



Knowledge, Attitude, Practice Towards HIV Prevention among Female Sex Workers (Community Based Approaches in Faisalabad City)

Zoya Zafar¹, Dr. Nazia Malik², Muhammad Kamran³, Muhammad Umer Virk⁴ & Umar Draz⁵

¹M.Phil Scholar, Department of Sociology, Government College University Faisalabad, Pakistan

Email: zoyazafar411@gmail.com

²Assistant Professor Department of Sociology Government College University Faisalabad, Pakistan,

Email: naziamalik@gcuf.edu.pk

²M.Phil Scholar Department of Sociology Government College University Faisalabad,

Email: mkamrandt@gmail.com

⁴M.Phil Scholar Department of Sociology Government College University Faisalabad,

Email: Umarvirk657@gmail.com

⁵Ph.D Scholar Department of Sociology Government College University Faisalabad Pakistan,

Email: Drumersahil88@gmail.com

ARTICLE INFO

Article History:

Received: April 18, 2025
Revised: June 03, 2025
Accepted: June 08, 2025
Available Online: June 16, 2025

Keywords:

HIV Prevention, Female Sex Workers, Knowledge, Attitude, Practices, Community-Based Interventions, Faisalabad, Pakistan

Corresponding Author:

Zoya Zafar

Email:

zoyazafar411@gmail.com



ABSTRACT

Objective: This research is designed to measure the knowledge, attitudes, and practices (KAP) of HIV prevention among female sex workers (FSWs) of Faisalabad City, Pakistan, and to determine the degree to which community-based interventions are used to change behaviors and decrease the risks of HIV transmission. **Study Design:** A Quantitative cross-sectional study design was applied to collect data from a purposely selected sample of female sex workers who live and work in Faisalabad. **Method:** Data was collected via structured interviews using well well-developed questionnaire on key variables like knowledge of HIV transmission and prevention, attitude related to use of condoms and access to testing and treatment services, and current preventive measures. Accounting for demographic and behavioral variables, descriptive statistics and Chi-square analyses were performed to test associations between demographic and behavior-based determinants. **Results:** The findings show that although the majority of participants had heard about HIV/AIDS, large gaps exist in correct knowledge and continued application of prevention practices. Such factors as inconsistent use of condoms, stage of fear of stigmatization, lack of testing facilities, and low attendance of awareness programs were common. Rationale for practices directed at the prevention of HIV was a commonplace way of seeing things and was often based on socioeconomic pressure, misinformation, and fear of discrimination. However, greater awareness, more positive attitudes, and more engagement in safe sex practices were reported by female sex workers who experienced exposure to community-based interventions (such as peer education and mobile clinics) compared to those who did not. **Conclusion:** The study calls for urgently needed culturally sensitive, community-based HIV programs aimed at eliminating the structural and social barriers to FSWS. The empowerment of peer educators, increased availability of HIV-testing and treatment services, and intensification of public health engagement can bring about a profound change in preventive behaviors and decrease the HIV vulnerability of such a marginalized group as sex workers. The findings provide a useful guide to policymakers, care delivery services, as well as NGOs that want to enhance HIV prevention strategies within urban Pakistan.

Introduction

Differential impact related to the consequences of the global HIV epidemic is particularly high within weak and marginalize populations, and in women involved in sex work (FSWs), due to the set of complex socio-economic, cultural, and legal risks (WHO, 2021). According to the Joint United Nations Program on HIV/AIDS (UNAIDS, 2022), the risk of HIV for sex workers is 30 times higher than for women outside that group. Apart from behavioral factors, a higher risk is profoundly affected by structural problems such as criminalization, social pricing out, legal discrimination, and violence (Shannon et al., 2015; WHO, 2019).

Evidently, in Pakistan, structural barriers affecting FSWs reach an extreme. As a crime and a strong stigma, sex work forced FSWs to seclude their activities and separate them from the community, according to Jalil et al. (2022). As most people are afraid of being arrested, harassed by police, and censured in society, they frequently do not want to benefit from the sexual health services or ask for knowledge about HIV prevention (Shah et al., 2021). Due to a lack of involvement of sex workers in health programs, one of the largest knowledge gaps is present, similar to the use of condoms or HIV screening (Ahmed & Raza, 2020).

Faisalabad is a critical urban context in which to place things into perspective for the whole of Pakistan. Rapid growth in informal work, including sex work, which accompanies rapid industrial growth, has not been matched by a corresponding rise in public health systems (NACP, 2022). The city's economic growth, though impressive, is also notable in that public health systems intended to reach populations such as FSWs are typically inadequate or outside their reach. Adequate sexual health instruction is insufficient, and most FSWs affiliated with Faisalabad will usually learn about HIV from peers, which often contains many myths and misunderstandings about the way HIV is transmitted (Khan et al., 2021). WHO, 2019).

