

Access to Support Services and Mental Health Consequences of Gender-Based Violence among Sex Workers in Abuja, Nigeria

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Abstract *Gender-based violence (GBV) remains a significant public health and human rights challenge globally, with sex workers disproportionately affected due to criminalization, stigma, economic vulnerability, and social exclusion. This study assessed access to support services and the mental health consequences of GBV among sex workers in Abuja, Nigeria. A mixed-methods comparative cross-sectional study involving 455 sex workers was conducted across Abuja Municipal Area Council, Bwari, and Gwagwalada. Quantitative data were collected using interviewer-administered questionnaires, while qualitative insights were obtained through focus group discussions. Findings revealed that although awareness of healthcare and legal support services was relatively high, actual utilization remained poor due to fear of arrest, stigma, discrimination, financial barriers, lack of confidentiality, and mistrust of law enforcement agencies. Respondents reported high levels of anxiety, depression, emotional trauma, fear, and post-traumatic stress disorder associated with repeated exposure to violence. Qualitative findings highlighted persistent psychological distress, social isolation, and discrimination within healthcare institutions. Criminalization of sex work and structural inequalities significantly contributed to poor mental health outcomes and limited healthcare utilization. The study concludes that GBV among sex workers in Abuja has profound psychosocial consequences and that existing support systems remain inadequate. Comprehensive interventions including trauma-informed mental health services, stigma reduction, legal reforms, and survivor-centered healthcare approaches are urgently needed.*

Keywords *Gender-Based Violence, Mental Health, Nigeria, Sex Workers, Support Services.*

Introduction

Gender-based violence (GBV) remains one of the most significant global public health and human rights challenges, disproportionately affecting women and other vulnerable populations worldwide. The World Health Organization (WHO) estimates that approximately one in three women globally experiences physical and/or sexual violence during her lifetime, with marginalized populations such as sex workers facing substantially higher levels of violence and exploitation than the general population [1]. GBV encompasses a broad range of harmful acts, including physical assault, sexual violence, emotional and psychological abuse, economic deprivation, coercion, intimidation, and social discrimination. Among sex workers, violence is frequently perpetrated by clients, intimate partners, brothel managers, criminal groups, and law enforcement personnel [2].

Sex workers experience unique vulnerabilities that increase their exposure to violence and limit their ability to seek protection and support. In many low- and middle-income countries, including Nigeria, sex work remains highly stigmatized and criminalized, creating environments in which violence is often normalized and underreported. Criminalization, social exclusion, poverty, and gender inequality collectively contribute to unsafe working conditions and poor access to healthcare and legal services [3]. Consequently, many sex workers experience repeated exposure to violence without adequate support or protection.

The consequences of gender-based violence extend far beyond immediate physical injuries. Numerous studies have demonstrated strong associations between violence and adverse mental health outcomes, including anxiety, depression, post-traumatic stress disorder (PTSD), substance abuse, emotional exhaustion, and suicidal ideation [4]. Persistent exposure to violence often results in chronic

psychological distress, reduced quality of life, and poor health-seeking behavior. Furthermore, stigma and discrimination discourage many survivors from accessing available healthcare and psychosocial support services, thereby exacerbating the long-term effects of violence [2, 3].

Globally, a variety of interventions have been proposed and implemented to address violence against sex workers and improve their health outcomes. These include decriminalization of sex work, harm-reduction programs, community empowerment initiatives, peer-support networks, trauma-informed mental health services, legal aid programs, and integrated sexual and reproductive healthcare services [5, 6]. International organizations such as UNAIDS, Amnesty International, and Human Rights Watch have consistently advocated for rights-based approaches that promote healthcare access, legal protection, social inclusion, and violence prevention among sex workers [7, 8, 13].

Among the available interventions, community empowerment and decriminalization strategies have demonstrated considerable effectiveness in reducing violence and improving health outcomes. Shannon et al. [9] reported that decriminalization improves access to healthcare services, reduces police harassment, and promotes reporting of violence. Similarly, Kerrigan et al. [10] found that peer-led community empowerment interventions enhance social support, resilience, and access to health services among sex workers. Evidence also suggests that trauma-informed healthcare approaches can improve psychological wellbeing and facilitate recovery among survivors of violence [11].

