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Prevalence and predictors of recreational drug use in a conflict affected area in the Southwest region of Cameroon: A cross-sectional study

Atabong Emmanuel Njingu[1,2*], Fombo Enjeh Jabbossung[1,3], Nyuydzedze Stanley Sunjo[1,4], Nembulefac Derick Kemndah[1,5] and Ayongi Eyong Njang Stephen[1,5]

[1]Faculty of Health Sciences, University of Buea, Buea, Cameroon.
[2]Kalfou Integrated Health Center, Kalfou Cameroon.
[3]Saint John of God Health Center, Mamfe, Cameroon.
[4]Bamenda District Health Services, North West Regional Delegation of Public Health, MINSANTE, Cameroon.
[5]District Hospital Limbe, Cameroon.

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Conflicts and displacements have high impact on mental health due to direct exposure to traumatic events and exposure to increased levels of daily stressors. Post-traumatic stress and other common disorders in conflict or post conflict settings have been well identified however recognition of substance use or abuse and what substances are in use, as well as predictors in conflict settings is sparse. This study aimed to assess the prevalence, types and predictors of recreational drug use among residents of a conflict affected area in the Southwest Region of Cameroon. This was a cross sectional study. We used consecutively sampling to interview 387 adults on recreational drug use in Mamfe a peri-urban town in conflict hit South West Region of Cameroon. Prevalence of ever and current use of recreational drugs were calculated, binary logistic regression was used to identify predictors of ever and current use of recreational drugs. 264 (68.22%) participants had (ever) used drugs for recreational purposes and 252 (65.12%) were current users. Of the 10 different recreational drugs detected, Alcohol (65.4 = 36%), cigarette (25.32%) and opioids (12.14%) were the most consumed. After multivariate analyses, age range of 35 to 54 years (AOR 1.65, 95% CI 0.79 to 3.48), male gender (AOR 3.47, 95% CI 2.03 to 5.94), and being a student (AOR 10.51, 95% CI: 1.15 to 95.93) were significantly associated with higher likelihood of ever used drugs for recreational purposes. Being internally displaced (AOR 0.81, 95% CI: 0.44 to 1.50) significantly predicted higher likelihood of current use of recreational drugs. Employment status of housewife (AOR 0.47, 95% CI: 0.03 to 8.64) predicted lower odds of recreational drug use. Recreational drug use is common among people living in the conflict affected area of Southwest of Cameroon. while housewives are less likely to use recreational drugs. Mental health interventions in conflict settings in low income settings should target male adults >35years and students as these are at high risks of recreational drug use as well as IDP's as they deal with multiple stressors due to displacement.

Key words: Recreational drugs, predictors, conflict-affected area.

INTRODUCTION

Conflict and displacement are associated with an increase in alcohol and other recreational drug use

(UNHCR, 2021; Affinnih, 1999). Many health and social problems related to substance use are prevalent in conflict situations, including refugee camps and internally displaced persons (Strathdee et al., 2006). Psychoactive drugs such as alcohol and other stimulants are also frequently used by combatants (UNHCR, 2021; Hankins et al., 2002). The reasons given for the use of recreational drugs in areas affected by conflict and among displaced persons includes: self-medication for pain, the stress of adapting to life in a new environment, exposure to war trauma, co-existing mental health problems, unfamiliar exposure to new recreational drugs and loss or disruption of livelihood (UNHCR, 2021; Karam et al., 2008; Šantić et al., 2006). The use of many different recreational drugs has been described in different conflict situations; Khat chewing in areas of Somalia affected by conflict (Odenwald et al., 2005), alcohol abuse among urban internally displaced persons in Columbia (Puertas et al., 2006), use of opioids and heroin among Afghan refugees in Pakistan (Zafar et al., 2003; Strathdee et al., 2003) and use of benzodiazepines among people displaced by war in Bosnia-Herzegovina (Bjelosevic et al., 2003). Recreational drug use among populations displaced by war is a neglected area of public health (Ezard et al., 2011). Conflict situations are beginning to be recognized as high-risk environments for the use of recreational drugs and development of problems related to drug use such as acute intoxication, life-threatening overdose, organized crimes, gender-based violence (Colson, 1995). Furthermore, the financial burden of alcohol and other recreational drug use has a negative impact on the economies of families and food security, hence, undernutrition and poor health conditions ensue (UNHCR, 2021). Also, there is a clear association between suicide and use of alcohol (Bosnar et al., 2005). The relationship between HIV transmission as well as the relationship between post-traumatic stress disorder (PTSD) and recreational drug use are complex and needs further studies in conflict situations (UNHCR, 2021; Ezard et al., 2011; Spiegel et al., 2007). However, recreational drug use has been shown to increase risky sexual behaviours and unsafe injection drug use that may increase HIV and other blood-borne viral disease transmission in conflict-affected areas (Carballo et al., 2005; Ortiz et al., 2005; Dewing et al., 2006; Kuo et al., 2006). Globally, recreational drug use is a recognized cause of poor health and mortality. Alcohol alone accounts for about 4% of mortality (Rehm et al., 2009). According to world drug report in 2018, the number of deaths linked to drug abuse increased by 60% between the year 2000 and 2018 (Watt et al., 2014; Abdeta et al., 2017; Abio et al., 2020; World Drug Report, 2018; Ajayi and Somefun, 2020). In Cameroon, there is reported diverse use of recreational drugs among males and female of all age groups (Wansi et al., 1996), A study in Cameroon reported the prevalence of recreational drug use to be 1.64% among medical and nursing students in 2018 (Mbanga et al., 2018). Globally, most studies conducted on recreational drug use in conflict situations are limited by lack of comparative data with populations not affected by war. In Cameroon, epidemiology of substance use in conflict-affected areas of the country have not been studied, hence evidence on the possible difference in distribution or diversity and determinants of recreational drug use in conflict-affected areas of the country is unavailable. To bridge this gap, we sought to assess the prevalence, types and factors associated with recreational drug use in a conflict-affected area Cameroon.

