

Mental Health Status of Adult Women Aged 18–49 Engaged in Prostitution in Livingstone District, Zambia

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ABSTRACT

Introduction: Female sex workers (FSWs) psychological health has become a significant issue that affects public health in most low- and middle-income countries (LMICs). Women engaged in prostitution are at heightened risk of mental health challenges, including depression, anxiety, post-traumatic stress disorder (PTSD), and substance abuse. These are often worsened by stigma, social isolation, discrimination, fear of seeking help, poverty, low levels of education, exposure to violence, drug and alcohol use, and HIV infection. This study aimed at assessing the mental health status of adult women (aged 18-49) engaged in prostitution in Livingstone District of Zambia.

Material and Methods: Moreover, primary data for this study were collected from respondents using a researcher-administered structured questionnaire consisting of closed-ended questions. The questionnaire was reviewed by the researcher's supervisor to ensure content validity, and the researcher underwent training in cultural sensitivity and trauma-informed approaches to ensure respectful engagement with participants. A pilot study was conducted with a small group of women engaged in prostitution from selected brothels, streets, bars, and lodges in Livingstone District to evaluate the clarity, reliability, and consistency of the data collection instrument. To minimize the risk of selection bias, all streets, brothels, bars, and lodges that participated in the pilot study within Livingstone district were excluded from the main study sample. Cronbach's alpha was used to assess the internal consistency reliability of the questionnaire items related to mental health.

Results: The study found that most respondents, 61 (59.8%), were aged between 21 and 30 years. In addition, 79 (77.5%) belonged to the middle class, while 74 (72.5%) were single and 83 (81.4%) were unemployed. The study also found that the majority of study participants involved in prostitution, 96 (94.1%), were diagnosed with mental health disorders, while only 6 (5.9%) were not. Marital status ($p = 0.003$), level of education ($p = 0.001$), social class ($p = 0.009$), occupation ($p = 0.006$), and age ($p = 0.004$) were found to be significantly correlated with the prevalence of mental health disorders among adult women aged 18–49 engaged in prostitution in the Livingstone District of Zambia. Religion was not significantly associated with mental health disorder prevalence ($p = 0.200$). These findings suggest that socio-economic and demographic characteristics play an important role in shaping mental health outcomes in this vulnerable population. The study also revealed that the vast majority of respondents 83 (81.4%) were unemployed with living conditions reported as mostly adequate 92 (90.2%). Despite extreme workloads, with more than half respondents working over 60 hours per week, all participants 102 (100%) lacked access to healthcare services. The study also found that more than half of the women (54; 52.9%) reported experiencing physical abuse, while 22 (21.6%) experienced emotional abuse, 16 (15.7%) experienced sexual abuse, and 60 (58.8%) reported social isolation. Most respondents coped with stress primarily by talking to friends or family (75.5%), while fewer relied on substance use (13.7%), recreational activities (5.9%), or physical exercise (3.9%). Stigma was identified as the main barrier to mental health service utilization (75.5%), compared to lack of awareness (23.5%) and financial constraints (1.0%). The majority (89.2%) perceived their coping mechanisms as effective, and nearly all (98.0%) had considered leaving prostitution to improve their mental health status, though most (96.1%) remained due to financial dependence. Despite widespread access to community mental health services (97.1%), actual utilization was very low, with only 15.7% ever accessing support.

Conclusion: All in all, the study highlights the vulnerability of women in prostitution, most of whom are young, unemployed, and living under precarious conditions. High rates of mental health disorders, extreme workloads, and widespread experiences of violence and social isolation accentuate the severity of their challenges. Although many rely on informal coping strategies and perceive them as effective against stress, stigma and lack of service utilization leave them excluded from formal mental health support programs. Financial dependence remains the primary reason for continued involvement in prostitution, despite nearly all participants expressing a desire to leave. The author recommends that, strengthening legal frameworks against violence, improving psychosocial support, creating sustainable livelihood opportunities, and expanding accessible, stigma-free healthcare with targeted interventions are critical to safeguarding the rights, dignity, and well-being of this marginalized population while addressing both mental health and socioeconomic barriers.