Despite these advances, substantial challenges remain. Existing interventions are often constrained by inadequate funding, weak implementation mechanisms, persistent social stigma, cultural resistance, and restrictive legal environments [12]. In many African countries,

criminalization continues to push sex workers into hidden and unsafe environments where violence is normalized and rarely reported [13]. Fear of arrest, discrimination, and victimization discourages many survivors from seeking medical care, legal assistance, or psychological support [14].

Research conducted over the past decade has significantly improved understanding of the relationship between violence, stigma, and mental health among sex workers. Studies from Africa, Asia, and North America consistently demonstrate that repeated exposure to violence is associated with depression, PTSD, anxiety disorders, emotional trauma, and social isolation [15, 16]. Deering et al. [2] and Argento et al. [17] further demonstrated that violence and stigma substantially reduce healthcare utilization and increase vulnerability to chronic psychological distress among sex workers.

In sub-Saharan Africa, the burden of violence and its associated mental health consequences remains alarmingly high. Scorgie et al. [3] documented widespread experiences of stigma and discrimination within healthcare facilities among sex workers in Kenya, Uganda, Zimbabwe, and South Africa. Similarly, Muluneh et al. [16] reported a high prevalence of violence among female sex workers across the region. In Nigeria, Oyefara [19] identified poverty, stigma, and criminalization as major contributors to violence and poor psychosocial wellbeing among sex workers.

More recent evidence from Nigeria further demonstrates the persistence of gender-based violence despite ongoing interventions. Ochonye et al. [20] reported that sexual violence, physical assault, extortion, and police harassment remain common experiences among female sex workers. The authors noted that although grassroots interventions have improved awareness and reporting of violence, structural barriers such as criminalization, stigma, and inadequate legal protection continue to limit their effectiveness. Similarly, another Nigerian study reported high levels of

physical, sexual, and emotional violence among sex workers, highlighting the urgent need for comprehensive prevention and response strategies [23].

Abuja, the Federal Capital Territory of Nigeria, presents a unique socio-economic context characterized by rapid urbanization, migration, unemployment, inequality, and expanding informal economic activities. These conditions contribute significantly to the vulnerability of sex workers and may increase exposure to violence. Despite the growing recognition of gender-based violence as a public health issue, there remains limited evidence specifically examining access to support services and the mental health consequences of violence among sex workers in Abuja.

Understanding the extent to which sex workers can access healthcare, legal assistance, counselling, and psychosocial support following experiences of violence is essential for informing effective policy and intervention strategies. In addition, documenting the psychological consequences of violence provides important evidence for strengthening mental health services and developing survivor-centered care models.

This study therefore assessed access to support services and the mental health consequences of gender-based violence among sex workers in Abuja, Nigeria. The findings are expected to contribute to violence prevention efforts, mental health programming, policy reforms, and the development of comprehensive survivor-centered interventions aimed at improving the health, wellbeing, and human rights of sex workers.

Materials and Methods

Study Design

This study employed a mixed-methods comparative cross-sectional research design involving both quantitative and qualitative approaches. The mixed-methods approach was considered appropriate because it enabled

comprehensive assessment of the prevalence of gender-based violence (GBV), access to support services, and the associated mental health consequences among sex workers in Abuja, Nigeria. The quantitative component provided measurable estimates of violence, service utilization, and psychological outcomes, while the qualitative component offered deeper understanding of the lived experiences, perceptions, and coping mechanisms of respondents.

Study Area

The study was conducted in the Federal Capital Territory (FCT), Abuja, Nigeria, specifically within Abuja Municipal Area Council (AMAC), Bwari, and Gwagwalada. Abuja is the administrative capital of Nigeria and is characterized by rapid urbanization, migration, socio-economic inequalities, and diverse informal economic activities, including commercial sex work. The selected locations were chosen because they represent major sex work hotspots within urban, peri-urban, and semi-rural settings of the FCT. These areas host various categories of sex workers including brothel-based, street-based, club-based, and mobile sex workers.