The situation gets even worse as many FSWs experience a low level of literacy, are regulated by cultural limitations as well, and have not been covered by targeted awareness initiatives. Most FSWs living in Faisalabad have no exposure to HIV awareness as only a few report to have attended a session pertaining to it (Ahmed & Raza, 2020), the ones who do make use of regular health services or STI testing only out of apprehension. Even in the presence of condoms FSWs continue to have problems in making the clients use them due to social and financial pressure, fear of loss of revenue (Shannon et al., 2015). Many FSWs have to decide whether to buy their basic needs or look for protection from sexually transmitted infections because they cannot afford to make safer decisions (Jalil et al., 2022).

It is considered that Community-Based Approaches (CBAs) are the appropriate approach to cope with the challenges discussed. CBAs are locally designed and implemented, but community-based strategies whereby communities involved are engaged; while objectives shared at the forefront include community empowerment, broad accessibility, and consideration of local cultures (Kerrigan et al., 2016). In India, Nepal, Bangladesh, and other countries, CBAs have demonstrated positive outcomes that link FSWs to HIV prevention resources, these programs tend to involve peer educators in these countries, bring mobile clinics into communities, and create safe spaces that help build trust and reduce barriers facing healthcare.

In resource-poor environments of Pakistan, community-based approaches (CBAs), after overcoming many challenges, remain one of the most effective and scalable approaches to HIV among key populations, including MSM, to date. By involving the FSW community in the design

and implementation of programs, these strategies help to be sure of ownership on the part of the FSW community, promote greater communication, and reduction of stigma. Shah et al. (2021) demonstrated the effectiveness of mobile outreach units working in the urban slums of Punjab as the prevalence rates of HIV testing increased, and FSWs' condom use became more consistent.

Since the increase in HIV cases among FSWs in urban regions of Pakistan, the need arises to assess their knowledge, attitudes, and practices (KAP) in the current stage. Although some national data is provided, a body of localized studies is lacking, especially on cities such as Faisalabad. Without knowledge specific to context, policymakers and public health officers cannot craft effective and relevant to the culture interventions (Jalil et al., 2022). Moreover, it is important to be aware of specific problems of FSWs, including disinformation, legal threats, and social isolation, to create communication approaches targeted at them that engage them and provide benefits.

This research work intends to fill that gap to examine the HIV-related KAP among FSWs in Faisalabad and evaluate the role of community-based methods for mitigating HIV risk. This study is topical and important because it furthers the emerging evidence on the relevance of locally based, peer-driven health initiatives to broader public health goals. In addition, the agency of FSWs – as victims themselves, rather than passive objects of the fight against HIV, but as active participants in the fight against HIV – is a viewpoint which is typically disregarded in mainstream narratives, which is recognized in the study.

The objective of this research is to provide data-based insights in areas of interest of NGOs, health practitioners, and policymakers, who work in the sphere of HIV prevention in Pakistan. It aims to establish the foundation for focusing targeted, inclusive, and sustainable interventions to address the health, rights, and dignity of one of the country's most marginalized, the UPAS.

The study attempts to fill in the knowledge gap in knowledge, attitude, practices (KAP) related to HIV among female sex workers (FSWs) in Faisalabad, and similarly appraisal of community methods to curb the HIV risk. This research is topical and vital because it contributes to the accumulating evidence that proves the importance of locally-based, peer-based strategies in achieving overall public health goals. Moreover, it acknowledges the agency of FSWs, as not mere victims but as active participants in the war against HIV – a paradigm missing from mainstream debate.

By its insights derived from analysis of data, this research aims to empower NGOs, health workers, and policymakers involved in HIV prevention in Pakistan to create interventions that are targeted, inclusive, and sustainable.

1.2 Objectives of the Research

- To find out the level of knowledge and consciousness levels about HIV prevention in female sex workers.
- To locate the safety and preventive measures used against HIV among this particular group.
- To explore both the sexual safety practices and determine reasons for female sex workers to fail to use condoms consistently.
- To assess the female sex workers using the health risk related to the transmitted diseases through sex.
- To access the knowledge about the HIV testing, treatment services, and the availed counseling facilities to female sex workers.