METHODS

Study design, setting and sampling techniques

This was a community-based, observational, cross-sectional study. This study was conducted from March 2021 to May 2021 in Mamfe. Mamfe is one of the conflicts affected towns in the South West Region of Cameroon. It is a border town about 74 km away from Nigeria with a population of about 34,225 inhabitants spread over a surface area of 744 square kilometers (population density 46 persons/km^2) (Communes et villes unies du Cameroun, 2021) (Population and Housing Census of Cameroon, 2015). A sample size of 374 was obtained using a sample size calculator (RAOSOFT, 2020). The margin of error of ±5%, at 95% confidence interval and a 50% response distribution were used. A population of 13,690 people was used since about 40% of the 34,225 inhabitants of Mamfe are adults (Population and Housing Census of Cameroon, 2015). Following the design and approval of the study, community members were recruited to pre-test and validate the questionnaire. Participants in the pre-test were asked the ease with which they responded to the questions, their understanding of the questions and responses verified against the objectives of the study and the phrasing of the questions adjusted accordingly. The purpose of the study was explained to participants and consent obtained prior to interviews. Individuals who met the eligibility criteria and consented to the study were interviewed using a pretested structured questionnaire. A door-to-door approach was used to locate participants. To avoid double counting, each individual was asked if they had filled a similar questionnaire prior to recruitment for the study. Literate persons were allowed to fill the questionnaire by themselves after receiving instructions on how to fill the questionnaire. A face-to-face interview was done for illiterate people. The following sociodemographic variables were collected; gender, age, marital status (single, married or widowed), residence (internally displaced, not internally displaced), employment status (employed, housewife, student, unemployed/retired), employment type (physical, non-physical, or combined), level of education (no education, primary, secondary and tertiary education) and average monthly income (<FCFA 50,000, FCFA 50,000-100,000, FCFA 100,000-300,000, and >FCFA300,000 (US$1=FCFA 530)). Information on the use of recreational drugs, types and frequency of

*Corresponding author. E-mail: aenjingu@yahoo.com. Tel. 676272958.

drug use were also collected. Participants were asked; “have you ever used substances/drugs such as alcohol, cigarette, tobacco, marijuana, shisha, tramadol, sildenafil or any other substance for pleasure, to boost yourself or to help you relax or just to ease tension/stress?” To evaluate current use of recreational drugs, participants were asked; have you in the past 30 days used substances/drugs such as alcohol, cigarette, tobacco, marijuana, shisha, tramadol, sildenafil or any other substance for pleasure, to boost yourself or to help you relax or just to ease tension/stress?” To assess packs years of smoking, smokers were asked the average number of cigarette they consume per day and total number of years of smoking, we as well asked people who consumed alcohol to state the type of alcohol consumed and the average volume taken per week. We did not evaluate the frequency of consumption of other recreational drugs which have been stated as a limitation of this study.