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Introduction

Globally, Mental illness continues to disproportionately affect vulnerable populations, with significant disparities in access to and utilization of appropriate treatment services. Mental health encompasses the emotional, psychological, and social well-being of individuals, influencing how they think, feel, and behave, as well as their ability to manage stress and interact with others. Prostitution is a complex phenomenon that is frequently associated with a range of mental health challenges for those involved, arising from societal stigma, emotional distress, and the demanding nature of the work itself. Sex workers frequently experience stigma, social marginalization, and criminalization within the societies in which they live, and involvement in sex work can have significant effects on their psychological well-being [1].

Evidence also explains that, women in prostitution (WIP) face very high rates of sexual, physical, and emotional abuse and are much more susceptible to mental disturbances and trauma than the general population. The studies that best cover the needs of WIP are those ones that focus on treating trauma, predisposing trauma, and the trauma that occurred during the prostitution [2].

Moreover, female prostitutes appear to be more prone to health issues than the general population, in particular, sexually transmitted diseases (STD) or HIV/AIDS, respiratory, heart-related, skin and urological disorders, as well as mental health issues. In such cases, women are often afflicted with mood disorders, predominantly with depressive symptomatology and anxiety disorders in addition to posttraumatic symptomatology suicide attempts and substance use disorders. Besides, the mortality rates of these women are significantly higher as compared to women who never participated in prostitution, and the most common reasons of death are violence-related, suicide and drug use [3-8].

Methods and Materials

A cross-sectional study design was utilized to assess the mental health status, experiences, and coping mechanisms of adult women aged 18–49 years engaged in prostitution in Livingstone District, Zambia. Ethical clearance for the study was obtained from Lusaka Apex Medical University Biomedical Research Ethics Committee IRB Number 00001131. Prior to data collection, written informed consent was obtained from all eligible study participants. The objectives and purpose of the study were clearly explained to the respondents either in small peer-group sessions or individually to ensure informed participation. Participants were informed that the study posed no risk of harm, offered no direct personal benefits, and that participation was entirely voluntary. They were also advised of their right to withdraw from the study at any time without any consequences. Confidentiality and anonymity were strictly maintained, and no personally identifiable information including names, National Registration Card numbers, residential addresses, or phone numbers was collected. All research materials were securely stored, with access limited to the researcher. Participants were informed that completion of the questionnaire would take approximately 9–12 minutes.

Moreover, primary data for this study were collected from respondents using a researcher-administered structured questionnaire consisting of closed-ended questions. The questionnaire was reviewed by the researcher's supervisor to ensure content validity, and the researcher underwent training in cultural sensitivity and trauma-informed approaches to ensure respectful engagement with participants. A pilot study was conducted with a small group of women engaged in prostitution from selected brothels, streets, bars, and lodges in Livingstone District to evaluate the clarity, reliability, and consistency of the data collection instrument. To minimize the risk of selection bias, all streets, brothels, bars, and lodges that participated in the pilot study within the Livingstone district were excluded from the main study sample. Cronbach's alpha was used to assess the internal consistency reliability of the questionnaire items related to mental health domains.

The study proposal was submitted to the Department of Public Health at Texila American University for peer review and methodological validation prior to implementation. The sample size was determined using Cochran's formula for cross-sectional studies. Assuming an estimated prevalence of mental health challenges among women engaged in prostitution, a 95% confidence level, and a 5% margin of error, a minimum sample size was calculated. To account for potential non-response and incomplete questionnaires, the sample size was adjusted upward by 20% resulting in a final sample of 102 participants. This adjustment was necessary because the study population (adult women engaged in prostitution) is considered a hard-to-reach and stigmatized group. Individuals in such populations may be reluctant to participate due to fear of stigma, privacy concerns, or social desirability bias. Previous research indicates that non-response rates among similar populations can range from 20% to 30% or higher, making it prudent to increase the sample size to ensure sufficient statistical power and representativeness of the final sample. A combined Respondent-Driven Sampling (RDS), Time-Location Sampling (TLS), and stratified random sampling were used to recruit 102 adult women aged 18–49 years engaged in prostitution in Livingstone District. TLS facilitated systematic recruitment of venue-based participants from selected brothels, streets, bars, and lodges, while RDS enabled access to hidden participants through peer networks, with initial "seeds" recruiting additional respondents. Stratified random sampling ensured proportional representation of key sub-groups, such as age and work setting.