Study Population

The study population comprised male, female, transgender, and non-binary sex workers aged 18 years and above who were actively engaged in sex work within the selected study areas during the period of data collection.

Inclusion Criteria

Participants were eligible for inclusion if they:

1. Were aged 18 years and above;
2. Self-identified as sex workers;
3. Had lived or worked within the selected study areas for at least six months;
4. Were willing to provide informed consent;
5. Were mentally and physically capable of participating in the study.

Exclusion Criteria

Participants were excluded if they:

1. Were below 18 years of age;
2. Were critically ill at the time of data collection;
3. Declined participation or withdrew consent;
4. Were unable to communicate effectively during interviews or discussions.

Sample Size Determination

The sample size was determined using the formula for comparison of two independent proportions:

$$n = [(Z\alpha/2 + Z\beta)^2 \times \{P_1(1 - P_1) + P_2(1 - P_2)\}] / (P_1 - P_2)^2$$

Where:

N = minimum sample size required per group

$Z\alpha/2$ = standard normal deviation corresponding to the desired confidence level (1.96 for a 95% confidence interval)

$Z\beta$ = standard normal deviation corresponding to the desired statistical power (0.84 for 80% power)

P_1 = estimated proportion in the first group

P_2 = estimated proportion in the second group

$P_1 - P_2$ = expected difference between the two proportions

After obtaining the minimum sample size, adjustment for non-response was performed using the following formula:

$$N = n / (1 - r)$$

Where:

N = final adjusted sample size

n = calculated minimum sample size

r = anticipated non-response rate

This approach ensured that the study had adequate statistical power to detect the expected difference between the two groups while accounting for potential participant non-response or incomplete data.

Using a 10% non-response rate ($r = 0.10$), the final sample size obtained was 462 respondents. However, 455 participants successfully completed the study questionnaires.

For the qualitative component, 45 participants were purposively selected for focus group discussions (FGDs), with 15 participants recruited from each study location.

Sampling Technique

A multistage cluster sampling technique was employed for the quantitative survey. In the first stage, the three area councils (AMAC, Bwari, and Gwagwalada) were purposively selected because of their high concentration of sex work activities. In the second stage, sex work hotspots including brothels, clubs, bars, hotels, and street locations were identified with the assistance of peer educators and community mobilizers.

Respondents were subsequently recruited proportionately from identified hotspots using convenience and snowball sampling techniques due to the hidden and stigmatized nature of the study population.

For the qualitative component, purposive sampling was used to recruit participants with diverse experiences relating to violence, healthcare access, and mental health challenges.

Data Collection Instruments

Quantitative data were collected using structured interviewer-administered questionnaires developed after extensive review of related literature and standardized GBV assessment tools. The questionnaire consisted of the following sections:

1. Socio-demographic characteristics;
2. Experiences of gender-based violence;
3. Access to healthcare and support services;
4. Mental health consequences of violence;
5. Barriers to healthcare utilization;
6. Coping mechanisms and social support systems.

The questionnaire included both closed-ended and Likert-scale questions.

Qualitative data were collected using Focus Group Discussion (FGD) guides designed to explore:

1. Experiences and perceptions of violence;
2. Psychological and emotional consequences of GBV;
3. Access to healthcare and legal support services;
4. Experiences with healthcare providers and law enforcement agencies;
5. Coping strategies and recommendations for interventions.

Validity and Reliability of Instruments

The instruments were reviewed by experts in public health, gender studies, and mental health to ensure content and face validity. A pilot study was conducted among sex workers outside the selected study sites to assess clarity, appropriateness, and reliability of the instruments.

Necessary modifications were made following pilot testing. Internal consistency reliability of the questionnaire items was assessed using Cronbach's alpha coefficient, which yielded acceptable reliability values above 0.70.

Data Collection Procedure

Data collection was conducted over a period of eight weeks by trained research assistants familiar with key population research and ethical handling of sensitive information. Interviews were conducted in private and secure locations to ensure confidentiality and participant comfort.

Prior to data collection, informed consent was obtained from all participants after explaining the purpose, procedures, benefits, and potential risks of the study. Participants were assured of anonymity and confidentiality. Focus group discussions were conducted in English and local languages where necessary. Each discussion lasted approximately 60–90

minutes and was audio-recorded with participants' permission.

