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Substance Use and Associated Factors Among Street Community

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Abstract

Background: Substance abuse has severe and life-threatening consequences. In 2014, around 250 million people aged 15 to 64 used at least one drug, with 29 million suffering from drug-related disorders. However, there is a lack of comprehensive data on this issue, despite its prevalence in the studied region. Thus, the study aimed to assess substance use and related influences in the street community.

Methods: A community-based cross-sectional study was carried out in 362 street communities. Participants in the study were chosen using a systematic random sampling procedure. Face-to-face interviews with study participants were conducted, with a standardized questionnaire used to collect data. The data was input and processed with Statistical Software for Social Sciences (SPSS) version 23. The data was processed and provided as frequency and percentages. Statistical significance was defined as a p-value less than 0.05 with a 95% confidence level.

Result: The prevalence of substance uses in the 362 street communities surveyed was 58.6%. Being 15 or older and having friends who use drugs were both major risk factors for substance usage. The inquiry also revealed that street communities frequently used natural chemicals like benzene. Counseling for behavioral changes was more statistically significant than the other recommended therapies.

Conclusion: Sodo town's high substance use among street communities is attributable to new substances such as benzene, necessitating behavioral change counseling and stakeholder collaboration for successful rehabilitation programs.

Keywords: substance use; street community; alcohol; smoking; benzene

Introduction

Background: Substance use is a silent killer. Drug use has been present since humanity's beginnings, with homemade alcohol being the first drug used in religious ceremonies and Holy Communion. Other drugs were used for legitimate, medical, or scientific purposes [5, 6]. The street community comprises people of all genders and ages, with adolescents and younger age groups being the dominant demographic. It has unique biological, psychological, and social characteristics, affecting social and moral norms of behavior [7]. Adolescence is a time of great change, and experimentation with psychoactive substances is common. In some cases, this can lead to the development of long-term addictive behavior [8]. Psychoactive substances encompass legal, illegal, and prescribed medications, including alcohol, cigarettes, marijuana, cocaine, heroin, LSD, crack, and ecstasy, with controlled substances being alcohol and cigarettes [9]. Adolescent psychoactive substance use is frequently linked to socioeconomic factors such as gender, age, type, race, ethnicity, family, social structures, and the family's socioeconomic status [10].

Significant risk factors for psychoactive substance use among adolescents were poor parental involvement in the child's education, conflictual family relationships, and drug use by the parents, friends, and neighbors [11, 12]. Additionally, parental alcoholism, divorce before the age of 18, and death before the age of 18 increased the likelihood of using psychoactive substances [13].

Understanding this relationship is an important step in identifying people at risk [14]. In order to identify the risk factors and protective factors associated with psychoactive substance use among young people, it is very important to measure how socioeconomic factors influence the attitudes and behavior of young people toward the use of psychoactive substances [15]. In 2015, about a quarter of a billion people used drugs, according to the United Nations Office on Drugs and Crime [16]. According to the United Nations (UN), 250 million people aged 15 to 64 used at least one drug in 2014, with over 29 million suffering from drug use disorders, up from 27 million in 2013. Of the 12 million people who inject drugs, 14% are now living with HIV. Heroin tops the list of the most killing drugs, and the poorest societies bear the brunt

[17]. Africa now occupies the second position worldwide in the trafficking and consumption of illegal drugs. The UN estimated in 2014 that there were 28 million drug users in Africa and that 37,000 people died annually from diseases associated with the consumption of illegal drugs. Children are identified as the most vulnerable, especially those who cannot resist peer pressure [18]. Therefore, it seems drug addiction has reached epidemic levels across the world, and the spectrum of drugs on the drug market has widened considerably, becoming one of the social problems that affect everyone, everywhere, either directly or indirectly, and children are no exception [5].

