The Influence of Female Sex Worker Fellows Support and Motivation on Sexually Transmitted Diseases (STDs) Prevention Behaviors in Makassar City, Indonesia

Zulhijriani, Nur Cahyani Ari Lestari, Eviyati Aini Muriana, Iin Tri Marlinawati, Dian Shofia Reny Setyanti, Putri Yunita Sari

Midwifery Program, Sekolah Tinggi Ilmu Kesehatan Bakti Utama Pati, Indonesia.

*Corresponding author’s email: zulhijriani.2@gmail.com
DOI: 10.35898/ghmj-71980

ABSTRACT

**Background:** A sexually transmitted diseases (STDs) is an illness that is primarily transmitted through sexual contact. There are around 30 different species of microorganisms, including bacteria, viruses, and parasites, that can be transmitted through sexual activity without protection. The most prevalent conditions include gonorrhea, chlamydia, syphilis, trichomoniasis, chancroid, genital herpes, HIV, and hepatitis B. Within society, sexually transmitted diseases (STDs) are the most prevalent form of infection.

**Aims:** The objective of this study is to ascertain the direct and indirect impact on the prevention of sexually transmitted illnesses in the city of Makassar.

**Methods:** This study used a cross-sectional design. The study collected samples from 45 consenting individuals who agreed to participate. This study used a structure equation model as an analysis method using Smart PLS 2.0.

**Results:** The findings demonstrated a significant correlation between the support of fellow female sex workers (FSWs) and the practice of STDs prevention, with a direct impact of 10.26%. Additionally, there was a direct influence of STDs prevention behavior on motivation, accounting for 10.84%. Furthermore, the support of fellow FSWs had a substantial impact on motivation, with a direct influence of 29.16%. The overall direct effects have increased by 50.26%. The support of fellow FSWs has an indirect influence on STDs prevention behavior, increasing motivation by 5.77%. The cumulative impact, both direct and indirect, amounts to 56.03%. The Q-Square analysis model accounts for 44.1% of the variability in the data and specifically investigates the phenomenon studied. The remaining 55.9% of variability is attributed to other variables that were not addressed in this study.

**Conclusion:** Hence, the research findings indicate that various factors, including the assistance from fellow female sex workers and motivation, contribute to the promotion of STDs prevention behavior.

**Keywords:** Sexually Transmitted Diseases (STDs), Prevention Behavior, Female Sex Workers, Fellow Support, Motivation.
1. Introduction

Sexually transmitted diseases (STDs) are a significant public health concern globally, with varying prevalence rates across different populations and geographic regions. The prevalence of STDs is influenced by a multitude of factors such as sexual behavior, knowledge of STDs, preventive practices, and demographic characteristics. Several studies have been conducted to understand the prevalence and associated factors of STDs in different populations, shedding light on the heterogeneity of sexual behavior and the drivers of transmission. For instance, a study in Ethiopia found that previous history of STDs, multiple sexual partners, inconsistent condom use, and poor knowledge of STDs were associated with a higher prevalence of STDs among university students (Kassie et al., 2019). Similarly, a hospital-based survey in Iran revealed a significantly higher lifetime prevalence of STDs in women compared to men (Fararouei et al., 2023).

The prevalence of sexually transmitted diseases (STDs) among female sex workers (FSWs) is a significant public health concern. Studies have consistently shown that FSWs are a high-risk group for acquiring and transmitting STDs, including HIV and syphilis (Halatoko et al., 2017; Kakchapati et al., 2017; Tura et al., 2023). The susceptibility of FSWs to STDs is attributed to their sexual behavior, limited access to health services, and engagement in high-risk sexual activities (Kakchapati et al., 2017; Oza et al., 2014). For instance, research in Nepal highlighted that FSWs are susceptible to acquiring HIV and syphilis due to their high-risk sexual behaviors (Kakchapati et al., 2017). Similarly, studies in Ethiopia and Togo reported a high prevalence of syphilis among FSWs, emphasizing the vulnerability of this population to STDs (Halatoko et al., 2017; Tura et al., 2023). Additionally, studies in China have addressed the prevalence of Neisseria gonorrhoeae and Chlamydia trachomatis infections among FSWs, indicating the burden of STDs in this population (Chen et al., 2013; Li et al., 2014).