Primary data collection was conducted between 20th August and 30th September, 2024 in Livingstone District. Completed questionnaires were reviewed for completeness and accuracy before data entry. The collected primary data were analyzed using the Statistical Package for Social Sciences (SPSS) version 28. Descriptive statistics were used to summarize the data and present findings in tables and charts. Multivariate logistic regression analysis was performed to examine associations between socio-demographic factors and mental health outcomes, with statistical significance set at $p < 0.05$.

Table 1 shows that most respondents were young adults, with the majority aged 21–30 years (61, 59.8%), making this the most represented age group, followed by those aged 31–40 years (20, 19.6%) and 18–20 years (15, 14.7%), while a smaller proportion

were aged 41–49 years (6, 5.9%). The study also shows that most of the respondents were unemployed 83 (81.4%), engaged in informal employment 18 (17.6%) and only one respondent was in formal employment 1 (1.0%). Social class identification was dominated by the middle class 79 (77.5%), followed by the lower class 20 (19.6%), with a small proportion identifying as upper class 3 (2.9%). With regard to marital status, the majority of respondents were single 74 (72.5%), followed by those who were divorced 18 (17.6%), separated 8 (7.8%), and

widowed 2 (2.0%). Educational attainment was modest, with equal proportions of respondents having completed primary 35 (34.3%) and secondary education 35 (34.3%), while 31 (30.4%) had attained tertiary education and only one respondent 1 (1.0%) reported having no formal education. The table also illustrates that nearly half of the respondents 50 (49.0%) had one child, while 23 (22.5%) reported having no children. The findings further show that 11 (10.8%) had two children, and 16 (15.7%) reported having three children.

Results

Table 1: Demographic Data

VARIABLES	RESPONSES	FREQUENCES	PERCENTAGES (%)
AGE	18-20	15	14.7%
	21-30	61	59.8%
	31-40	20	19.6%
	41-49	6	5.9%
OCCUPATION	Formal employment	1	1.0%
	Informal employment	18	17.6%
	Unemployed	83	81.4%
SOCIAL CLASS	Lower class	20	19.6%
	Middle class	79	77.5%
	Upper class	3	2.9%
MARITAL STATUS	Divorced	18	17.6%
	Separated	8	7.8%
	Single	74	72.5%
	Widowed	2	2.0%
LEVEL OF EDUCATION	None	1	1.0%
	Primary	35	34.3%
	Secondary	35	34.3%
	Tertiary	31	30.4%
NUMBER OF CHILDREN	Zero	23	22.50%
	One	50	49.00%
	Two	11	10.80%
	Three	16	15.70%
	Four	2	2.00%

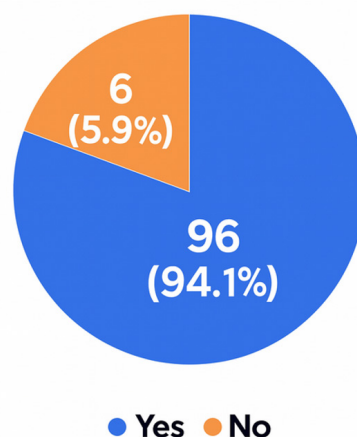


Figure 1: Prevalence of Mental Health Disorders Among Adult Women (Aged 18-49) Involved in Prostitution

Figure 1 shows that the majority of study participants involved in prostitution 96 (94.1%) were diagnosed with mental health disorders, while 6 (5.9%) of respondents were not diagnosed with mental health disorders in Livingstone the tourist capital of Zambia.

Table 2: Socio-Demographic Factors Associated with Mental Health Challenges Among Adult Women in Prostitution

QUESTIONS	RESPONSES	FREQUENCES	PERCENTAGE
What is your occupation?	Formal employment	1	1.0%
	Informal employment	18	17.6%
	Unemployed	83	81.4%
How would you describe your living conditions?	Adequate	92	90.2%
	Comfortable	1	1.0%
	Poor	9	8.8%
What is your monthly income level?	Less than k1000	38	37.3%
	k1000 – k2000	14	13.7%
	k2000 – k3000	14	13.7%
	3000 - 4000	36	35.3%
How many hours do you typically work per week?	Less than 20 hours	11	10.8%
	20-40 hours	37	36.3%
	41-60 hours	1	1.0%
	More than 60 hours	53	52.0%
Do you have access to healthcare services?	Yes	0	0.0%
	No	102	100%
How would you describe your living conditions?	Adequate	92	90.2%
	Comfortable	1	1.0%
	Poor	9	8.8%
Have you experienced any form of violence or abuse in the past year?	Yes	95	93.1%
	No	7	6.9%
If yes, what type of violence or abuse have you experienced?	Emotional abuse	22	21.6%
	Financial abuse	3	2.9%
	Physical abuse	54	52.9%
	Sexual abuse	16	15.7%
	Others	7	6.9%
How often do you feel socially isolated or lonely?	Occasionally	60	58.8%
	Rarely	42	41.2%
On a scale of 1 to 10, how would you rate your overall mental well-being currently? (1 being very poor, 10 being excellent)	1-6	0	0.0%
	7	1	1.0%
	8	23	22.5%
	9	72	70.6%
	10	6	5.9%