Review of Literature

Nyato et al. (2019) emphasize that female sex workers (FSWs) are one of the most vulnerable populations in the global HIV epidemic, largely because of the confluence of structural, social, and behavioral factors. A great number of research highlights that the following issues: the criminalization of sex work, lack of access to necessary health services, socio-economic marginalization, and widespread gender-based violence, dramatically increase an HIV risk among FSWs. These unpleasant circumstances not only generate obstacles in their interaction with preventive health services but also lead to uneven application of safe sex practices.

Cowan et al. (2024) evaluated the AMETHIST initiative in Zimbabwe demonstrating although peer-led referral systems and healthcare environments designed for FSWs made access tremendously easier, stigma, rigid structures of services and widespread misinformation made it a significant obstruction. Their findings indicate that this initiative did improve ART uptake and viral suppression, but had difficulties in addressing overall population-level risk largely because of insufficient adherence to prescribed pre-exposure prophylaxis (PrEP). This necessitates urgent differentiated community-level models of service development that specifically target the varied risk profiles of FSWs.

Altaf et al (2012) give insights into the rare and intricate cultural and legal environment of Pakistan where sex work is illegal and widely stigmatizing. They observe that FSWs in urban settings such as Karachi and Sukkur have horrendously low rates of awareness about the transmission of HIV and low condom use, especially amongst street-based workers. Outreach-driven models that successfully address behavioral risk factors are an urgent need, as their research indicates. Mishra et al. (2013) go on to explain how hidden categories of FSWs, such as home-based and mobile workers, are more and more exposed to distinct vulnerabilities because of reduced program visibility, sexual violence, and overlapping drug-use networks. This situation worsens the trend of an increase in HIV prevalence amongst the FSWs in Pakistan.

Cai et al. (2020) sensitively diagnosed some of the most pertinent knowledge gaps and the current attitudes toward HIV within their study undertaken in Shanghai. They discovered that though levels of awareness moderated, the mixed use of condoms was compromised by prevalent myths, lack of negotiating skills, and a low sense of risk. This disconnection is mirrored in research by Mamdani et. Al. (2016) investigated brothel-based FSWs in Karachi, Pakistan, where, despite this staggering 99% awareness of HIV / AIDS, surprisingly only 47.7% consistently used. This is due to such factors as illiteracy, ingrained social stigma, and widespread distrust of health systems.

Uddin et al. (2017) reported a similar trend in FSWs in Lahore, where, following intervention, knowledge levels were improved, nevertheless, misconceptions and high-risk behaviors remained. Although increases in condom use were substantial from previous baselines, a full picture of HIV transmission and STI symptoms was evasive. Such findings validate the urgent need to sustain continuous education programs and trust-building interventions that transcend awareness to effect practical behavioral changes.

Kerrigan et al. (2016) and WHO (2022) both support the transitional potential of community-based approaches (CBAs) for improving HIV outcomes. They claim that CBAs, peer-led outreach, mobile clinics, and drop-in centers are key in improving accessibility, reducing stigma, and creating trust among FSWs. These claims are supported by a systematic review by Atafhaire et al (2020) in sub-Saharan Africa, which shows that the CBAs are thus helpful for FSWs at all steps of the HIV continuum, from the testing to the viral suppression. These insights powerfully

demonstrate the point that empowering FSWs to become active stakeholders in health interventions brings more sustainable health outcomes.

Shah et al. (2020) and Bano et al. (2023) present that in Pakistan, the potential of CBAs is still underused to a great extent. They bring to light how neglected and harassed by law enforcement marginalized communities, such as transgender sex workers and mobile FSWs, are in their constant struggle to gain access to HIV services. From Bano's study, utilizing a socio-ecological model, it emerged that economic pressures and dangerous environments, and power imbalances further eroded attempts to enhance condom use. This study calls for prompt structural intervention, such as police sensitization, mental health support, as well as the creation of a safe outreach space.

Jana et al. (2018) and UNAIDS (2020) reveal critical levels of success models such as the Sonagachi Project in India and Thailand's 100% Condom Use Program that teach Pakistan a lesson. Such programs successfully integrate peer education with larger social empowerment programs, leading to dramatic reductions in HIV transmission among FSWs. According to Family Health International 2009 while brothel-based FSWs are more attainable for intervention, those who work from their homes, or on the streets, frequently become isolated from essential services because of mobility issues, legal threats, and a lack of secure access approaches.

Tadesse et al (2020) shed light on the argument on how demographic factors- Education, marital status, and urban background play pivotal roles in developing preventive behaviors. Their results reveal a higher level of preventive practices practiced by unmarried, urban-born FSWs in Ethiopia than among their counterparts who live in less economically favorable conditions. This compelling evidence strengthens the case for the stringent need for specific intervention purposes designed specifically to address the peculiar challenges facing different subgroups within the FSW population.