Furthermore, factors such as vaginal douching have been associated with an increased risk of STDs among FSWs, as evidenced by a study in China (Li et al., 2014). Additionally, early life experiences and sexual behavior have been linked to negative effects on reproductive and sexual health among FSWs in Tijuana, Mexico (Oza et al., 2014). Moreover, a study in Indonesia identified various risk factors for chlamydia infection among direct female sex workers, highlighting the complex interplay of factors contributing to STD prevalence in this population (Rabiah et al., 2018). Overall, the prevalence of STDs among FSWs underscores the urgent need for targeted interventions, access to comprehensive sexual health services, and tailored reproductive health education to mitigate the burden of STDs in this vulnerable population (Rudi et al., 2020).

Jalan Nusantara is one of the places of prostitution in the city of Makassar which is very strategically located because it is close to tourist attractions, making this place easy to visit compared to other places of prostitution. The existence of this phenomenon increases the risk of transmitting sexually transmitted diseases (STDs). Transmission is becoming more rapid due to the lack of awareness of the use of condoms by guests when dating commercial sex workers in this area. Prevention efforts are generally focused on making people aware of STDs and also recommending that people whose sex lives are still active can limit the number of sexual dates they have and start using safe methods, such as 'outercourse' and condom use. Based on a preliminary study that the author conducted by conducting interviews with 10 FSW in Makassar who were guided by a theoretical basis in the form of a questionnaire regarding STD prevention behavior, on March 2022, the results showed that 6 (60%) FSW had behavior to prevent STDs. Still not good and 4 (40%) people have behaved well in preventing STDs, namely 3 (30%) people have used condoms every time they have sexual intercourse with their partner, 2 (20%) people have been vaccinated, they are vaccinated against HPV. The female sex workers have not been motivated to try to prevent STD, most of their motivation is still low. This research aims to determine the direct and indirect influence and the amount of support from fellow FSW and motivation on the behavior of preventing sexually transmitted diseases in Makassar City.

Symptoms that appear in mental disorders can include hallucinations, illusions, delusions, disturbances in thought processes thinking abilities, and abnormal behavior such as aggressiveness or catatonia. Mental disorders can become severe, known as schizophrenia (Horan & Green, 2019). Schizophrenia is a psychotic disorder characterized by significant thoughts, emotions, and behavior disturbances. Schizophrenia is a major psychiatric disorder characterized by changes in a person’s perceptions, thoughts, affects, and behavior (Sari & Subandi, 2021; Astuti et al., 2020).

Based on the World Mental Health Report (2016), the number of people with Schizophrenia worldwide has reached 24 million people or around 1 in 200 adults (aged 20 years and over). Meanwhile, in Indonesia, cases of Schizophrenia increase every year. Based on Riskesdas 2018, the prevalence of households with ART for the mental disorder Schizophrenia or psychosis is 6.7 per mile, which means there are 6-7 households with ART for the mental disorder Schizophrenia or psychosis per 1000 households. This figure has increased more than three times compared to the 2013 Riskesdas results, which were 1.7 per 1,000 households (Kementrian Kesehatan RI, 2019).
Schizophrenia impacts behavior and conditions that disturb the patient, other people, and the environment (Kurniawan et al., 2021). Schizophrenia is a complex mental health condition that can be effectively treated with somatic therapy. Somatic therapy includes antipsychotic medication, psychosocial therapy, and hospitalization when necessary. With the right treatment, individuals living with schizophrenia can experience significant improvements in their symptoms and quality of life (Asher et al., 2017). Other research states that the family can carry out medical and non-medical treatment (Suryani, Hidayah, et al., 2019). Other research shows that schizophrenic patients are taken to “dukun” to obtain an explanation of the causes of the illness and also ways to overcome it (Bachtiar et al., 2020).

The recovery process for schizophrenia survivors requires a collaborative role between various parties, including family and mental health professionals (Hidayah et al., 2022). The debate about the recovery process for schizophrenia survivors is still developing. The recovery process is defined as how individuals with mental health challenges regain and develop significant relationships with their family, friends, community, and themselves to overcome the harmful effects of stigma (Apostolopoulou et al., 2020). However, Riskesdas's (2013) data shows that as many as 1,655 households with schizophrenia still use shackling methods, which means that the stigma is still strong in society. Other research shows that shackling of schizophrenic patients is carried out due to ignorance on the part of the family, shame on the part of the family, mental disorders that do not heal, there is no cost for treatment, and the purpose of shackling is to protect ODGJ so that acts of violence do not occur (Puspitosari et al., 2019). Based on the background above, researchers are interested in conducting a scoping review regarding the picture of recovery in people with schizophrenia in Indonesia based on the views of the survivors, their families, and mental health professionals.

