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The Relationship Between Knowledge and Attitudes with HIV/AIDS Prevention Behavior in Female Sex Workers in Konawe Regency

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ABSTRACT

Introduction. HIV/AIDS is a global health issue that continues to be a significant challenge, particularly in developing countries, including Indonesia. Konawe Regency in Southeast Sulawesi has shown a significant increase in the number of HIV/AIDS cases. Female Sex Workers (FSWs) are a group highly vulnerable to HIV/AIDS transmission due to limited access to information and social stigma. Good knowledge and attitudes regarding HIV/AIDS play a crucial role in the prevention efforts. This study aims to analyze the relationship between knowledge and attitudes with HIV/AIDS prevention behavior among FSWs in Konawe Regency.
Methods. This study used a quantitative design with a cross-sectional approach. The sample consisted of 90 FSWs selected using accidental sampling techniques. Data were collected through a closed questionnaire that had been tested for validity and reliability, covering questions about knowledge, attitudes, and HIV/AIDS prevention behavior. Data analysis was performed using the Chi-Square test to examine the relationship between independent and dependent variables.
Results. The results showed a significant relationship between knowledge and attitudes with HIV/AIDS prevention behavior among FSWs. Respondents with good knowledge were more likely to show better prevention behavior. Positive attitudes were also proven to be a dominant factor in encouraging more effective prevention behavior. Media information and interaction with health workers played an essential role in shaping these preventive attitudes and behaviors.
Conclusion. The conclusion of this study is that increasing knowledge and positive attitudes towards HIV/AIDS prevention is necessary to encourage behavioral change among FSWs. Therefore, interventions that focus on improving positive attitudes towards HIV/AIDS prevention should be a priority in public health programs in Konawe Regency.

Keywords: Knowledge, Attitudes, Prevention Behavior, HIV/AIDS, Female Sex Workers, Konawe Regency

INTRODUCTION

HIV/AIDS is a major global health issue for which there is still no cure (Basavaraj et al., 2010; Pendse et al., 2016). The disease is caused by the Human Immunodeficiency Virus (HIV), which attacks the immune system, making individuals vulnerable to other infections and diseases (Huang et al., 2019; Nüesch et al., 2009). According to data from the World Health Organization (WHO), HIV/AIDS cases continue to increase every year, with a high prevalence in developing countries, including Indonesia (UNSAID, 2021).

In Indonesia, the number of HIV/AIDS cases has been steadily increasing. The Ministry of Health of the Republic of Indonesia reported that by 2023, the number of HIV cases had reached more than 377,650 people. Southeast Sulawesi, including Konawe Regency, has also experienced a significant increase in HIV/AIDS cases in recent years (Kemenkes, 2023). Despite various efforts by the government and health organizations, the challenges in preventing and addressing HIV/AIDS remain considerable (Yardley et al., 2015; Yousuf et al., 2020).

One of the groups that are highly vulnerable to HIV/AIDS transmission is Female Sex Workers (FSWs) (Ahmed et al., 2021; Baral et al., 2015). FSWs often face various barriers in accessing healthcare services and obtaining adequate information about HIV/AIDS prevention. Social stigma and discrimination that still exist in society worsen this situation. Therefore, a more comprehensive approach is needed to increase awareness and prevention behavior among FSWs (Arifin et al., 2022).

Knowledge and attitudes about HIV/AIDS play a crucial role in determining preventive behavior. Good knowledge of HIV/AIDS transmission and prevention methods helps individuals make better decisions to protect themselves. A positive attitude towards prevention, such as condom use, regular health check-ups, and willingness to receive health education, also contributes to efforts to combat the disease (Bharat et al., 2013).

Previous studies have shown a significant relationship between knowledge levels and attitudes towards HIV/AIDS prevention behavior. Individuals with high knowledge and good attitudes tend to be more disciplined in applying preventive measures. However, many other factors can influence an individual's behavior in preventing HIV/AIDS transmission, such as social environment, family support, and access to healthcare services (Dalmida et al., 2015; Dandona et al., 2005).

In Konawe Regency, there is still limited research specifically addressing the relationship between knowledge and attitudes with HIV/AIDS prevention behavior among FSWs. Therefore, this study was conducted to fill this information gap and provide more accurate data on the factors that influence HIV/AIDS prevention behavior in this vulnerable group. The results of this study are expected to serve as a basis for local governments and health workers in designing more effective policies and intervention programs.