Data Analysis

Quantitative data were entered, cleaned, and analyzed using Statistical Package for Social Sciences (SPSS) version 25. Descriptive statistics including frequencies, percentages, means, and standard deviations were used to summarize socio-demographic characteristics, prevalence of violence, mental health outcomes, and healthcare utilization patterns.

Inferential statistics including chi-square tests and logistic regression analyses were performed to assess associations between socio-demographic variables, exposure to violence, mental health outcomes, and access to support services. Statistical significance was set at $p < 0.05$.

Qualitative data obtained from FGDs were transcribed verbatim and analyzed thematically. Thematic analysis involved familiarization with the data, coding, categorization, and identification of recurring themes related to violence, stigma, healthcare access, and psychological wellbeing.

Ethical Considerations

Ethical approval for the study was obtained from the appropriate Institutional Research Ethics Committee before commencement of the study. Permission was also obtained from relevant community gatekeepers and peer

network leaders. Participation in the study was entirely voluntary. Written informed consent was obtained from all participants prior to data collection. Confidentiality and anonymity were strictly maintained by excluding identifying information from questionnaires and transcripts. Participants who experienced emotional distress during interviews were referred to available counselling and psychosocial support services. All procedures were conducted in accordance with international ethical principles governing research involving human participants.

Results

Socio-Demographic Characteristics of Respondents

The study involved a total of 455 sex workers recruited from Abuja Municipal Area Council (AMAC), Bwari, and Gwagwalada. The findings revealed that the majority of respondents were female, and most participants were within the economically active age group of 25–44 years. Secondary and tertiary education levels were the most commonly attained educational qualifications among respondents. In addition, most participants identified as heterosexual, although a considerable proportion identified as homosexual or bisexual. The socio-demographic characteristics of respondents are presented in Table 1.

Table 1. Socio-Demographic Characteristics of Respondents

Variable	Frequency	Percentage (%)
Female	374	82.29
Male	49	10.82
Non-binary	20	4.33
Transgender	12	2.59
Age 25–34 years	148	32.47
Age 35–44 years	128	28.14
Secondary education	197	43.29
Tertiary education	179	39.40

Awareness and Utilization of Support Services

The findings demonstrated relatively high awareness of healthcare and legal support services among respondents; however, actual utilization of these services remained considerably low. Awareness of healthcare services was reported by more than two-thirds

of respondents, while less than one-third utilized healthcare services following experiences of violence. Similarly, awareness of legal support services was moderate, but only a small proportion of respondents had sought legal assistance after experiencing violence. These findings are summarized in Table 2.

Table 2. Awareness and Utilization of Support Services

Variable	Percentage (%)
Awareness of healthcare services	72.0
Utilization of healthcare services	31.0
Awareness of legal support services	45.0
Utilization of legal support services	12.1

Barriers to Accessing Support Services

Respondents identified several important barriers limiting access to healthcare, psychosocial, and legal support services. Fear of arrest and harassment by law enforcement officers emerged as one of the most commonly reported barriers. In addition, stigma and discrimination within healthcare facilities

significantly discouraged respondents from seeking care and support services.

Other commonly reported barriers included financial constraints, fear of exposure, lack of confidentiality, negative attitudes from healthcare workers, and mistrust of police and judicial institutions. Figure 1 presents the major barriers to accessing support services among respondents.