Table 1 indicate that, a substantial majority of respondents 83 (81.4%) were unemployed, 18 (17.6%) in informal employment, and only 1 (1.0%) in formal employment. Living conditions were reported as mostly adequate by 92 women (90.2%), while 9 (8.8%) described them as poor and just 1 (1.0%) as comfortable. Income levels show clustering at extremes, with 38 (37.3%) earning less than K1000, 36 (35.3%) between K3000–4000, and 28 (27.4%) between K1000–3000, pointing to volatility in earnings. Workload is excessive, with 53 (52.0%) working more than 60 hours per week, 37 (36.3%) between 20–40 hours, and only 12 (11.8%) working fewer or moderate hours, reflecting high exposure to burnout and unsafe conditions. Strikingly, all 102 respondents (100%) reported no access to healthcare services, leaving them entirely excluded from medical and psychological support. Violence is near-universal, with 95 (93.1%) experiencing abuse, most commonly physical (54; 52.9%), followed by emotional (22; 21.6%), sexual (16; 15.7%), financial (3; 2.9%), and others (7; 6.9%). Social isolation is also prevalent, with 60 (58.8%) occasionally lonely and 42 (41.2%) rarely lonely, showing limited social support. Interestingly, self-rated mental well-being appears very high, with 72 (70.6%) rating themselves at 9, 23 (22.5%) at 8, 6 (5.9%) at 10, and only 1 (1.0%) at 7, while none rated themselves poorly (1–6).

Table 3: Coping Mechanisms Utilized by Adult Women in Prostitution

QUESTIONS	RESPONSES	FREQUENCES	PERCENTAGE
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How do you usually cope with stress?	Engaging in recreational activities	6	5.9%
	Exercise or physical activity	4	3.9%
	Others	1	1.0%
	Substance use (e.g., alcohol, drugs)	14	13.7%
	Talking to friends or family	77	75.5%
Do you have access to mental health support services in your community?	Yes	99	97.1%
	No	3	2.9%
If yes, have you ever utilized these services?	Yes	16	15.7%
	No	86	84.3%
What barriers, if any, prevent you from accessing mental health support services?	Lack of awareness about available services	24	23.5%
	Lack of financial resources	1	1.0%
	Stigma associated with mental health	77	75.5%
How often do you engage in self-care activities?	Monthly	37	36.3%
	Rarely	65	63.7%
Do you feel that your coping mechanisms effectively alleviate your mental health stressors?	Yes	91	89.2%
	No	11	10.8%
Have you ever considered leaving prostitution to improve your mental health?	Yes	100	98.0%
	No	2	2.0%
If yes, what factors influence your decision to stay in prostitution despite mental health challenges?	Financial stability	98	96.1%
	Lack of alternative employment opportunities	4	3.9%
How do you perceive the role of the government or NGOs in addressing mental health issues among women engaged in prostitution?	Supportive	8	7.8%
	Neutral	94	92.2%
	Inadequate	0	0.0%
What additional resources or support would you find helpful in managing your mental health while engaged in prostitution?	Access to counseling services	15	14.7%
	Financial assistance	39	38.2%
	Job training programs	48	47.1%