By understanding the factors that influence HIV/AIDS prevention behavior among FSWs, strategic steps can be taken to improve awareness and preventive behavior in high-risk groups. This study aims to analyze the relationship between knowledge and attitudes with HIV/AIDS prevention behavior among FSWs in Konawe Regency and identify the dominant factors that play a role in these prevention efforts.

MATERIALS & METHODS

Research Design

This study used a quantitative design with a cross-sectional approach to analyze the relationship between knowledge and attitudes with HIV/AIDS prevention behavior among FSWs in Konawe Regency.

Research Setting

The study was conducted in Konawe Regency, Southeast Sulawesi, specifically in areas with a significant FSW population. The research took place from November 2024 until its completion.

Respondents

The population in this study consisted of all FSWs in Konawe Regency. A sample of 90 respondents was determined using the accidental sampling technique, where the sample was taken based on availability and the willingness of respondents encountered in the research location.

Research Variables

The study used a questionnaire to measure three main variables: knowledge, attitudes, and HIV/AIDS prevention behavior among FSWs (HIV/AIDS patients). Each variable was measured using 10 questions, including multiple-choice and Likert scale questions. The multiple-choice questions were used to assess knowledge about HIV/AIDS, where respondents selected the correct answers. The Likert scale questions were used to measure attitudes and prevention behavior regarding HIV/AIDS. The Likert scale consisted of 5 points, ranging from strongly disagree to strongly agree, indicating the degree to which respondents agreed or frequently engaged in actions related to HIV/AIDS.

For knowledge, points were given based on correct or incorrect answers, where correct answers received 1 point and incorrect answers received 0 points. Attitudes were measured using the Likert scale, with scores ranging from 1 (strongly disagree) to 5 (strongly agree) for each statement that assessed attitudes toward HIV/AIDS. Behavior was also rated using the Likert scale, with scores from 1 (never) to 5 (always), based on the frequency of prevention behaviors performed by respondents. Objective criteria for knowledge were divided into two categories: low knowledge (scores 0-5) and high knowledge (scores 6-10). For attitudes, the criteria used were negative attitude (scores 10-25) and positive attitude (scores 26-50). For prevention behavior, the criteria were low behavior (scores 10-25) and high behavior (scores 26-50). Thus, the study can describe the relationship between knowledge, attitudes, and HIV/AIDS prevention behavior, and analyze how much knowledge and attitudes affect prevention behavior.

Data Collection

Before conducting the study, informed consent was obtained from all respondents to explain the study's purpose, data collection methods, and respondents' rights, such as confidentiality of identity and the freedom to withdraw from the study at any time without consequences. All respondents were given the opportunity to read and understand this information before voluntarily providing their consent.

Data collection was conducted with the help of two trained enumerators. These enumerators were responsible for distributing the questionnaires, explaining questions if needed, and ensuring that respondents understood each part of the questionnaire before completing it. The enumerators ensured that the questionnaires were filled out correctly and collected the data accurately according to the established procedures.

Questionnaires were distributed directly to FSWs willing to participate in the study. Respondents were asked to fill out the questionnaire independently; however, if any part was unclear, the enumerators provided the necessary explanations. The completed questionnaires were then collected, and the data were analyzed to assess the relationship between the studied variables. Throughout this process, respondent answers were kept confidential to ensure that no personal information was disclosed.

Data Analysis

Data analysis was conducted in two stages. The first stage involved univariate analysis to describe respondent characteristics and the distribution of research variables. The second stage involved bivariate analysis using the Chi-Square test to determine the relationship between independent and dependent variables.

RESULT

Table 1. Respondent Characteristics

Characteristic	Frequency (n)	Percentage (%)
Age		
15 – 24 years	21	23.3
25 – 34 years	55	61.1
35 – 44 years	12	13.3
≥ 45 years	2	2.2
Education Level		
Primary School	2	2.2
Junior High School	9	10.0
Senior High School	63	70.0
Higher Education	16	17.8
Marital Status		
Married	33	36.7
Single	35	38.9
Widowed	22	24.4

Table 1, it can be observed that most respondents are between 25-34 years old, accounting for the majority of participants. In terms of education, the largest proportion of respondents have completed senior high school. Regarding marital status, the highest number of respondents are single. Meanwhile, respondents with only primary education and those aged ≥45 years have the lowest representation.

Table 2. Factors Associated with HIV/AIDS Prevention Behavior

Variable	Category	n	%
Knowledge	Good	49	54.4
	Poor	41	45.6
Attitude	Positive	78	86.7
	Negative	12	13.3
HIV/AIDS Prevention Behavior	Good	74	82.2
	Poor	16	17.8

Table 2, the majority of respondents have good knowledge of HIV/AIDS prevention. However, a notable proportion still lacks adequate knowledge. Most respondents also exhibit a positive attitude towards prevention, whereas only a small percentage display a negative attitude.