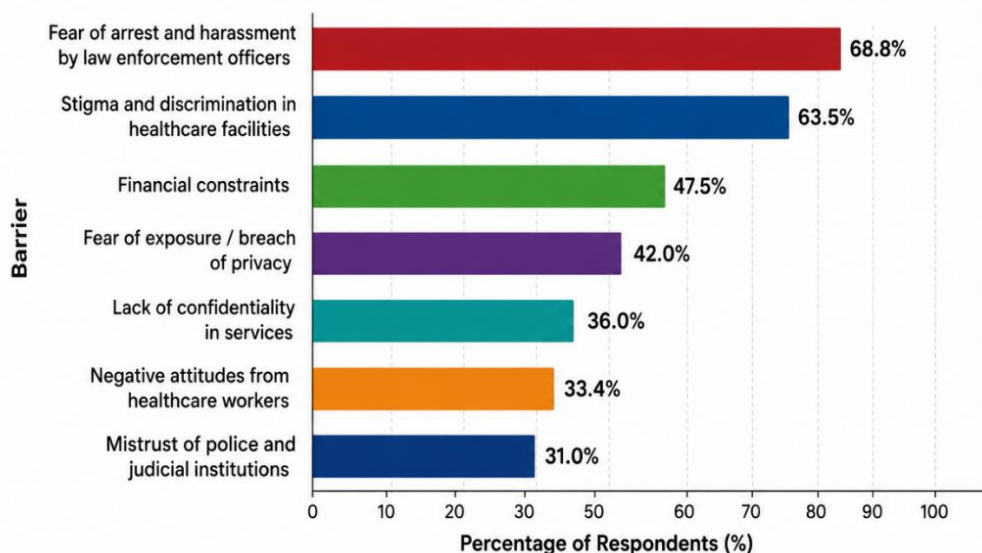


Figure 1. Major Barriers to Accessing Support Services among Respondents

The majority of respondents explained that healthcare providers often judged or discriminated against them because of their

occupation. Some respondents also reported receiving disrespectful treatment while seeking healthcare services.

Mental Health Consequences of Gender-Based Violence

The study revealed high levels of psychological distress among respondents who had experienced gender-based violence. Fear and insecurity were the most commonly reported mental health consequences, followed closely by anxiety. More than half of

respondents also reported symptoms of depression, while nearly half experienced symptoms suggestive of post-traumatic stress disorder (PTSD), including nightmares, insomnia, flashbacks, intrusive memories, emotional numbness, and hypervigilance. The distribution of mental health consequences is presented in Table 3.

Table 3. Common Mental Health Consequences Reported by Respondents

Mental Health Outcome	Percentage (%)
Fear and insecurity	72.0
Anxiety	68.0
Depression	54.0
PTSD symptoms	49.0

Experiences of Emotional and Psychological Trauma

Respondents described persistent emotional and psychological trauma associated with repeated exposure to violence, social rejection, and discrimination. Many participants reported feelings of hopelessness, loneliness, shame, and emotional exhaustion. Repeated experiences of violence were also reported to negatively affect self-esteem and trust in clients, healthcare providers, and law enforcement agencies.

Several respondents further explained that they resorted to alcohol consumption and substance use as coping mechanisms to manage emotional distress and traumatic experiences.

Qualitative Findings From Focus Group Discussions

The qualitative findings provided deeper insights into the lived experiences of sex workers regarding violence, mental health challenges, institutional discrimination, and barriers to support services. Several important themes emerged from the focus group discussions, including fear and insecurity, stigma in healthcare settings, psychological distress, and mistrust of law enforcement agencies.

Experiences of Fear and Insecurity

Participants consistently described living in fear due to frequent exposure to violence, unsafe working environments, and police harassment. Many respondents reported persistent anxiety and feelings of insecurity in their daily lives.

One participant stated:

“I feel trapped. Every day I wake up, I feel anxious, scared, and alone.”

Another respondent explained:

“We are afraid to report violence because the police often harass us instead of helping us.”

Stigma and Discrimination in Healthcare Settings

Many participants reported experiencing discrimination, judgment, and disrespect while seeking healthcare services. Respondents explained that healthcare workers often stigmatized them because of their occupation, which discouraged future healthcare-seeking behavior.

One respondent noted:

“We are judged when we go to hospitals. Some nurses insult us or refuse to attend to us.”

Another participant added:

“Society sees us as worthless, and the clients treat us like we are disposable.”

Psychological Impact of Violence

Participants reported severe emotional distress resulting from repeated violence and social exclusion. Frequently reported psychological symptoms included fear, sadness, insomnia, hopelessness, emotional withdrawal, and low self-esteem.

Several respondents explained that fear of discrimination and lack of emotional support prevented them from seeking counselling or mental health services.