In southern Brazil, drug use (except alcohol and tobacco) was 17.1% [21]. Boys smoke cigarettes more often than girls, with a daily smoking rate of 16% among boys and 9% among girls [22]. In Zambia's Kitwe city center, the findings of the study revealed that the prevalence of substance use was 93% [23]. Research in southern Ethiopia revealed that 53.2% of respondents had consumed alcohol within the year preceding data collection. 58.64% had sex after chewing khat, while 38.4% were homeless [31]. Some of the factors associated with alcohol use are: age 19–25 years (51% and 60%), level of education (39%), place of residence: major urban (69%), small town (62%), having ever heard about STDs (86%), and being a cigarette smoker (2.67 times more likely to be a substance user when compared to non-smokers [31]. One of the principles of preventing drug use is that "prevention programs should address the type of drug use problem in the local community, target modifiable risk factors, and strengthen identified protective factors." This principle describes how the plan should reflect the reality of the drug problem in that community and, importantly, what needs to be done to address it [32]. Alcoholism, cigarette smoking, and chat chewing are common forms of substance abuse in Ethiopia. However, few studies have been conducted on the street community in Wolaita Sodo town, and it is critical to investigate the psychological and physical health risk factors for these communities, as they can have serious consequences. This study assesses substance use and associated factors in Wolaita Sodo town's street community, contributing to existing knowledge, policymaking, child rights advocacy, and increasing awareness of drug use risk.

Methods and Materials

Study design and setting

A cross-sectional study was conducted in Sodo Town, Wolaita Zone, Ethiopia, from October 1 to November 30, 2021. Wolaita Sodo Town, one of seven town administrations in the Wolaita Zone, has a population of 244,817, with 119,961 men. Wolaita Sodo Town served as both the zone's capital and the political and administrative headquarters for the newly constituted South Ethiopia Regional State. The town has two hospitals, three health facilities, eleven health posts, and around twenty-one private healthcare organizations. The sample populations were street inhabitants who agreed to engage in interviews and were chosen at random. The study included all selected community members who appeared to be healthy and of all ages. The study excluded street communities who had difficulty speaking due to drug addiction, severe illness, mental disturbances, or being unwell.

Sample size determination
Sample size for the first objective

For the 1st objective, the sample size was calculated using a single population proportion formula at a 95% confidence level of significance. The proportion of substance-abusing adults was 30.8%, which was done in Jimma Town[25]. The margin of error was 5% and the non-response rate was 10% and the following formula was used.

$$n= \frac{(Z_{\alpha/2})^2 * p\,(1-p)}{d^2}$$

Where: - Z = Standard normal distribution value at 95% CI= $(1.96)^2$
d = 0.05(5% margin of error
P = 0.308(30.8%)

$$\text{Therefore } n= \frac{(1.96)^2 * 0.308(1-0.308)}{(0.05)^2} = 329$$

Using 10% as the non-response rate, the study's total sample size was 362.
The calculated maximum sample size of 362 was used for better representativeness and sufficient power to detect all associated factors.

Sampling procedure

The study involves randomly selecting individuals from different street communities within a town. The participants are then made comfortable to answer questions. Data collection took place at night, either before bedtime or after dinner. Participants provided complete, written, and informed consent for monitoring frequent travel. It was not possible to recover missing data. Interviewing all street

respondents resulted in the collection of precise and dependable data. Pre-defined measurements were used to study factors like economic status, personal traits, environment, and family that affect substance use. The utilization of this method guaranteed precise and reliable data collection within the specified timeframe.

Data collection procedure and tools

The study included a standardized and pre-tested survey instrument. The questionnaire was translated from English to Amharic and then back to English to ensure consistency with the Amharic version used in the interviews. Pre-testing of the survey instrument, including the questionnaire, was conducted among 5% of Areka town inhabitants, and feedback was used to refine the tools. The feedback from the pre-test informed adjustments and improvements in the final design of the questionnaire. The lead investigator and supervisors conducted immediate inspections to ensure accurate and consistent results. The data were collected by trained data collectors with bachelor's degrees in nursing, along with professional supervisors.

Operational definition

Substance use: A drug is considered used by a person when s/he deliberately uses it for non-medical purposes, as well as arbitrary use without a medical prescription.

Affordability – if a substance can be bought for only 5 ETB or less.

Availability of substances: - if a substance is available within a 1 km radius of the respondent's residence area.

Drugs: They are those man-made or naturally occurring substances used without medical supervision to basically change the way a person feels, thinks, or behaves by altering the normal biological and psychological functioning of the body, especially the nervous system.

Street Community: In our study, a person who works and/or sleeps on the street was included, including all aged people who stayed on the street for at least 1 month.

Substance- Any non-medical chemicals (including Khat, cigarettes, alcohol, shisha... etc.) that affect the activity of the brain that distorts and makes it work artificially and induces temporary happiness.

Substance use - At least once in the last 30 days, you used one or more substances (Khat, cigarettes, alcohol, shisha, etc.) to alter your mood or behavior.