Table 3 shows that most respondents, 77 (75.5%), reported coping with stress by talking to friends or family. In contrast, fewer respondents reported engaging in substance use 14 (13.7%), recreational activities (6, 5.9%), physical exercise 4 (3.9%), or other methods 1 (1.0%) as coping strategies. Although most respondents reported having access to mental health support services within their communities 99 (97.1%), actual utilization of these services was markedly low, with only 16 (15.7%) having ever accessed such support. The results also show that a substantial proportion of respondents, 77 (75.5%), indicated that stigma was the most prominent barrier to mental health service utilization, compared to lack of awareness of available services 24 (23.5%) and financial constraints 1 (1.0%). The study further demonstrates that engagement in self-care activities was generally limited, with 65 (63.7%) respondents reporting rare participation and 37 (36.3%) indicating monthly engagement. Despite these challenges, the majority of respondents perceived their coping mechanisms as effective in alleviating mental health stressors 91 (89.2%). Nearly all participants 100 (98.0%) reported having considered leaving prostitution to improve their mental health. Additionally, the majority of respondents, 98 (96.1%), indicated that their continued involvement in prostitution was primarily attributed to financial stability. With regard to institutional support, most respondents 94 (92.2%) perceived the role of

government and non-governmental organizations as neutral. The most frequently identified additional support needs included job training programs 48 (47.1%), financial assistance 39 (38.2%), and access to counseling services 15 (14.7%).

Table 4: Association Between Demographic Factors and the Prevalence of Mental Health Disorders Among Adult Women (Aged 18–49) Engaged in Prostitution

SOCIAL DEMOGRAPHIC VARIABLES	χ ² value	df	p-value
Marital status	22.382	5	0.003**
Religion	21.160	4	0.200
Level of education	24.275	6	0.001**
Social class	20.753	2	0.009**
Occupation	22.014	8	0.006**
Age	23.431	3	0.004**

(P < 0.05).

The chi-square analysis in table 4 indicates that marital status (p = 0.003), level of education (p = 0.001), social class (p = 0.009), occupation (p = 0.006), and age (p = 0.004) were found to be significantly correlated with the prevalence of mental health disorders among adult women aged 18–49 engaged in

prostitution in the Livingstone District of Zambia. Religion was not significantly associated with mental health disorder prevalence ($p = 0.200$). These findings suggest that socio-economic and demographic characteristics play an important role in shaping mental health outcomes in this population.

Discussion

Demographic Data

The results from this study indicate that most respondents comprised of young adults (2135 59.8) and a slightly smaller number were aged 3134 (19.6), whilst even fewer were aged 1830 (14.7), which explains the dominance of the former. The fact that most of the people who participated in this study are young adults is typical of many women who have ventured into the world of prostitution and in this case, economic vulnerability, lack of employment and social pressures at the young age of adulthood tend to push them into the sex trade. The proportion of older women is relatively lower, which can either suggest that some women leave prostitution at some point in their lives or that individuals who are older are impacted by some social or economic constraints to joining the profession. The importance of this age distribution is that it can lead to exposure to occupational stressors, susceptibility to exploitation and types of coping strategy used, with young women possibly depending more on informal social networks and older women possibly depending on more adaptive psychological coping strategies in the long run.

Concerning employment status, the majority of the respondents were unemployed (83, 81.4%), followed by a lesser percentage of informal employment (18, 17.6%), and the remaining percentage was the formal employment with only one respondent (1, 1.0%). Such a high unemployment rate indicates the economic hardship of women participating in the study and it is therefore probably the reason women turn to sex work as one of the major sources of their income. A lack of formal employment opportunities may contribute to the financial instability and exposes the prostitutes to stress factors. The percentage of identification with social classes was as follows: middle class (79, 77.5%), lower class (20, 19.6%), and a minor percentage of upper class (3, 2.9%). Although the fact that their majority of respondents were in the middle class might have been premised on self-perceived social status, the fact that even those who describe themselves as middle-class participants are under financial strains shows that social class does not insulate women against economic vulnerability.

On marital status, the question was mostly answered by singles (74, 72.5%), then those who were divorced (18, 17.6%), separated (8, 7.8%), and widowed (2, 2.0%). The fact that the percentage of single women is high may also mean that they are not supported by partners, which might be the cause of financial reliance on sex work and the development of the coping strategies. Single women might be depending more on peer or community support in managing stress whereas those who are divorced or separated may have combined stress factors that are associated with their family matters and stigmatization.

The education level of respondents was also moderate with equal number completing primary education (35, 34.3), secondary education (35, 34.3) and 31 (30.4) completed tertiary education, and only one (1.0) has no formal education. Lack of education may limit the connection to the formal job opportunities, which

may enhance reliance on sex work. Simultaneously, the fact that there are respondents with higher education levels indicates that the involvement in prostitution cannot be completely attributed to a lack of education but may also indicate the influence of the socioeconomic factors in general. The level of education can also determine coping styles hence more education of women can equip them with more thinking and problem-solving abilities of stress in their occupation.