Mistrust of Law Enforcement Agencies

A recurring theme across the focus group discussions was widespread mistrust of police and legal institutions. Participants described experiences of extortion, intimidation, verbal abuse, and harassment by law enforcement officers.

One respondent explained:

“We don’t trust the police because they harass us instead of protecting us.”

Overall, the qualitative findings supported the quantitative results by demonstrating that gender-based violence among sex workers in Abuja is strongly associated with psychological distress, social exclusion, institutional discrimination, and poor utilization of support services.

Discussion

This study assessed access to support services and the mental health consequences of gender-based violence among sex workers in Abuja, Nigeria. The findings revealed that although awareness of healthcare and legal support services was relatively high, actual utilization of these services remained considerably low. The study further demonstrated that exposure to gender-based violence was associated with substantial psychological consequences, including fear, anxiety, depression, emotional trauma, and

symptoms consistent with post-traumatic stress disorder (PTSD). These findings highlight the persistent structural, social, and institutional barriers that prevent sex workers from accessing appropriate support services despite their availability.

The relatively high level of awareness of healthcare and legal support services observed in this study may be attributed to ongoing public health interventions, community outreach activities, and peer-education programs targeting key populations within the Federal Capital Territory. However, awareness alone did not translate into service utilization. Similar findings have been reported in previous studies conducted in sub-Saharan Africa, where sex workers often possess knowledge of available services but remain reluctant to utilize them because of fear of discrimination, stigma, criminalization, and concerns about confidentiality [3, 7]. The discrepancy between awareness and utilization observed in the present study suggests that increasing service availability alone is insufficient unless accompanied by measures that address social and structural barriers.

Fear of arrest and harassment by law enforcement agencies emerged as one of the most important barriers to accessing support services. This finding is consistent with reports from Amnesty International and Human Rights Watch, which documented widespread fear of police victimization among sex workers operating in criminalized environments [8, 13]. Criminalization creates a climate of fear that discourages survivors from reporting violence or seeking legal protection. Similar observations were reported by Platt et al. [12], who demonstrated that restrictive legal frameworks negatively affect health outcomes and reduce access to justice among sex workers. The findings therefore support growing international calls for legal reforms that prioritize the safety, health, and human rights of sex workers.

Stigma and discrimination within healthcare settings were also identified as major obstacles to service utilization. Many participants reported experiences of judgment, disrespect, and discriminatory treatment by healthcare providers. These findings corroborate those of Scorgie et al. [3], who reported widespread stigma against sex workers in healthcare facilities across several African countries. Healthcare-related stigma has been shown to reduce trust in healthcare systems, discourage treatment-seeking behavior, and contribute to delayed utilization of essential health services. Similarly, UNAIDS [7] reported that discriminatory healthcare practices remain significant barriers to service access among key populations globally.

The present study revealed substantial mental health consequences associated with exposure to gender-based violence. Fear and insecurity were the most commonly reported psychological outcomes, followed by anxiety, depression, and PTSD-related symptoms. These findings are consistent with previous studies demonstrating strong associations between violence and poor mental health among sex workers [4, 17, 18]. Argento et al. [17] reported that repeated exposure to violence significantly increases the likelihood of depression, anxiety disorders, emotional exhaustion, and suicidal ideation among sex workers. The high prevalence of psychological distress observed in the current study underscores the need for routine mental health screening and trauma-informed care within services targeting vulnerable populations.

The widespread occurrence of PTSD-related symptoms among respondents is particularly concerning. Participants reported recurrent nightmares, insomnia, intrusive memories, emotional numbness, hypervigilance, and persistent fear. These symptoms are characteristic of trauma-related psychological disorders and reflect the cumulative effects of repeated exposure to violence. Similar findings have been reported among sex workers in

multiple settings, where chronic exposure to violence contributes to long-term psychological dysfunction and reduced quality of life [1, 11]. The findings emphasize the importance of integrating mental health services into existing healthcare programs serving sex workers.

Economic vulnerability emerged as another important factor influencing both exposure to violence and poor mental health outcomes. Many respondents indicated that financial constraints limited their ability to access counselling services, legal aid, and safe accommodation. Economic dependence often reduces the ability of sex workers to avoid abusive situations or seek alternative livelihoods. Similar findings were reported by Puri et al. [21], who found that financial insecurity significantly increased vulnerability to violence and psychological distress among female sex workers. Economic empowerment interventions may therefore play a critical role in reducing vulnerability and improving overall wellbeing.