Data Analysis procedure

The tables presented key findings on the distribution of demographic characteristics and the association between variables. Bivariate logistic regression identified factors as potential variables to further analyze their impact on the outcome. Both unadjusted and adjusted odds ratios (AOR) for associated factors were calculated to assess their impact on the outcome variable, taking into account potential confounding variables. The 95% confidence interval was calculated to assess the precision of the estimates. Additionally, the model's adequacy in predicting the observed data was assessed using the goodness-of-fit test by Hosmer and Lemeshow to determine if the model fit the data well. This evaluation is crucial for assessing the model's reliability. A 5% significance level was selected for multivariable analysis to minimize the chance of Type I errors and maintain a cautious approach in hypothesis testing, which improves the study's reliability.

Ethical consideration

The Ethical Review Committee, also known as the Institutional Review Board (IRB) at PHARMA College, issued an ethical approval letter. The letter from the IRB was sent to the Wolaita Sodo town administration, the zonal health office, and three sub-cities in Sodo for approval. Subsequently, the Ethical Review Committee granted permission to the community leaders to conduct studies in the field. Participants were clearly briefed on the study's objectives and willingly agreed to take part. Participants willingly signed written informed consent before the interview, without coercion. Participants were informed that their involvement in the study was completely voluntary. For study participants under the age of 15, written consent was obtained from their legal guardians. Participants were assured that their information would remain confidential, data collection would be anonymous, and they could withdraw from the study at any time.

Results

Socio-demographic and economic characteristics

In a study of 362 street community members, it was found that 95% were male, 4.1% were female, and 59.4% were under the age of 15. The middle age of the community members was 15 years old. 93.6% were not married, and 58.6% used illegal substances. Most of the community members were in primary

school and earned between 31 and 60 Ethiopian Birr (ETB) per day. The majority of street community members, 58.6%, were substance users, using drugs. Approximately 290 of them engaged in carrying small

items and delivering messages, while 250 were involved in begging. The majority of the street community members lived in hotels, while the rest resided in abandoned buildings (refer to Table 1).

Table 1: Socio-demographic, economic and housing conditions of the respondents (n=362)

S. no	Variables	Category	Frequency	Percent
1	Sex	Male	347	95.6
		Female	15	4.1
2	Place of birth	Rural	86.5	86.5
		Urban	13.5	13.5
3	Religion	Orthodox	123	34.0
		Protestant	213	58.8
		Catholic	13	3.6
		Other Specify	13	3.6
4	Marital status	Single	339	93.6
		Marred	17	4.7
		Divorced	4	1.1
		Widowed	2	.6
5	Educational status	Never attend school	33	9.1
		Grade 1–8	269	74.3
		Grade 9-12	60	16.6
6	Daily income	less than 30 ETB	86	23.8
		31 to 60 ETB	128	35.4
		61 to 90 ETB	27	7.5
		91 to 120 ETB	79	21.8
		more than 120 ETB	42	11.6
7	Duration of stay in the street	less than 1 years	129	35.4
		2 to 5 years	91	25.0
		6 to 9 years	76	20.9
		10 and more years	68	18.7
8	Substance use	Yes	212	58.6
		No	150	41.4
9	Sleeping place (Hotel veranda)	Yes	324	89.5
		No	38	10.5
10	Sleeping place (Old and abandoned buildings)	Yes	236	65.2
		No	126	34.8
11	Child's job (Carrying small items)	Yes	290	80.1
		No	72	19.9
12	Child's job (Begging)	Yes	250	69.1
		No	112	30.9

In the context of close friends and family history of substance use, the largest portion (276, 76.2%) of street community fathers were substance users. However, the majority (257, 71.0%) of the mothers of these individuals did not use substances. In the case of close friends within the street community, only 74 (20.4%) reported substance use, with the majority of close friends being non-users.

Negative impacts of substance use

212 out of the 362 study participants were male, making up 58.2% of the total participants. The victims experienced various negative impacts of substance use, such as health issues, social problems, and legal troubles in different ways. Six individuals (1.7%) contracted HIV/AIDS through substance abuse or risky behaviors. Additionally, 41 (11.3%) experienced mental illnesses such as epilepsy, depression, and anxiety. Furthermore, 109 (30.1%) were involved in incidents of frequent physical altercations and theft. Additionally, according to

Table 2, 103 (28.5%) were involved in road traffic accidents and motorcycle collisions. Substance abuse directly results in unexpected workplace conflicts among the study participants. Additionally, 177 individuals (48.9%) experienced persistent family issues such as domestic conflicts, and 115 (31.8%) faced complex challenges in their relationships with peers and colleagues, like communication barriers.