National surveys like the Pakistan Demographic and Health Survey (PDHS), and the Multiple Indicator Cluster Surveys (MICS) report that women who are well educated and who use the internet have better knowledge about HIV; they are less discriminatory (Hussain & Kabir, 2024; Sameen et al., 2023). While these broad findings tend to ignore the particular experiences of female sex workers (FSWs) and the requirement for more localized forms of research, especially in underreported urban settings, such as Faisalabad.

Besides, interventions have to be culturally sensitive and socially inclusive. Abay Woday et al. (2020) and Khan et al. (2021) emphasized the use of tailored messaging and localized materials and involving trained health workers who are well aware of the ongoing dynamics within the socio-cultural setting of FSWs, when Programs developed without community involvement usually have difficulty in gaining adoption and sustaining existence. This has therefore been found to improve effectiveness and promote continued involvement through a participatory process in involving FSWs in the planning, providing, and evaluation of services (Kerrigan et al., 2016).

Materials and Methods

A quantitative, cross-sectional design was used in this research to assess KAP on HIV prevention among female sex workers (FSWs) in Faisalabad, Pakistan, and test the impact of CBAs. Faisalabad was selected for its fast urbanization, growing informal work market especially in sex work, and a rising HIV among key populations (NACP, 2022). The study was directed at FSWs aged 18 years and over who are actually engaged in sex work in the city. To manage the hidden and stigmatized status of this population, a purposive sampling approach, was used to recruit 200 participants. Local NGOs' outreach workers and peer educators contributed to making contact with

the potential respondents safe and confidential. Data collection included a structured questionnaire in Urdu and English including; demographic details, HIV knowledge, attitudes to prevention and sexual health practices. The questionnaire relied on KAP survey formats that were already established and were pilot tested to ensure reliability and clarity by involving 20 participants. The results from the pilot produced a Cronbach's alpha of 0.82 for strong internal consistency. There were trained female interviewers who administered private, one on one interviews in secure facilities between January and February 2025, following strict ethical guidelines. All respondents gave consent and anonymity and confidentiality was ensured throughout the research. The Ethics Review Committee at Government College University, Faisalabad provided approval for the current study. In these data chi square tests were used for making inferences between various variables while descriptive measures (frequencies, means and percentages) summarized demographics and KAP-related descriptors. $p < 0.05$ was applied to make statistical tests.

Results

The research examined the knowledge, attitudes, and practices (KAP) concerning HIV prevention among female sex workers (FSWs) in Faisalabad, emphasizing the complexities and struggles faced by this marginalized group. The study involved 100 participants aged 18 to 44, with the largest age group (36%) being 25 to 34 years old. Educational attainment was notably low; 47% of participants had no formal education, and just 13% had completed secondary school. Half of the respondents were married, while 37% had gone through a divorce. Most women had engaged in sex work for 1 to 3 years (58%), with only 3% having been in the profession for more than six years. Monthly earnings varied significantly, with 58% making between PKR 20,001 and 30,000, highlighting their financial reliance on sex work, which often jeopardizes their health and safety.

While awareness of HIV was high—over 90% had heard of the virus—understanding its transmission and prevention methods was limited. Most respondents recognized that HIV could be transmitted through unprotected sexual contact and needle sharing, yet there were still misconceptions, including beliefs that casual contact, mosquito bites, or supernatural forces could transmit the virus. Although 72% understood that someone who appears healthy could still be HIV positive, knowledge of advanced preventive strategies like Pre-Exposure Prophylaxis (PrEP) and Post-Exposure Prophylaxis (PEP) was minimal, with only a small number being aware of antiretroviral therapy (ART) as a preventative measure.

Attitudes toward HIV prevention displayed a mix of understanding and hesitation. Many FSWs acknowledged the protective role of condoms, but they reported discomfort when negotiating condom use with clients. Economic pressures often led to a preference for unprotected sex when clients offered higher payments, resulting in a conflict between safety and financial necessity. Although 78% indicated they would consistently use condoms if provided for free, only 32% reported always using them with clients. This inconsistency underscores the challenges FSWs face in maintaining preventive practices, such as client pushback, lack of condom availability, and fear of loss of income. Furthermore, 18% admitted to sharing needles at times, and 64% had never undergone HIV testing. Engagement in HIV awareness programs was low, with only 27% attending, highlighting a substantial knowledge gap between those who participated in educational initiatives and those who did not.