Prevalence of Mental Health Disorders Among Adult Women Aged Between 18 and 49 Years Involved in Prostitution

This research findings reveal that the burden of mental health disorders varies between women engaged in prostitution in Livingstone District with 94.1% of the participants diagnosed with one of the mental health disorders and 6 (5.9) of the respondents not diagnosed with mental health disorders. This is much higher compared to many other studies that have been carried out internationally implying that there is a very serious case of mental health among sex workers in the setting. The prevalence rate might indicate multiplied susceptibility, which could be connected with poverty, stigmatization, criminalization, violence exposure, and lack of access to mental health care in the tourist-related capital of Zambia where the process of sex work is typically informal and highly insecure. Related to results in high-income environments, it is possible to note similarities in general awareness about mental health as a significant issue, yet there are differences in intensity. Indicatively, according to a study carried out in Zurich, the level of mental disorders in female sex workers was high and mental illnesses were closely associated with violence and emotional and psychological weight of sex work. Nevertheless, the prevalence was lower in Zurich than it is in the present study, which can be attributed to the ease of access to social protection services, mental health service, and harm-reduction interventions in Switzerland than in low-resource environments like Zambia [9].

More contrast can be observed compared to the global evidence that has been synthesized using systematic reviews and meta-analyses. It was found that there was a significant heterogeneity in the prevalence of mental health problems in female sex workers depending on HIV status, migration, and substance use. Although their review failed to detect the legal and economic context that might greatly influence prevalence overall, the exceedingly high prevalence in the present study suggests that the contextual factors in Livingstone (criminalization, exploitation related to tourism and lack of psychosocial support) could contribute to greater mental health risks than those found globally [10].

Additionally, literature on low- and middle-income countries gives a better comparison though its prevalence is higher in this case. One of the studies found that pooled prevalence rates of depression (41.8%), anxiety (21.0%), PTSD (19.7%), and suicidal ideation (22.8) were found to be high among female sex workers. Although these data indicate that mental illness rates are prevalent in such environments, they are still quite low compared to the almost universal diagnosis in the present study. Such difference can be explained by the variation in the method of diagnosing, the study design, or the cumulative impact of unaddressed violence, substance use, and economic insecurity in Livingstone.

Conversely, a single line of study established that only 48.8 percent of the female sex workers reported ever being diagnosed with a mental health problem with depression and anxiety being the most prevalent. They have identified certain risk factors that include their substance use, childhood trauma, and employment in street-based or informal indoor environments. Although the risk factors associated with it are similar to the rest of the literature and might as well impact the target population of the present study, the significantly higher prevalence in Livingstone highlights a larger mental health burden, which might be associated with the insufficiency of mental health resources and an increased cumulative trauma burden. As a rule, the results of this study support the tendency in the world literature that female sex workers are disproportionately subjected to the effects of mental health disorders, and also indicate that the level of the load is significantly greater in Livingstone District in relation to most other settings. This implies that there is a dire necessity of context-specific mental health and trauma-informed care and structural response to violence, stigma, and socio-economic vulnerability among women involved in prostitution in Zambia [12].

Socio-Demographic Factors Associated with Mental Health Challenges Among Adult Women in Prostitution

The results from this study indicate that, a substantial majority of respondents 83 (81.4%) were unemployed, 18 (17.6%) in informal employment, and only 1 (1.0%) in formal employment. Living conditions were reported as mostly adequate by 92 women (90.2%), while 9 (8.8%) described them as poor and just 1 (1.0%) as comfortable. Income levels show clustering at extremes, with 38 (37.3%) earning less than K1000, 36 (35.3%) between K3000–4000, and 28 (27.4%) between K1000–3000, pointing to volatility in earnings. Workload is excessive, with 53 (52.0%) working more than 60 hours per week, 37 (36.3%) between 20–40 hours, and only 12 (11.8%) working fewer or moderate hours, reflecting high exposure to burnout and unsafe conditions. Strikingly, all 102 respondents (100%) reported no access to healthcare services, leaving them entirely excluded from medical and psychological support. Violence is near-universal, with 95 (93.1%) experiencing abuse, most commonly physical (54; 52.9%), followed by emotional (22; 21.6%), sexual (16; 15.7%), financial (3; 2.9%), and others (7; 6.9%). Social isolation is also prevalent, with 60 (58.8%) occasionally lonely and 42 (41.2%) rarely lonely, showing limited social support. Interestingly, self-rated mental well-being appears very high, with 72 (70.6%) rating themselves at 9, 23 (22.5%) at 8, 6 (5.9%) at 10, and only 1 (1.0%) at 7, while none rated themselves poorly (1–6).