2. Methods

Study design
This research uses survey and case study methods with a quantitative approach, meaning that this research emphasizes descriptive statistical analysis with an explanatory research type, namely to explain the influence of support from fellow female sex workers and motivation on STD prevention behavior among female sex workers on Nusantara Street in Makassar. The research design used a cross-sectional design, where the research measurements explained in the independent variables were support from fellow female sex workers and motivation. This location was chosen purposefully with the consideration of making it easier to collect data, considering that this location is the localization in Makassar.

Population and samples
In this research, female sex workers were used as the research sample. Sampling was carried out by researchers using a model a complete modeling basically consisting of a measurement model and a structural model. The measurement model is intended to confirm a dimension or factor based on empirical factors. From this modeling, the number of samples that can represent these conditions in the field is determined. The sample uses quota random sampling, namely, the population becomes the research sample, with the total number of samples being 45 female sex workers in the city of Makassar.

Measurement
The measurement method for both variables used in this research uses an interval scale, while the measurement technique uses semantic differential, which has a 5-point scale. On this scale, positive traits are given the greatest value, and negative traits are given the smallest value. Likewise, the principle of combining positive-negative and negative-positive is maintained.

Data collection
The primary data collection method used in this research is through instruments in the form of questionnaires or questions obtained by distributing questionnaires, which are carried out by researchers to respondents who comply with the specified criteria. The instrument is in the form of a questionnaire or question containing each indicator in the four variables. The variables in question include those consisting of support from fellow female sex workers and motivation for behavior to prevent sexually transmitted diseases. Research data collection was carried out after obtaining a letter of ethical approval from the research ethics commission of the Muhammadiyah University of Geresik Health Faculty.
**Instruments**

This validity and reliability test is carried out to find out whether the instrument used really measures what needs to be measured and to what extent the instrument used can be trusted or relied upon. Validity and reliability testing using Smart Partial Square (PLS) is declared valid if it has a loading factor of 0.5–0.6 (still tolerable as long as the model is still in the development stage), but the recommended loading factor is above 0.7.

**Analysis data**

The research results are presented in the form of a textual table. The presentation of data in tabular form is a systematic presentation of numerical data composed of columns and rows. This presentation is used to present the results of the analysis of primary and secondary data. Apart from that, it is also presented in diagram form to make reading easier. Research results obtained. Meanwhile, data interpretation is presented in narrative form, making it easier to understand the research results.

The data analysis technique in this research uses structural equation modeling (SEM) with partial least squares (PLS). The steps in data analysis using PLS are as follows: 1) Designing a structural model (inner model) describing the relationship between latent variables based on substantive theory. Designing a structural model of the relationship between latent variables is based on the problem formulation or research hypothesis. 2) Designing a measurement model (outer model). The outer model, or measurement model, defines how each indicator block is related to the latent variable. The design of the measurement model determines the indicator properties of each latent variable, whether reflective or formative, based on the operational definition of the variable.

The reflective model is often also called the principal model, where the indicator measurement covariance is influenced by the latent construct or reflects variations in the latent construct. In the unidimensional constructive reflective model, it is depicted in an elliptical shape with several arrows from the construct to the model indicators. This hypothesizes that changes in the latent construct will influence changes in the indicators. The reflective model must have internal consistency because all indicator measures are assumed to be valid in measuring a construct, so that two indicator measures with the same reliability can be interchanged. Even though the reliability (Cronbach alpha) of a construct will be low if there are only a few indicators, the validity of the construct will not change if one indicator is removed.

The data analysis technique uses structural equation modeling (SEM) with partial least squares (PLS), which is carried out to thoroughly explain the relationship between variables in the research. SEM is used not to design a theory but is more aimed at checking and justifying a model. Therefore, the main requirement for using SEM is to build a hypothesis model consisting of a structural model and a measurement model in the form of a path diagram based on theoretical justification. SEM is a collection of statistical techniques that allow testing a series of relationships simultaneously.