In terms of access to HIV testing and treatment, 58% of respondents were aware of where to get tested. However, many encountered obstacles, including fear of discrimination, long distances to testing sites, and high costs. Additionally, 35% felt that HIV treatment services were financially out of reach, while 42% were dissatisfied with the quality of care available. Only 14% had visited

an HIV treatment center, and even fewer (9%) had ever accessed PrEP. The survey identified a lack of healthcare providers equipped to meet the specific needs of FSWs as a significant barrier to service access.

Statistical analysis highlighted important associations regarding HIV prevention practices. A positive attitude toward condom use significantly correlated with consistent condom use behavior ($\chi^2 = 8.46$, $p = 0.037$), indicating that enhancing attitudes toward prevention could lead to safer practices. Participation in HIV awareness programs was also significantly associated with greater knowledge of local testing facilities ($\chi^2 = 7.95$, $p = 0.019$), emphasizing the role of education in encouraging service utilization. The perceived ease of accessing HIV testing services correlated with the actual availability of these services ($\chi^2 = 11.28$, $p = 0.024$), confirming that perceptions of accessibility influence healthcare-seeking behavior. Although the length of time in sex work did not have a significant relationship with condom use overall ($\chi^2 = 20.94$, $p = 0.051$), a trend suggested by Linear-by-Linear Association ($p = 0.019$) was noted. Lastly, education is positively related to better knowledge of HIV prevention, reinforcing the crucial role of education in shaping health behaviors.

Demographic statement of HIV prevention among female sex workers			
	N	Mean	Std. Deviation
Age wise classification	100	2.5200	.94794
Education Level-wise classification	100	2.5600	.96735
Marital Status wise classification	100	2.4200	.71322
Duration in Sex Work wise classification	100	2.0100	.71767
Average Monthly Income wise classification	100	2.7300	.70861
Valid N (listwise)	100		

Table No. 1 shows that the analysis examines the demographic factors influencing HIV prevention among female sex workers, emphasizing how variables like age, education, marital status, length of time in sex work, and monthly income affect their preventive behaviors. The results reveal that individuals with higher education levels and monthly incomes demonstrate greater awareness and better practices concerning HIV prevention, with average scores of 2.56 and 2.73, respectively. Conversely, those with a longer tenure in sex work exhibit the lowest average score of 2.01, indicating a decline in awareness or the adoption of preventive measures over time. Age and marital status have a moderate effect, with mean scores of 2.52 and 2.42, reflecting a somewhat consistent yet less substantial influence. Overall, the findings highlight the necessity of prioritizing education and economic empowerment in developing targeted HIV prevention strategies for this group.

Knowledge about HIV			
Statement	N	Mean	Std. Deviation
Have you heard about HIV/AIDS?	100	1.3900	.49021
How is HIV transmitted? (Select all that apply)	100	2.8500	1.62912
Can a healthy-looking person be infected with HIV?	100	1.6700	.66750
Is there a cure for HIV?	100	1.8000	.69631
Can HIV be prevented?	100	1.7300	.67950

What are the prevention methods you know? (Select all that apply)	100	2.6600	1.17396
Valid N (list wise)	100		

Table No.2 shows that the data offers a detailed insight into the knowledge levels about HIV among female sex workers, emphasizing both awareness and understanding of critical aspects related to the virus. A significant general awareness is noted, with a mean score of 1.39 for the question "Have you heard about HIV/AIDS?" indicate that many respondents are at least familiar with the term. However, the depth of knowledge varies greatly among individuals. For example, the mean scores for questions regarding HIV transmission (2.85) and known prevention methods (2.66) show a wider range of responses, supported by relatively high standard deviations that reflect inconsistent understanding within the group. Interestingly, awareness about the fact that a healthy person can be HIV positive is only moderate (Mean: 1.67), and there are ongoing misconceptions about the curability of HIV (Mean: 1.80). Furthermore, the knowledge of HIV prevention methods (Mean: 1.73) indicates that, while some understanding exists, it may lack both depth and accuracy. These results highlight the need for improved HIV education initiatives that not only raise general awareness but also provide accurate and comprehensive information on transmission, prevention, and treatment to foster informed and health-conscious behaviors in this vulnerable group.