Table 3. Distribution of Determinants of HIV/AIDS Prevention Behavior Among People Living with HIV/AIDS

Variable	HIV/AIDS Prevention Behavior				Total		p-value
	Good		Poor				
	n	%	n	%	n	%	
Knowledge							
Good	46	51.1	3	3.3	49	54.4	**0.004**
Poor	28	31.1	13	14.5	41	45.6	
Attitude							
Positive	69	76.7	9	10.0	78	86.7	
Negative	5	5.5	7	7.8	12	13.3	0.001

Table 3 highlights that individuals with good knowledge are more likely to engage in effective HIV/AIDS prevention behaviors compared to those with poor knowledge. This suggests that better understanding of HIV/AIDS contributes to more optimal preventive actions. Furthermore, attitude also plays a significant role in prevention

behavior. Respondents with a positive attitude are more likely to exhibit good preventive behaviors than those with a less supportive attitude. These findings indicate that, in addition to knowledge, attitude should be considered an important factor in HIV/AIDS prevention efforts.

DISCUSSION

The results of this study show a significant relationship between knowledge and attitudes with HIV/AIDS prevention behavior among FSWs in Konawe Regency. Respondents with good knowledge tend to show better prevention behavior compared to those with less knowledge. Good knowledge of HIV/AIDS allows individuals to better understand the transmission methods and preventive measures. This aligns with the theory that individuals with sufficient information tend to be more cautious in their behavior (Fan et al., 2015; Fauk et al., 2018).

Good knowledge not only helps individuals understand how HIV is transmitted but also encourages them to take appropriate preventive actions. Those with a deep understanding of HIV/AIDS are more likely to avoid risky behaviors. Therefore, accurate education and information are crucial in increasing individuals' awareness of potential HIV transmission. This knowledge provides a strong foundation for individuals to maintain their health. In addition to knowledge, a positive attitude toward HIV/AIDS prevention also influences an individual's behavior in avoiding transmission risks. Respondents with positive attitudes are more likely to implement HIV/AIDS preventive measures in their daily lives. This attitude includes willingness to follow the rules and information provided by health workers. This shows that supportive attitudes toward prevention can strengthen behaviors that align with HIV/AIDS prevention efforts (Eluwa et al., 2012).

A positive attitude is not only related to knowledge but also to an individual's understanding and belief in the importance of prevention. Those with a positive attitude tend to be more proactive in maintaining their health and avoiding risk factors. Furthermore, this attitude helps individuals become more open to information related to HIV/AIDS. Thus, a positive attitude plays a major role in determining whether an individual will adopt effective prevention measures.

One interesting finding in this study is the role of media information in shaping attitudes and HIV/AIDS prevention behavior. Information received through mass media, health workers, and the surrounding environment can increase individual awareness of the importance of HIV/AIDS prevention. Positive media exposure can reinforce the attitudes and preventive behaviors built on the knowledge individuals possess. This indicates that media plays a significant role in education efforts and raising public awareness. In addition to media, interaction with health workers also greatly influences the formation of attitudes and HIV/AIDS prevention behavior. Information conveyed directly by health workers can help individuals better understand the risks and steps to take (Mazzitelli et al., 2016; Nubed & Akoachere, 2016). This interaction also opens space for individuals to ask questions and get clarification on issues that may still be unclear. Therefore, health workers play an important role in providing deeper education to the public (Qashqari et al., 2022; Ramezani Tehrani & Malek Afzali, 2008; Wen et al., 2011).

However, despite the importance of knowledge and attitudes, this study also found that some respondents with good knowledge still exhibited risky behaviors. This indicates that external factors such as social pressure and economic conditions also influence an individual's decisions regarding their behavior. Family support and health workers are crucial in helping individuals make the right decisions related to HIV/AIDS prevention. Therefore, HIV/AIDS prevention efforts must involve various factors, including knowledge,

attitudes, social support, and holistic interventions by health workers.

CONCLUSION

This study concludes that there is a significant relationship between knowledge and attitudes with HIV/AIDS prevention behavior among FSWs in Konawe Regency. Positive attitudes have been proven to be the dominant factor in encouraging prevention behavior. Therefore, interventions aimed at improving positive attitudes toward HIV/AIDS prevention are essential.

Declaration by Authors

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