The parameter estimation method (estimation) in PLS is the least squares method (least squares models). The calculation process is carried out in an iterative manner, and the iteration will stop if a convergent condition has been reached. The estimation of parameters includes three things, namely: 1) A weight estimate is used to calculate latent variable data. 2) Path estimate, which connects latent variables and estimates the loading between latent variables and indicators. 3) Means and location parameters (regression constant values, intercept) for indicators and latent variables. 4) Evaluation of Goodness of Fit, model measured using R². Dependent latent variable with the same interpretation as regression. For a structural model, Q² predictive relevance assesses how well the model and its parameter estimates generate the observed values. 5) Hypothesis Testing (Resampling Bootstrapping): Hypothesis testing (β, γ, λ) is carried out using the bootstrap resampling model developed by Geisser & Stone. The test statistic used is the t statistic, or t test. The application of the resampling method allows the application of freely distributed data without requiring assumptions. The criteria for accepting or rejecting the hypothesis in this research include the following conditions: 1) If the t statistical value < t-table with a significance level of 0.05 (one-tailed, then reject Ho and accept Ha. 2) If the t statistical value> t-table with a significance level of 0.05 (one-tailed), then accept Ho and reject Ha. The path analysis model for all latent variables in PLS consists of three sets of relationships: (1) inner model which specifies the relationship between latent variables (structural model), measured using Q-Square Predictive Relavance with the formula Q² = 1-(1-R²)² ( 1-Rp²), (2) outer model which specifies the relationship between latent variables and their indicators or manifest variables (measurement model), measured by looking at convergent validity and discriminant validity, convergent validity with a loading value of 0.5 to 0.6 is considered sufficient, for the number of indicators of the latent variable it ranges from 3 to 7, while for discriminant validity it is recommended that the AVE value be greater than 0.5 and also by looking at (3) the weight relationship where the case value of the latent variable is still estimated. It is safe to assume that latent and indicator variables, also known as manifest variables, are scaled to zero means and unit variance so that location parameters, also known as constant parameters, can be taken out of the model.
3. Results

The data obtained were analyzed using univariate, bivariate, and PLS analyses. In univariate analysis, researchers looked for respondent data based on their characteristics, namely age, education, and length of service. After obtaining the characteristics of the respondents, they were categorized. Researchers will test significance through the chi square test. The majority of respondents were in the 26–30 years age range, namely 35.6% or 16 FSW; the 31–35 years age range was 28.8% or 13 FSW; the 20–25 years age range was 20% or 9 FSW; and the age range of 35–40 years is 15.6% or 7 FSWs.

Based on the level of education of respondents, it shows that the majority of respondents have an elementary school education of 35.6% or 16 FSW, a junior high school education of 31.1% or 14 FSW, no school or not finished elementary school of 22.2% or 10 FSW, and a high school education of 11.1% or 5 FSW. For respondents’ work period, in this study, the majority had a work period of 4-6 years, namely 37.8%, or 17 FSW; those who had a work period of > 6 years, amounting to 28.8%, or 13 FSW; those who had worked 1-3 years, 26.7%, or 12 FSW; and those who had worked < 1 year, 6.7%, or 3 FSW.

In the STDs prevention behavior variable, the respondent’s answer range was between 33 and 75, close to or not far from the theoretical range with the highest value (15–75) with an average value of 49.95 and a standard deviation of 9.43. This shows that the respondent’s STDs prevention behavior was in the category of good. This also shows that some respondents have made efforts to prevent STDs.

In the motivation variable, the range of respondents’ answers is between 28 and 75, close to or not far from the theoretical range with the highest value (15–75) and an average value of 61.20 with a standard deviation of 13.20. This indicates that respondents consider this motivation to be important in terms of behavior. STDs prevention. In the peer support variable FSW, the range of respondents’ answers was between 20 and 75, close to or not far from the theoretical range at the highest value (15–75), with an average value of 56.2 and a standard deviation of 16.64. This shows that respondents consider the support of their fellow FSW friends important in terms of STDs prevention behavior.

Based on the results of the chi square test with a significance level of α = 5%, the characteristics of respondents to the STDs prevention behavior variable showed a P value > 0.005, which means there is no relationship between the respondent’s characteristics and the STDs prevention behavior variable. Meanwhile, the respondents’ educational characteristics on the motivation variable show a P value < 0.005, which means there is a relationship between education and motivation, and the age and work experience characteristics show a P value > 0.005, which means there is no relationship between the characteristics of age and work period on the motivation variable.