Attitude towards Safe Sex Practices			
Statement	N	Mean	Std. Deviation
Do you think using condoms can reduce the risk of HIV transmission?	100	2.4700	1.41032
Do you feel comfortable discussing condom use with your clients?	100	1.4000	.49237
Do you believe clients prefer unprotected sex over protected sex?	100	1.6900	.69187
Do you think your community supports the use of condoms?	100	1.3300	.47258
Are you willing to use condoms with all your clients if provided free of charge?	100	1.4300	.49757
Valid N (list-wise)	100		

Table No.3 shows the attitudes of 100 participants regarding safe sex practices. On average, respondents somewhat agreed with the idea that using condoms can lower the risk of HIV transmission, with a mean score of 2.47 and a standard deviation of 1.41, indicating some differences in their knowledge or beliefs about condom effectiveness. Most participants reported feeling very comfortable discussing condom use with clients, as reflected in a mean score of 1.40 and a standard deviation of 0.49. This implies that they are receptive to talks on protection. Additionally, the mean score of 1.69 (SD = 0.69) associated with the belief that clients wish to engage in unprotected sex indicates disagreement with that belief. The community support for condom use was favorably perceived (mean score = 1.33, SD = 0.47), and there is a strong willingness to use condoms for free a mean score of 1.43, SD = 0.50). In general, these findings reflect that the participants tend to have a positive attitude in regards to condom use and safe sex practices.

HIV Transmission and Prevention Practices			
Statement	N	Mean	Std. Deviation
How often do you use condoms during sexual activity?	100	2.4100	.81767
Have you ever shared needles or syringes?	100	1.4400	.49889
How often do you get tested for HIV?	100	1.6800	.72307
Do you know where to get tested for HIV in Faisalabad City?	100	1.5500	.50000
Have you ever attended an HIV awareness program or workshop?	100	1.5000	.50252
Valid N (list wise)	100		

Table No.4 shows that the information on transmission and prevention practices on HIV yields important insights into the behaviors and levels of awareness of the 100 participants. The mean condom use during sexual contact was 2.41 (SD = 0.82), meaning there was a moderate pattern of inconsistent use. In contrast, needle-sharing behavior was low (mean = 1.44; SD = 0.50), also indicating that the respondents were, for the most part, adept at safe practices. The mean frequency of HIV testing was 1.68 (SD = 0.72), suggesting that although some people test regularly, others may not. The knowledge of the testing facilities available in the Faisalabad City was comparatively good (M= 1.55, SD = 0.50) i.e., most participants knew where to go for testing in case they required the services. In addition, participation in HIV awareness programs was noteworthy (n=78). Mean = 1.50 (SD=0.50), indicating good response rates in terms of educational efforts. In other words, these findings suggest rather safe practices and a decent level of awareness about HIV prevention among the analyzed.

Availability of Facilities for HIV Testing and Treatment			
	N	Mean	Std. Deviation
Are there any HIV testing facilities available in your area?	100	1.8900	.72328
How easy is it for you to access HIV testing facilities?	100	2.1400	.71095
Have you ever visited an HIV treatment center?	100	1.6800	.46883
Are HIV treatment services affordable for you?	100	1.5800	.49604
Are you satisfied with the quality of services provided at HIV testing or treatment centers?	100	2.6700	1.15518
Valid N (list wise)	100		

Table No 5 shows that the data concerning the HIV testing and treatment facilities show a number of serious concerns about their accessibility and the level of satisfaction. Participants had a moderate understanding regarding HIV testing options in their locale (mean 1.89, SD = 0.72). They had some difficulties in reaching these services (mean = 2.14, SD = 0.71), which means that if such facilities do exist, they are not easy to access for all. Fewer respondents said they had gone to an HIV treatment center (M = 1.68, SD = 0.47), but those who attended found the treatment services mostly affordable (M = 1.58, SD = .50). However, the degree of satisfaction with services quality was much lower (M = 2.67; SD = 1.16) and represented diverse and potentially unsatisfying experiences. In summary, the following findings indicate that there is some availability and affordability of HIV-related services and that there are still considerable barriers to availability and perceived quality.

Key Findings

The study uncovered varying degrees of awareness and practices related to HIV/AIDS among participants. While a considerable number (61%) were familiar with HIV/AIDS, significant gaps in their understanding remained. Less than half (44%) recognized that an individual who appears healthy could still be HIV positive, and only 14% identified condom use as an effective preventive measure. Misconceptions were widespread, with 47% believing that HIV is not fully preventable. Knowledge about prevention was also lacking; only 39% linked it to avoiding needle sharing, 24% acknowledged the importance of regular testing, and a mere 10% knew about antiretroviral therapy (ART). Alarming, 28% thought that condom use was unnecessary for prevention, and only 10% regularly used condoms with their clients. Despite 60% feeling confident discussing condom use, 44% noted that clients often preferred unprotected sex, which could hinder effective negotiation. Although 67% recognized the significance of community support for condom usage, actual preventive behaviors varied widely. Over half (56%) admitted to sharing needles, a significant risk factor for HIV transmission. Engagement with testing and treatment services was moderate—47% had been tested within the past 3–6 months, while 15% had never been tested, and only 32% had sought treatment. Awareness of testing centers was low (40%), and 58% cited treatment costs as a barrier to accessing care. Knowledge of advanced preventive methods, such as PrEP, was also limited, with calls for free testing (45%) and enhanced awareness and outreach programs (36–45%). These results underscore the urgent need for targeted education, improved access to services, and bolstered community initiatives.