Table 2: Negative impacts of the substance use among street community (n=362)

S. no	Variables	Category	Frequency	Percent
1	Getting diseases (e.g. HIV/AIDS, TB, STIs)	Yes	6	1.7
		No	356	98.3
2	Mental illness (e.g. Epilepsy)	Yes	41	11.3
		No	321	88.2
3	Frequent fighting and stealing	Yes	109	30.1
		No	253	69.9
4	Accidents involvement	Yes	103	28.5
		No	259	71.5
5	Problems and fighting at work place	Yes	138	38.1
		No	224	61.9
6	Endless family problems	Yes	177	48.9
		No	185	51.1
7	Becoming a school drop-out	Yes	256	70.7
		No	106	29.3
8	Aggressive behavior	Yes	109	30.1
		No	253	69.9
9	Endless problems with peers and colleagues	Yes	115	31.8
		No	247	68.2

Most frequently used substances among street communities

Out of the total 362 participants in the survey, about 146 (40.3%) from the street community used drugs. According to the interview responses, inhalants, such as benezine, also known as "mastish" in the street community, ranked first. Various types of cigarettes and marijuana were the second most commonly used substances among the participants, with a frequency of 62 (17.1%), paracetamole at 56 (15.5%), and hashish at 55 (15.2%), ranking third and fourth, respectively. Participants were less likely to take diazepam and opium, with frequencies of 7 (1.9%) and 12 (3.3%), respectively. Additionally, an equivalent number of participants used antibiotics and heroin, with frequencies of 21 (5.58%) each (Table 3).

Table 3: Most frequently used substances among street communities (n=362)

S. no	Variables	Category	Frequency	Percent
1	Marijuana	Yes	62	17.1
		No	300	82.9
2	Cocaine	Yes	34	9.4
		No	328	90.6
3	Hashish	Yes	55	15.2
		No	307	84.8
4	Opium	Yes	12	3.3
		No	350	96.7
5	Heroine	Yes	21	5.8
		No	341	94.2
6	Inhalant (Benzene, cigarettes and Chat)	Yes	146	40.3
		No	216	59.7
7	Paracetamol	Yes	56	15.5
		No	306	84.5
8	Antibiotic	Yes	21	5.8

		No	341	94.2
9	Diazepam	Yes	7	1.9
		No	355	98.1

Table 4: Kinds of support needed by victims of substance use (n=362)

S. no	Variables	Category	Frequency	Percent
1	Behavioral counseling or therapy	Yes	168	46.4
		No	194	53.6
2	Regular and affordable medical treatments	Yes	137	37.8
		No	225	62.2
3	Regular family support	Yes	121	33.4
		No	241	66.6
4	Traditional or herbal treatments	Yes	208	57.5
		No	154	42.5
5	Vocational training or skills	Yes	195	53.9
		No	167	46.1
6	Uninterrupted educational services	Yes	178	49.2
		No	184	50.8
7	Supportive friends/family environments	Yes	172	47.5
		No	190	52.5
8	A sober social network and peers	Yes	189	52.2
		No	173	47.8
9	A sober living environment	Yes	150	41.4
		No	212	58.6
10	Support groups including spiritual ones	Yes	181	50.0
		No	181	50.0

Kinds of support needed by victims of substance use

Behavioral counseling or therapy is indicated as a form of support for people who take drugs. One hundred sixty-eight (46.4%) of 362 respondents agree that behavioral treatment can help those who have been harmed by it. One hundred thirty-seven persons, or 37.6%, agree that regular and affordable medical care is essential. One hundred twenty-one people (33.4%) agree that families should offer consistent support. Two hundred and eight people (57.5 percent) feel that herbal or conventional therapies work. One hundred and ninety-five people (53.9%) support vocational education or training. More than half of sober peers and social networks are well trusted in street communities. Furthermore, 178 respondents (49.2%) said they trusted continuing education services, while 172 (47.8%) said they preferred supportive friend and family situations to overseer living conditions.

Street communities tested illegal drugs substances

The study's findings revealed that the majority of the 215 participants (58.8%) in the street community take narcotics as a result of peer pressure. Among the survey participants, 231 (63.8%) reported using substances due to ease of access, 223 (61.6%) due to ignorance, and 240 (66.4%) due to inadequate parental supervision. About 224 (61.9%) and 242 (66.9%) of them identified insufficient home surroundings as a factor influencing their substance use for pleasure and relaxation (Table 5).