The qualitative findings provided important contextual insights into the lived experiences of respondents. Participants consistently described feelings of fear, loneliness, hopelessness, emotional exhaustion, and social isolation. Many reported that experiences of violence had eroded their self-esteem and trust in both healthcare providers and law enforcement agencies. These narratives complement the quantitative findings and reinforce previous evidence indicating that the effects of gender-based violence extend beyond physical harm to include profound emotional and psychological consequences [17].

Mistrust of law enforcement agencies emerged as a recurring theme throughout the focus group discussions. Participants described experiences of harassment, extortion, intimidation, and verbal abuse by police officers. Such experiences contribute to underreporting of violence and discourage survivors from seeking legal redress. These findings support the theory of structural

violence proposed by Farmer [22], which argues that social institutions and unequal power structures can perpetuate violence and poor health outcomes among marginalized populations. The persistent mistrust observed in this study demonstrates the need for institutional reforms that promote accountability, human rights protection, and equitable access to justice.

The findings of this study are also consistent with previous Nigerian studies examining violence among sex workers. Oyefara [19] reported that stigma, poverty, and criminalization contribute substantially to violence and poor psychosocial wellbeing among sex workers in Nigeria. Similarly, Ochonye et al. [23] documented high levels of violence and barriers to healthcare access among female sex workers in Benue State. More recently, Ochonye et al. [20] demonstrated that despite increased awareness of violence prevention initiatives, significant gaps remain in access to mental health services, legal support, and survivor-centered care. These findings collectively suggest that violence against sex workers remains a persistent public health and human rights challenge in Nigeria.

Overall, the findings of this study demonstrate that gender-based violence among sex workers is not merely an issue of individual victimization but rather a manifestation of broader structural inequalities involving poverty, criminalization, stigma, gender discrimination, and inadequate institutional support. Effective responses therefore require comprehensive, multisectoral, and rights-based approaches that address both immediate support needs and the underlying determinants of vulnerability. Such interventions should include trauma-informed mental health services, stigma-reduction initiatives, legal reforms, economic empowerment programs, strengthened community support systems, and improved access to survivor-centered healthcare services.

Conclusion

This study demonstrated that gender-based violence remains highly prevalent among sex workers in Abuja and is associated with substantial psychological consequences including anxiety, depression, fear, emotional trauma, and symptoms of post-traumatic stress disorder. Although awareness of healthcare and legal support services was relatively high, utilization remained low due to stigma, fear of arrest, discrimination, lack of confidentiality, and mistrust of law enforcement agencies. The findings highlight the urgent need for trauma-informed mental health services, strengthened legal protection mechanisms, community empowerment programs, and policy reforms aimed at reducing structural inequalities affecting sex workers. Addressing these barriers is essential for improving mental health outcomes and ensuring equitable access to survivor-centered support services.

Study Limitations

This study has several limitations. First, the cross-sectional design limits the ability to establish causal relationships between exposure to gender-based violence and mental health outcomes. Second, data were based on self-reported experiences and may therefore be subject to recall bias and social desirability bias. Third, the use of convenience and snowball sampling techniques may limit the generalizability of findings to all sex workers in Abuja and Nigeria. Despite these limitations, the mixed-methods approach provided valuable insights into the experiences of violence, service utilization, and mental health challenges among a hard-to-reach population.

Conflict of Interest

The authors declare no conflict of interest.

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Author Contributions

Derby Ifeanyichukwu Collins-Kalu: Conceptualization, Data Collection, Methodology, Writing Formal Analysis and Project Administration. Christina Mbongueh Mohnchimbare: Writing – Original Draft Preparation. Henri Lucien Kamga: Supervision – Review and Editing.

Ethical Approval

Ethical approval for this study was obtained from the relevant institutional ethics review

board. Written informed consent was obtained from all participants before data collection.

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Data Availability

The datasets generated and/or analyzed during the current study are available from the corresponding author upon reasonable request.

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