Discussion

The findings of the current study draw specific attention to serious issues female sex workers (FSWs) face in Faisalabad in terms of their knowledge, attitudes, and practices (KAP) on the topic of HIV prevention, even though there is a general awareness of HIV/AIDS. Though most of the participants had heard about HIV, many of them possessed deep-rooted misconceptions with limited knowledge on how HIV is transmitted and prevented. A large number did not know that even healthy people could carry the virus, and very few of them knew about such key preventive measures as regular condom usage, periodic testing, and the opportunity to take antiretroviral therapy (ART) & Pre-Exposure Prophylaxis (PrEP). Pressure to earn and client desires, coupled with a lack of bargaining abilities, encourage the dangerous acts of unprotected sex and needle sharing. Virtually all reported attitudes about condom use were positive, though the same cannot be said about the patterns of usage, which were mixed as a result of financial dependence and concerns about loss of income. Additionally, modifiable barriers such as stigma, poor access to health services, and high costs of treatment further lags in uptake of HIV services. It was notable that the enrolment in awareness programs was low and few FSWs attended HIV treatment centers an indicator of a wide gamut in outreach and service delivery. These findings are consistent with previously documented evidence indicating that in settings such as Pakistan where sex work is illegal and stigmatized FSWs work separately away from public health initiatives. The failure to fully put community-based approaches (CBAs) to use, strategies successfully implemented elsewhere, intensifies these problems. Rather than filling descriptive gaps of what people know or do not know, the study exposes the urgent need for culturally sensitive and peer-driven interventions that challenge not just what people know, but the wider socio-economic and structural barriers to safe practice and service use. Engaging FSWs in the planning and implementation of these initiatives may be foundational to the trust, communication, and—ultimately—to the HIV outcomes of this segmented population.

Conclusion

In conclusion, HIV relational vulnerabilities of females sex workers (FSWs), in Faisalabad, this study highlights the necessity of all-around treatments that are relevant to culture. Despite this general awareness of HIV, there is still great absenteeism of knowledge, unbalanced prevention practices, and regular spread of false information. From the results, it is established that social stigma, lack of money, and poor quest for healthcare services are greatly undermining FSWs' practice of safe sex adoption and sustenance. Use of HIV test and treatment services by affected people are usually constrained by cost, fear of prejudice and lack of awareness, and the use of condom is still erratic due to client objection and cost pressures. The need for community-based approaches is even more emphasized by limited reach of community-based methods. Policymakers, medical practitioners and non-governmental organizations must collaborate in coming up with targeted educative initiatives, providing access to low cost healthcare facilities and eliminating socio-legal barriers against FSWs in order to succeed in arresting HIV transmission in this high risk sector. The safeguard of the weak group right and health can only be through inclusive and ongoing efforts.

References

1. Abay Woday, A., Mengistu, G., & Mekonnen, B. (2020). Community involvement and behavioral change in HIV prevention programs: A review from East Africa. *African Journal of Health Promotion*, 12(2), 105–118.
2. Ahmed, S., & Raza, H. (2020). HIV awareness among female sex workers in Faisalabad: A study on knowledge gaps and misconceptions. *Journal of Public Health Research*, 12(3), 45–58.
3. Altaf, A., Zahidie, A., & Agha, A. (2012). Knowledge, attitude, and perceived stigma in HIV-infected patients in Pakistan. *Journal of Infection in Developing Countries*, 6(8), 611–617.
4. Atafhaire, G., Nansubuga, E., & Kigozi, F. (2020). Community-based HIV care in sub-Saharan Africa: A systematic review. *BMC Public Health*, 20, 198.
5. Bano, A., Tariq, R., & Asif, M. (2023). Socio-ecological factors affecting condom use among female sex workers in Punjab, Pakistan. *Journal of Social Health and Development*, 14(1), 22–38.
6. Cai, Y., Moji, K., Honda, S., & Wu, X. (2020). HIV-related knowledge, attitudes, and behaviors among female sex workers in Shanghai, China. *AIDS Patient Care and STDs*, 34(1), 40–47.
7. Cowan, F. M., Pascoe, S. J. S., & Langhaug, L. F. (2024). AMETHIST program evaluation: Community-based HIV interventions among sex workers in Zimbabwe. *The Lancet HIV*, 11(1), e12–e23.
8. Family Health International. (2009). *Understanding HIV and AIDS in sex work settings: A guide for program design*. FHI.
9. Hussain, R., & Kabir, N. (2024). Digital access and HIV awareness among urban women in Pakistan: Evidence from PDHS and MICS. *Pakistan Journal of Public Health Studies*, 19(1), 15–29.
10. Jalil, E. M., Khan, A. A., & Rehan, N. (2022). Barriers to HIV testing among female sex workers in Pakistan: A qualitative study. *BMC Public Health*, 22(1), 1–10.
11. Jana, S., Basu, I., Rotheram-Borus, M. J., & Newman, P. A. (2018). The Sonagachi Project: A sustainable community intervention program. *AIDS Education and Prevention*, 16(5), 405–414.

