers, although some lacked adequate support. The majority of respondents also had good HIV/AIDS prevention behavior, while a small

percentage still lacked prevention efforts. These findings indicate that family and healthcare worker support play an important role in improving HIV/AIDS prevention behavior.

**Table 3. Determinants of HIV/AIDS Prevention Behavior**

Variable	HIV/AIDS Prevention Behavior				Total	p-value	
	Good		Poor				
	n	%	n	%	n	%	
Family Role							
Supportive	69	76.7	9	10.0	78	86.7	0.001
Less Supportive	5	5.5	7	7.8	12	13.3	
Healthcare Workers' Role							
Supportive	41	45.6	1	1.1	42	46.7	0,001
Less Supportive	33	36.6	15	16.7	48	53.3	

Table 3 shows that family support has a significant relationship with HIV/AIDS prevention behavior. Respondents who received family support were more likely to engage in better prevention behavior than those who did not receive support. Additionally, the role of healthcare workers also showed a significant relationship with HIV/AIDS prevention behavior. Respondents who received support from healthcare workers were more likely to engage in effective prevention behaviors compared to those who did not receive adequate support.

## DISCUSSION

The role of the family significantly influences HIV/AIDS prevention behavior among Freelance Women Workers (FWW). A supportive family can provide information, moral encouragement, and better access to healthcare services. In this study, most respondents who received family support exhibited better prevention behavior. This indicates that a family-centered approach can be an effective strategy in reducing the risk of HIV/AIDS transmission (Ndaga, 2020).

In addition to the family's role, healthcare workers also play a crucial role in shaping HIV/AIDS prevention behavior. Healthcare workers who actively provide education and

health services to FWW can increase awareness of the dangers of HIV/AIDS and how to prevent it. Unfortunately, in this study, many healthcare workers still provided insufficient support to FWW. This may be due to limited resources, stigma, or a lack of sustainable intervention programs (Zhang et al., 2020).

Family support can take various forms, such as providing information about HIV/AIDS, encouraging the use of contraceptives, and accompanying individuals during health check-ups. Respondents who received family support tended to be more concerned about their health and actively engaged in prevention efforts. Conversely, a lack of family support can increase the risk of unsafe sexual behavior and reluctance to seek healthcare services. Therefore, health campaigns that involve families should be strengthened to improve prevention program effectiveness (Hao et al., 2015; Hong et al., 2014).

Meanwhile, healthcare workers have a responsibility to provide accurate information and accessible healthcare services to FWW. HIV/AIDS education should be conducted consistently, both through direct counseling and other communication media. This study found that healthcare workers who actively provided education had a positive impact on FWW's prevention behavior. Therefore, training healthcare workers on how to handle vulnerable groups like FWW is crucial (Mataboge et al., 2014; Surratt et al., 2014; Underhill et al., 2014; Zungu & Sanni, 2011).

This study found that most respondents who had strong family and healthcare worker support demonstrated positive prevention behaviors. They were more likely to use condoms, undergo routine health check-ups, and have a higher awareness of HIV/AIDS risks. On the other hand, FWW who did not receive support from either their families or healthcare workers tended to engage in high-risk behavior. These results reinforce the evidence that a family-based approach and optimal healthcare services can improve

the effectiveness of HIV/AIDS prevention programs.

The main challenge in preventing HIV/AIDS among FWW is the strong social stigma in society. Many FWW avoid seeking healthcare services due to fear of discrimination or being ostracized. This stigma can also affect healthcare workers, who may be less proactive in providing services to FWW. Therefore, broader campaigns are needed to reduce stigma and improve FWW's access to healthcare services (Boakye et al., 2024; Scambler & Paoli, 2008).

Apart from stigma, economic factors also play a role in HIV/AIDS prevention behavior. FWW often face difficult economic conditions, making them more vulnerable to engaging in unprotected sexual activities for financial gain. This situation suggests that prevention programs should include economic empowerment aspects, such as skills training or access to more stable jobs. This way, FWW not only receive health information but also opportunities to improve their living conditions (Scambler & Paoli, 2008).

The government and health organizations need to enhance more comprehensive intervention programs for HIV/AIDS prevention among FWW. These programs should include continuous education, improved healthcare services, and social support for FWW. Additionally, collaboration with local communities can help reach FWW who are difficult to access through formal channels. With a more holistic approach, the risk of HIV/AIDS transmission among FWW can be significantly minimized.

## **CONCLUSION**

This study shows that the role of family and healthcare workers has a significant relationship with HIV/AIDS prevention behavior among Freelance Women Workers (FWW) in Konawe Regency. Respondents who received support from their families were more likely to engage in preventive behaviors compared to those who lacked

family support. Similarly, FWW who received guidance from healthcare workers showed better prevention behaviors. These findings highlight the importance of strengthening the involvement of families and healthcare workers in HIV/AIDS prevention efforts. However, challenges such as stigma, economic factors, and limited healthcare access remain major obstacles. Therefore, more comprehensive and sustainable intervention strategies are needed to reduce the spread of HIV/AIDS among FWW.

### Declaration by Authors

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