On the educational characteristics of respondents on the variable support from fellow FSW friends, it shows a P value < 0.005, which means there is a relationship between education and support from fellow FSWs friends, and on the characteristics of age and work period, it shows a P value > 0.005, which means there is no relationship between the characteristics of age and work period on the variable. support from fellow FSWs.

The theories presented led to reflective indicators being used in this study. The smart PLS 2.0 app was used for the measurement model, which has convergent and discriminant validity. The variable loading factor values have met the requirements, namely the loading factor values are higher than the outer model evaluation results consisting of loading factor values (convergent validity), discriminant validity of cross loading and AVE roots, as well as composite reliability values.

### Table 1. Outer Loading Evaluation

<table>
<thead>
<tr>
<th>Validity</th>
<th>Test Results</th>
<th>Loading Factor</th>
<th>Test Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Correlation</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information Support</td>
<td>0.733115</td>
<td>Valid</td>
<td></td>
</tr>
<tr>
<td>Emotional Support</td>
<td>0.822632</td>
<td>Valid</td>
<td></td>
</tr>
<tr>
<td>Assessment Support</td>
<td>0.798467</td>
<td>Valid</td>
<td></td>
</tr>
<tr>
<td>Needs</td>
<td>0.692753</td>
<td>Valid</td>
<td></td>
</tr>
<tr>
<td>Objective</td>
<td>0.886756</td>
<td>Valid</td>
<td></td>
</tr>
<tr>
<td>Incentive</td>
<td>0.669270</td>
<td>Valid</td>
<td></td>
</tr>
<tr>
<td>Efforts to carry out Vaccination</td>
<td>0.511453</td>
<td>Valid</td>
<td></td>
</tr>
<tr>
<td>Attempts to use condoms</td>
<td>0.816087</td>
<td>Valid</td>
<td></td>
</tr>
<tr>
<td>Efforts to select customers</td>
<td>0.838108</td>
<td>Valid</td>
<td></td>
</tr>
</tbody>
</table>
The results of the data processing analysis show that the constructs used to form a research model in the confirmatory factor analysis process have met the goodness of fit criteria that have been determined. The probability value in this analysis shows that the value above is significant, namely 0.5. From the results of the data processing above, it can also be seen that each indicator or dimension forming the latent variable shows good results, namely with high loading factor values where each indicator is greater than 0.5. With these results, it can be said that the indicators forming the latent variables of friend support, motivation, and STD prevention behavior have shown good results.

The results of the significance of the inner model are arranged in the PLS output below by evaluating the reflection of the indicator's T-statistic value on the variables.

### Table 2. Evaluation of T-Statistic

<table>
<thead>
<tr>
<th>Indicator</th>
<th>T-Statistic</th>
<th>Test Criteria &gt; 1.96</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information Support</td>
<td>7.195955</td>
<td>Significant</td>
</tr>
<tr>
<td>Emotional Support</td>
<td>26.503034</td>
<td>Significant</td>
</tr>
<tr>
<td>Assessment Support</td>
<td>13.116905</td>
<td>Significant</td>
</tr>
<tr>
<td>Needs</td>
<td>7.657639</td>
<td>Significant</td>
</tr>
<tr>
<td>Objective</td>
<td>34.185022</td>
<td>Significant</td>
</tr>
<tr>
<td>Incentive</td>
<td>7.361898</td>
<td>Significant</td>
</tr>
<tr>
<td>Efforts to carry out Vaccination</td>
<td>3.141801</td>
<td>Significant</td>
</tr>
<tr>
<td>Attempts to use condoms</td>
<td>12.450277</td>
<td>Significant</td>
</tr>
<tr>
<td>Efforts to select customers</td>
<td>14.971235</td>
<td>Significant</td>
</tr>
</tbody>
</table>

The table shows that the T-statistic value reflected on the variable is greater than 1.96, thus indicating that the indicator block has a positive and significant effect on reflecting the variable. The evaluation of the R-Square value shows that support from fellow FSWs friends contributes to motivation (0.292). The R square value states that the support of fellow FSWs is able to explain the motivation variable by 29.2%, and 71.8% is influenced by other factors not studied. Meanwhile, the variability in support from other FWSs friends of 0.211 was able to explain the variability of the STDs prevention behavior construct.