Moreover, it is found that majority of the respondents were not working (81.4), or employed in an informal manner (17.6), and therefore their economic position is seriously weak, and their incomes are not stable. This observation is comparable to that of a systematic review in sub-Saharan Africa, which determined that poor mental health in female sex workers was primarily related to poverty, criminalization, and structural marginalization as they augmented stress and restricted the access to economic and social chances. According to the two studies, there stands a close relationship that exists between precarious employment and mental health problems. Moreover, the income concentration in low and middle as well as high

workloads that were reported in this study was a manifestation of the socio-economic strains on Kenyan researches which showed that poverty and employment deprivation were associated to have psychic distress on sex workers. Similar results can be compared in terms of demonstrating that economic instability and workplace strains contribute to the vulnerability of mental health, though the Kenyan study also refined at the role of family destabilization and harmful gender [13,14].

In addition, the violence was almost universal in this study with 93.1% of the respondents undergoing some form of abuse. These conclusions are closer to the conclusions made by the sub-Saharan Africa review that found pervasive violence as one of the main structural drivers that have negative effects on the mental health. Both articles show that the risk of experiencing mental distress in women who are engaged in sex work is foreseeable because of being exposed to physical, emotional, and sexual violence [13].

Otherwise, as an interesting finding, despite the high rates of unemployment, violence and inaccessibility to healthcare, people in this study measured their mental health as high. This compares to findings of a study that was carried out in Bangladesh, where socio-demographic factors such as age, education, and income were examined with perceived stress, but none of them showed significant correlations and, hence, differences in self-perceived mental health are relative to the context. Besides that, this disparity may be explained by the fact that the cultural or psychological coping mechanisms influence the self-reporting of well-being. Finally, other studies have shown that age and health condition influenced mental health thus their impact can also be applied to the results. A study conducted on a group of female sex workers showed that the older they were and the HIV positive state the higher the chances of them being majorly depressed. These results are reliable in supporting the notion that socio-demographic factors, including age and health status, could contribute to augmenting mental health problems, despite the scenarios when the participants report experiencing high self-rated well-being [15,16].

Coping Mechanisms Used by Adult Women to Manage Mental Health Stressors in Prostitution

The results from the current study shows that most respondents, 77 (75.5%), reported coping with stress by talking to friends or family. In contrast, fewer respondents reported engaging in substance use 14 (13.7%), recreational activities (6, 5.9%), physical exercise 4 (3.9%), or other methods 1 (1.0%) as coping strategies. Although most respondents reported having access to mental health support services within their communities 99 (97.1%), actual utilization of these services was markedly low, with only 16 (15.7%) having ever accessed such support. The results also show that a substantial proportion of respondents, 77 (75.5%), indicated that stigma was the most prominent barrier to mental health service utilization, compared to lack of awareness of available services 24 (23.5%) and financial constraints 1 (1.0%). The study further demonstrates that engagement in self-care activities was generally limited, with 65 (63.7%) respondents reporting rare participation and 37 (36.3%) indicating monthly engagement. Despite these challenges, the majority of respondents perceived their coping mechanisms as effective in alleviating mental health stressors 91 (89.2%). Nearly all participants 100 (98.0%) reported having

considered leaving prostitution to improve their mental health. Additionally, the majority of respondents, 98 (96.1%), indicated that their continued involvement in prostitution was primarily attributed to financial stability. With regard to institutional support, most respondents 94 (92.2%) perceived the role of government and non-governmental organizations as neutral. The most frequently identified additional support needs included job training programs 48 (47.1%), financial assistance 39 (38.2%), and access to counseling services 15 (14.7%).

The results are in line with the earlier literature, which has given a central place to the social support in coping amongst women in prostitution. Research conducted in various nations identified that women use family, peer, and network communities to cope with fear, anxiety, and stress due to professional difficulties. Likewise, the fact that the conversation with friends or family was found to be the most common form of coping in the current study can be compared to the evidence suggesting that social support is also one of the main adaptive coping strategies in the specified population [17,18].