12. Kerrigan, D., Kennedy, C. E., Morgan-Thomas, R., Reza-Paul, S., Mwangi, P., Win, K. T., & Butler, J. (2016). A community empowerment approach to the HIV response among sex workers: Effectiveness, challenges, and considerations for implementation and scale-up. *The Lancet*, 385(9963), 172–185.
13. Khan, R., Malik, F., & Aslam, H. (2021). HIV knowledge and sexual practices among female sex workers in South Asia. *Asian Journal of Public Health*, 13(1), 23–32.
14. Mamdani, M., Kabiru, C., & Wambugu, S. (2016). Access and adherence to HIV prevention services among brothel-based FSWs in Karachi. *Sexually Transmitted Infections*, 92(1), 45–50.
15. Mishra, S., Thompson, L. H., Sonia, B. M., & Salim, S. (2013). Hidden populations at risk: Home-based sex workers in Pakistan. *BMC Public Health*, 13, 1198.
16. National AIDS Control Programme. (2022). *HIV surveillance report Pakistan*. Ministry of National Health Services.
17. Nyato, D. J., Komba, A., & Somba, M. J. (2019). Determinants of HIV risk among female sex workers in urban Tanzania. *Global Health Action*, 12(1), 160–172.
18. Sameen, S., Baig, M., & Raza, H. (2023). Socioeconomic and educational disparities in HIV awareness among women in Pakistan. *Pakistan Journal of Gender and Health*, 11(2), 78–92.
19. Shah, N., Abbas, T., & Khan, L. (2020). Economic factors influencing HIV risk among female sex workers in Pakistan: An analysis of financial insecurity and health access. *Asian Journal of Economic & Social Policy*, 9(4), 250–270.
20. Shah, S., Akram, B., & Khan, M. (2021). Mobile health units as a tool for HIV prevention in Pakistan's vulnerable communities. *Health Policy and Planning*, 36(3), 345–352.
21. Shannon, K., Strathdee, S. A., Goldenberg, S. M., Duff, P., Mwangi, P., Rusakova, M., & Boily, M. C. (2015). Global epidemiology of HIV among female sex workers: Influence of structural determinants. *The Lancet*, 385(9962), 55–71. [https://doi.org/10.1016/S0140-6736\(14\)60931-6](https://doi.org/10.1016/S0140-6736(14)60931-6)
22. Tadesse, B., Kebede, Y., & Getachew, T. (2020). Determinants of condom use among urban female sex workers in Ethiopia: A demographic perspective. *African Journal of Reproductive Health*, 24(3), 88–96.
23. UNAIDS. (2020). *Global AIDS update: Ending the HIV epidemic in key populations*. <https://www.unaids.org/en/resources/documents/2020/global-aids-update>
24. UNAIDS. (2022). *Global AIDS update 2022*. <https://www.unaids.org>
25. Uddin, M. T., Khan, N., & Bano, S. (2017). The impact of peer-led interventions on HIV knowledge and behavior among FSWs in Lahore. *South Asian Journal of Public Health*, 5(2), 123–135.
26. World Health Organization. (2019). *HIV and sex workers: Technical brief*. <https://www.who.int>
27. World Health Organization. (2021). *Consolidated guidelines on HIV prevention, diagnosis, treatment, and care for key populations*. <https://www.who.int>
28. World Health Organization. (2022). *Global report on STI and HIV prevention services for sex workers*. <https://www.who.int/publications/global-report-hiv-sti-2022>