Table 5: Reasons why some street communities tested illegal drugs/substances (n=362)

S. no	Variables	Category	Frequency	Percent
1	Peer influence	Yes	213	58.8
		No	149	41.2
2	Easy accessibility	Yes	231	63.8
		No	131	36.2
3	Easy affordability	Yes	140	38.7
		No	222	61.3

4	Ignorance	Yes	223	61.6
		No	139	38.4
5	Lack of or poor parental supervision	Yes	240	66.3
		No	122	33.7
6	Lack of or inadequate home environment	Yes	224	61.9
		No	138	38.1
7	Curiosity	Yes	206	56.9

Factors associated with substance use

The bivariate analysis of socio-demographic variables showed that age, religion, duration of stay on the street, educational level, and the substance usage of best friends had significant impacts. It was found that substance misuse, stroke, HIV/AIDS, and other communicable diseases had a statistically significant influence on the dependent variables. Moreover, this study established a connection between incidents such as car accidents and concerns like employment conflicts, school dropouts, aggressive behavior, and various challenges related to peers. The most commonly used drugs on the streets include marijuana, cocaine, hashish, heroin, inhalants, paracetamol, and antibiotics. Reasons for substance use include peer pressure, perceived family support, behavioral counseling, affordable medical treatments, support from family and friends, traditional remedies, and a supportive environment. The bivariate analysis showed significant relationships between mosques, churches/missions, and shrines or spiritual locations/Marabous' treatment centers (Table 6).

Table 6: Bivariate and Multi variable analysis result of the study participants (n=362)

S. no. Variables		Category	Substance use		COR (95%CI)	AOR (95%CI)	p-value
			Yes (#/%)	No (#/%)			
1	Age of respondents	Less than 15 years	108(29.8%)	107(29.6%)	1	1	
		Greater than 15 years	104(28.7%)	43(11.9%)	2.396(1.536,3.738) *	2.363(1.319, 4.232) *	0.004**
2	Duration of stay in the street	less than 1 years	60(16.6%)	67(18.5%)	1	1	
		2 to 5 years	54(14.9%)	37(10.2%)	1.630(0.946,2.809) *	1.937 (0.971, 3.863)	0.061
		6 to 9 years	47(13.0%)	29(8.0%)	1.810(1.014, 3.230)*	1.633*(0.768, 3.471)	0.203
		more than 10 years	51(14.1%)	17(4.7%)	3.350(1.749,6.418)*	1.230(0.524,2.887)	0.634
3	Best friends substance use	Yes	58(16.0%)	16(4.4%)	3.154(1.731,5.747)*	3.718(1.809,7.643)	.000***
		No	154(42.5%)	134(37.0%)	1	1	
4	Inhalant (Benzene, Cigarette)	Yes	130(35.9%)	16(4.4%)	13.28(7.378,23.893)*	14.999(7.808,28.812)	.000***
		No	82(22.7%)	134(37.0%)	1	1	
5	Behavioral change counseling or therapy	Yes	125(34.5%)	43(11.9%)	3.575(2.286,5.592)*	3.750(2.141,6.568)	.000***
		No	87(24.0%)	107(29.6%)	1	1	

NB: * *Showing statistical association and strength of association. COR (Crude odds ratio), AOR (adjusted odds ratio), CI (confidence interval level at 95%)*

In addition, monitor the variables' effect by interchanging the variables already selected. Communities aged over 15 years were more than twice as likely to use substances compared to younger age groups (AOR 2.363, 95% CI 1.319-4.232, p = 0.004). In terms of housing conditions, another variable to consider is the substance use of best friends. It indicates a significant relationship with an AOR of 3.718, 95% CI (1.809-7.643), p < 0.001, compared to friends who do not use substances. It was found that benzene and cigarettes are commonly used by street communities. They have an odds ratio of 14.999, 95% CI (7.808-28.812), and P < 0.001 compared to non-users. Furthermore, behavioral change counseling or therapy (AOR 3.750, 95% CI 2.141-6.568, p < 0.001) was deemed the most effective approach to assist this community in overcoming substance use, particularly when compared to those without counseling.

Discussion

In Wolaita Sodo Town, there were 58.6 illicit substance users per 1,000 people living on the streets.