Conversely, the current study reported only a small percentage of respondents (13.7) using substance use as a coping strategy which is less than other researches. Drug use among women in prostitution was very common as they struggled with intra- and interpersonal stressors, boosted self-confidence and reduced sexual distress. The disparity could be the disparity in study populations, cultural backgrounds or availability of substances, and the fact that the predominance of maladaptive coping mechanisms including drug use might be different across settings. The low involvement in the formal mental health care also becomes a particular aspect of the current study because research findings throughout the globe reveal that stigma, financial constraints, and awareness deficiency hinder the use of professional assistance. Access was also reported to be high; however, utilization was low, which highlights the difference between availability and the real uptake of the services, which has been noticed in other settings where social support and informal coping mechanisms are prioritized over formal mental health interventions [17,19,20].

Moreover, the results of these studies compare to longitudinal and resilience-oriented ones, where women who had left prostitution over a long time were found to have more adaptive coping strategies (positive reappraisal and emotional regulation) and active sex workers were found to have worse mental health outcomes and low-effective coping. This is consistent with the present research that has found out that active sex workers are almost entirely dependent on informal sources of social support, as opposed to formal coping mechanisms, indicating that coping ability varies with time and variation in occupational status. Lastly, adaptive internal coping factors like self-acceptance, achievement orientation and perceived fair treatment have been linked to reduced depression and post-traumatic stress symptoms in women in prostitution [5].

These internal resources were not directly quantified in the current study, but it was noted that most of the participants subjectively experienced that their coping mechanisms worked regardless of their little use of the formal support services and this implied that internal and social resources can work in concert to alleviate mental health stressors. Otherwise, the present study

supports the existing evidence according to which social support is one of the main coping mechanisms of women in the sphere of prostitution, and maladaptive strategies like substance use seem to be situation-specific. It further supports the position of stigma, financial restrictions, and occupational stressors in influencing coping styles, and underscores the possibility of interventions being used to address internal coping resources and access to mental health services to increase adaptive coping in women who are engaged in sex work [17,21,22].

Recommendations

- The investigator recommends promoting economic empowerment by introducing targeted job training initiatives, financial support schemes, and sustainable livelihood opportunities to reduce reliance on prostitution for income and enhance long-term economic resilience, supported by community engagement and social mobilization to ensure participation, relevance, and long-term sustainability.
- The author recommends strengthening protection against violence through the implementation and enforcement of robust legal frameworks to prevent physical, emotional, sexual, and financial abuse, alongside the provision of safe reporting mechanisms and survivor-centered support services, complemented by health education, health communication, community engagement, and social mobilization to enhance awareness of rights, reporting mechanisms, and community accountability.
- The researcher recommends expanding accessible mental health services by establishing community-based, stigma-free mental health programs tailored to women engaged in prostitution, ensuring that both psychological and medical support services are available, accessible and effectively utilized.
- The researcher further recommends enhancing social support and self-care initiatives by developing peer support networks, recreational activities, and awareness campaigns aimed at reducing social isolation, promoting healthy coping mechanisms, and strengthening community integration and participation.

Conclusion

This study concludes that women engaged in prostitution are predominantly young, economically vulnerable, and experience a disproportionately high burden of mental health disorders, violence, social isolation, and limited access to healthcare services. Despite widespread availability of community mental health services, utilization remains critically low due largely to stigma, underscoring a significant gap between service provision and effective access. Financial dependence emerged as the primary factor sustaining continued involvement in prostitution, even though most participants expressed a strong desire to exit to improve their mental health and overall well-being. While many women rely on informal coping mechanisms perceived as effective, these are insufficient to address the complex interplay of economic hardship, abuse, stigma, and unmet mental health needs. The author highlight an urgent need for integrated, multi-sectoral interventions that combine economic empowerment, strengthened legal protection, accessible and stigma-free mental health services, and enhanced social support systems to improve the mental health, safety, and long-term resilience of adult women involved in prostitution.

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Conflicts of Interest

The authors declare no conflicts of interest, whether financial, personal, professional, or institutional, that may have influenced the design, conduct, analysis, interpretation, or reporting of this study.

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Ethical Approval

Ethical approval for the study was sought and obtained from the Lusaka Apex Medical University Biomedical Research Ethics Committee IRB Number 00001131

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