The test results on the parameter coefficient between support from fellow FSWs friends and motivation show that there is a positive influence of 0.540, while the T-statistic value is 6.273 and is significant at α = 5%. The T-statistic value is far above the critical value (1.96). Friend support has a positive effect on STDs prevention behavior. The test results on the parameter coefficient between friend support and STDs prevention behavior show that there is a negative influence of 0.256, while the T-statistic value is 2.392 and is significant at α = 5%. The T-statistic value is above the critical value (1.96). Then motivation also has a positive effect on STDs prevention behavior. The test results on the parameter coefficient between motivation and STDs prevention behavior show that there is a positive influence of 0.267, while the T-statistic value is 2.421 and is significant at α = 5%. The T-statistic value is above the critical value (1.96).

### Table 3. Percentage of Influence between Variables on the STD Prevention Variable in the Model

<table>
<thead>
<tr>
<th>Source</th>
<th>LV correlation</th>
<th>Direct rho</th>
<th>Indirect rho</th>
<th>Total</th>
<th>Direct %</th>
<th>Indirect %</th>
<th>Total %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Support from fellow female sex workers</td>
<td>0.401</td>
<td>0.256</td>
<td>0.145</td>
<td>0.252</td>
<td>10.26</td>
<td>3.16</td>
<td>13.42</td>
</tr>
<tr>
<td>Motivation</td>
<td>0.406</td>
<td>0.267</td>
<td></td>
<td>0.267</td>
<td>10.84</td>
<td>0</td>
<td>10.84</td>
</tr>
<tr>
<td>Total</td>
<td>21.10</td>
<td>3.16</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>24.26</td>
</tr>
</tbody>
</table>

The table above shows that the support of fellow FSWs has a direct and indirect effect on STD prevention behavior. The test results on the parameter coefficient between FSW peer support and STD prevention behavior show that there is a direct influence of 10.26%, while the indirect influence of FSW peer support on STD prevention behavior through motivation is obtained by switching the path coefficient (support from FSW peer friends to motivation) with the path coefficient (motivation for STD prevention behavior), thus getting a value of 5.77%.

Likewise, the motivation variable shows a direct and indirect effect on STD prevention behavior. The test results of the parameter coefficient between motivation and STD prevention behavior show that there is a direct effect of 10.84%. Meanwhile, there is no indirect effect of motivation on STD prevention behavior through friend support, regardless of the factors that influence it. Therefore, the value of each of the direct effects of these independent latent variables together shows conformity with the R square value, or, in other words, this states that the variables of support from fellow FSW friends and motivation are able to explain the STD prevention behavior variable by 56.03%.
4. Discussion

To effectively prevent sexually transmitted diseases (STDs), it is crucial to consider a multifaceted approach that encompasses various strategies and interventions. Research has shown that the prevention of STDs is a critical public health priority (Keramat et al., 2022). The prevalence of STDs, including syphilis, among specific populations such as female sex workers (FSWs) and men who have sex with men (MSM) underscores the urgent need for targeted interventions and comprehensive sexual health programs (Anteneh et al., 2017; Gomes et al., 2017; Khandu et al., 2021). Additionally, the Centers for Disease Control and Prevention (CDC) has reported increasing STD rates, emphasizing the necessity for effective prevention strategies (Wright et al., 2021). Evidently, eHealth modes have been explored as a potential avenue for preventing STDs, highlighting the importance of leveraging technology and digital platforms for education, awareness, and intervention delivery (Keramat et al., 2022). Furthermore, the role of peer education has been recognized as a low-cost and beneficial strategy for preventing AIDS and other STDs, particularly among young individuals (Yan et al., 2022). Moreover, addressing the social determinants and structural factors that contribute to STD disparities is crucial.

Studies have highlighted the impact of sex work laws and stigmas on increasing HIV risks among sex workers, emphasizing the need to address legal and societal barriers to effective prevention (Lyons et al., 2020). Additionally, the allocation of resources for STD prevention has been identified as a critical factor in mitigating the health and economic burden of STDs (Chesson & Owusu-Edusei, 2018). Furthermore, educational programs based on behavioral theories have shown promise in promoting preventive behaviors related to STDs, emphasizing the importance of tailored interventions and health education (Shamsolahi et al., 2021). Additionally, the impact of COVID-19 on the epidemiology of STDs has been recognized, highlighting the need for adaptive and responsive prevention strategies in the face of evolving public health challenges (Yan et al., 2022).