In terms of gender distribution, it was 56.1% in males and 43.9% in females. As previously reported [33-35], males had a higher prevalence of substance use than females. Higher use among males could be attributed to gender roles related to external or social influences and impression-seeking behavior. A study involving 50 published papers from 22 countries, 62% of which were African, found that substance use was prevalent in 60% of street communities [36]. It is in line with the findings of our research. The current study's prevalence of substance use, specifically alcohol intake, was 58.6%, which was lower than the 47.9% reported in a study done in northwest Ethiopia [37]. The prevalence of substance use was more than double the 30.8% identified in a survey of street children in Jimma, Ethiopia [25], significantly higher than the prevalence among Addis Abeba high school students [38], and nearly identical 69.8% to the prevalence among Kenyan college students [39]. Adolescent substance use is widespread due to reasons such as low perceived danger, social acceptance of substance use, easy access to "gateway" substances, and shifts in community values. Age and substance use were shown to be highly associated, with individuals over 15 years old approximately twice as likely to use drugs as those in lower age groups. Research conducted in southern Ethiopia produced equivalent findings indicating substance use among homeless people of reproductive age [31]. This could be the result of weak family guidance or parental control, with the communities enduring the consequences.

Research done in southwest Ethiopia revealed that high school students whose best friends use drugs are more than twice as likely to relapse into substance misuse [40]. Furthermore, studies in southwest Ethiopia found that high school students whose best friends use drugs are more than twice as likely to return to substance addiction [37]. Similarly, a 2020 study in Oromia Regional State revealed that those who have close friends who use narcotics are 11 times more likely to do so than those who do not [25]. This finding was consistent with previous research conducted in Brazil [41] and Western Kenya [42], which revealed a similar pattern across areas. The street community may take narcotics to impress or avoid stigma from their peers. Inhalant drug users are 15 times more likely to suffer from substance abuse than non-users. Ethiopia's government has approved a national drug control master plan, with an interministerial organization being formed to implement it. Similar effects are observed in Egypt, where inhalant medications significantly impact citizens [43]. The study highlights challenges in regulating substance use in street communities, including drug availability, cost, urbanization, and cultural influences. Educating street communities about behavioral change and treatments is crucial to reducing inhalant substance use. Behavioral change counseling was found to be 3.75 times more effective in improving health compared to receiving no treatment, as observed in a study from Ghana [44]. Smoking deposits harmful chemicals in the body, reduces appetite, and impairs the absorption of nutrients from the digestive system, resulting in malnutrition and other health issues. A study conducted in Egypt found that smoking is associated with common problems like cardiovascular disease, malignant tumors, and erectile dysfunction. This highlights the harmful effects of substance usage [43].

Limitations & strengths of the study

The study's key strength was that its findings were broadly consistent with previous research. The utilization of a sufficient sample size improved the generalizability of our findings. Social desirability bias could have influenced the participants' responses.

Conclusions

The prevalence of substance use among the street community of Sodo town is higher than the national average in Africa and surpasses rates in other countries. Factors such as age, inhalant substances like benzene and cigarettes, counseling for behavioral changes, and intimate substance use were identified as key contributors to the high prevalence of substance use within the street community. Family plays a crucial role in shaping the substance use behaviors of the street community by providing support, such as emotional assistance, influence through role modeling, and guidance on healthy choices.

The initial intervention should target individuals within the street community who are currently using substances, those at risk of future substance use, and individuals facing sexual and reproductive health issues, with each group requiring tailored support and interventions. This intervention aims to develop basic life skills, offer mental health counseling services, and enhance access to primary healthcare for the street community. The next level of intervention involves supporting community initiatives like neighborhood clean-ups, providing mental health and addiction

services and ensuring resources such as shelters and food assistance are available for the street community at the local community and family levels. The third overall intervention involves activities that extend beyond the community and workplaces of the street community, including advocacy for policy changes at the national level and implementing educational programs on substance abuse prevention in regional schools. Educating and influencing these vulnerable groups through methods like interactive workshops on substance abuse awareness and advocacy campaigns for policy reforms at regional and national levels are also recommended.

Declarations

Ethical approval and consent for participation

The PHARM College of Health Science's ethical review committees granted permission to conduct the study. Formal permission letters from the head of the Woliata zone health department and the zonal administrative bodies (zone administrative body, zone police, and the women and child affairs offices of the Wolaita Sodo town administration) confirmed the legality of data collection. Each participant provided written informed consent, and those under the age of 15 had their legal guardians or caretakers sign on their behalf.

Availability of data and materials

Upon request, the corresponding author will provide all required data for the analysis.

Conflict of interest

All authors declared that they had no competing interests.

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Authors' contribution

All authors contributed equally for this research

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