In examining the influence of female sex workers’ characteristics with support from fellow FSW friends, motivation, and STD prevention behavior, it is essential to consider the multifaceted nature of this topic. The potential references provide valuable insights into the prevalence of STDs among female sex workers (FSWs), the impact of social support on HIV prevention, and the role of peer engagement in influencing sexual risk behaviors. By synthesizing the relevant references, a comprehensive understanding of the influence of FSW characteristics, social support, motivation, and STD prevention behavior can be achieved. Shed light on the high prevalence of HIV and other viral infections among FSWs, emphasizing the urgent need for effective STD prevention strategies (Moayedi-Nia et al., 2015; Shannon et al., 2015). These references underscore the vulnerability of FSWs to STDs and the critical importance of addressing this public health concern. Insights into the impact of social support and peer engagement on HIV prevention and condom use among individuals involved in sex work (Kislovskiy et al., 2022). These references highlight the potential influence of support from fellow FSW friends on motivation and STD prevention behavior, particularly in the context of condom use and pre-exposure prophylaxis perceptions.

Furthermore, valuable perspectives on community empowerment, mobile phone use, and the emerging role of technology in promoting condom use and safe sex practices among FSWs. These references underscore the multifaceted nature of interventions aimed at promoting STD prevention behavior and the potential influence of social networks and technology on motivation and support from fellow FSW friends (Kerrigan et al., 2013; Navani-Vazirani et al., 2014). In addition, the insights into the prevalence of STDs and the associated behavioral factors among FSWs, highlighting the complex interplay of individual risk behaviors, social support, and STD prevention (Huan et al., 2013; Tayeri et al., 2019).

The influence of support from fellow female sex workers on motivation can be comprehensively examined. The reliance of female sex workers on social support from fellow sex workers to reduce exposure to client-initiated violence (CIV) in China (Hail-Jares et al., 2015). This indicates the potential for a similar pattern of seeking aid from individuals with shared socio-cultural backgrounds. The study examines the impact of emotional and financial support and the size of the network on both intimate partner violence (IPV) and CIV among Chinese female street-based sex workers (SBSW). The role of support from other female sex workers in improving the ability to negotiate condom use. The study suggests that peer support enhances the power of female sex workers to negotiate condom use, thereby contributing to HIV prevention efforts (Blanchard et al., 2013; Isac et al., 2015). The association between social support and HIV risk behaviors, such as condom use, among female sex workers in Iran. The study highlights the importance of social support in influencing condom use behavior, indicating that support from peers may play a crucial role in promoting safer sexual practices (Shushtarli et al., 2021).

Additionally, social support influences peer-delivered HIV prevention interventions among Ugandan female sex workers (McGowan et al., 2022). The study provides insights into the impact of social support on the
effectiveness of peer-delivered interventions, indicating that support from fellow sex workers may enhance the success of HIV prevention initiatives.

5. Conclusion

From these findings it can be concluded that the STDs prevention behavior variable among FSWs on Nusantara street is influenced by several variables including the variables of support from fellow FSWs and motivation. FSWs must have STDs prevention behavior when carrying out their work to avoid it. Therefore, the support of fellow FSWs and the motivation that an FSWs has a big influence on behavior in efforts to prevent sexually transmitted diseases.

Conflict of Interest

The authors declare no conflicts of interest for the results.

References


Rabiah, M. G., Mutahar, R., & Sitorus, R. J. (2018). The Risk Factors Analysis Occurrence of Chlamydia Infection to Direct Female Seks Workers (DFS) in Indonesia. *E3S Web of Conferences*. [https://doi.org/10.1051/e3conf/2018601024](https://doi.org/10.1051/e3conf/2018601024)

Rudi, A., Haryanti, Y., Masan, L., Maretalinia, M., & Yulianto, A. (2020). The Determinants of Sexually Transmitted Infections (STIs) among Female Sex Workers (FSWs) in Indonesia: The Literature Review. *Journal of Health Epidemiology and Communicable Diseases*, 6(1), 15–24. [https://doi.org/10.22435/jhecds.v6i1.3108](https://doi.org/10.22435/jhecds.v6i1.3108)