Data management and statistical analysis

Data collected were entered into Microsoft excel 2016, were cleaned, exported and was analyzed using Statistical Package for Social Sciences (SPSS v20). Continuous variables were summarized using mean and standard deviation. Categorical variables were summarized using counts and percentages. Unadjusted binary logistic regression model was used to assess the effect of sociodemographic characteristics on ever use of recreational drugs and current use of recreational drugs. Adjusted binary logistic regression model was used to evaluate the predictors of recreational drug use among community dwellers. We considered all *p*-values less than 0.05 to be statistically significant

RESULTS

A total of 387 participants were recruited for this study. The male to female ratio was 1.10:1, the mean age was 34.54 years (SD; 10.96 years, range 18 to 75 years). 85 (21.96%) of participants were internally displaced persons (IDPs) and majority 203 (52.45%) of the study participants were males. Details of the sociodemographic features of study participants are shown in Table 1.

Recreational drug use

The prevalence of ever use of recreational drugs was 68.22% and the prevalence of current use of recreational drugs was 65.12%. The mean pack year of smoking was 6.66 years (SD; 8.69 years). The mean amount of alcohol consumed per week was 24.78 units (SD; 19.54 years). Alcohol (62.59%), cigarette (23.77%) and opioids (12.14%) respectively, were the most commonly used drugs among current users of recreational drugs. Table 2 shows the different types of recreational drugs used by study participants and the proportion of people who used them. Table 3 displays the results of unadjusted and adjusted logistic regression. In the unadjusted regression model, age range of 35 to 54 years and greater than 55 years, male gender and employment status of student and retired were significantly associated with having ever used recreational drugs. After adjustments, only age range of 34 to 55 years, male gender and employment status of student were significantly associated with higher likelihood of ever used recreational drugs while being a housewife predicted lower likelihood of ever use of recreational drugs. Table 4 shows the results of unadjusted and adjusted logistic regression predicting current use of recreational drugs. In the unadjusted regression model, male gender, being internally displaced, employment status of unemployed and student as well as tertiary level of education were significantly associated with higher likelihood of current use of recreational drugs while being a housewife predicted lower likelihood of current use of recreational drugs. After adjustments, only male gender, being internally displaced and employment status of student were significantly associated with higher likelihood of current use of recreational drugs while being a housewife predicted lower likelihood of current use of recreational drugs.

DISCUSSION

This study was aimed to assess the prevalence, types and factors associated with recreational drug use in a conflict-affected area in Cameroon. We found a high prevalence of recreational drug use among people living in this conflict-affected area and we identified 10 different types of recreational drugs amongst which were; alcohol, cigarette, cannabis, opioids and cocaine. After multivariate adjustments, male gender, being internally displaced and employment status of student were significantly associated with higher likelihood of current use of recreational drugs while being a housewife predicted lower likelihood (protected against) of current use of recreational drugs. A study in Cameroon conducted among medical and nursing university students reported a prevalence of recreational drug use of 1.64% (Mbanga et al., 2018). This is far lower than the 65.12% found this study. The difference could be due to the fact that, Mbanga et al. (2018) considered only illicit drugs (tramadol and marijuana) as recreational drugs unlike in our study where we considered both licit and illicit drugs used for recreational purposes as recreational drugs. In addition, our study was conducted in a conflict-affected area (UNHCR, 2021; Puertas et al., 2006; Bjelosevic et al., 2003; Ezard et al., 2011), evidence supports conflict situations are risk environments or factors for recreational drug use. A variety of recreational drugs have been described in different conflict settings, this includes Khat, alcohol, heroin, opioids and oral benzodiazepines (Šantić et al., 2006; Odenwald et al., 2005; Zafar et al., 2003; Bjelosevic et al., 2003; Ezard et al., 2011). Apart from Khat, all the other common recreational drugs reported to be prevalent in conflict settings were found to be in use in this conflict affected area of Cameroon with predominance of Alcohol (62.59%), cigarette (23.77%) and opioids (12.14%)

Table 1. Socio-demographic characteristics of study participants.

Socio-demographic variable	Total (n = 387)	Non-recreational drug users (n=123)	Current recreational drug users (n=252)	Former recreational drug user (n =12)	P-value
Age (mean, SD) (years)	34.54 (10.96)	31.13 (8.39)	35.31 (10.69)	53.17 (17.33)	0.000
Gender (n, %)					
Female	184 (47.55)	86 (69.93)	92 (36.51)	6 (50.00)	0.000
Male	203 (52.45)	37 (30.08)	160 (63.49)	6 (50.00)	
Residence (n, %)					
Not internally displaced	302 (78.04)	98 (79.67)	200 (79.37)	4 (33.33)	0.000
Internally displaced	85 (21.96)	25 (20.33)	52 (20.63)	8 (66,67)	
Marital status (n, %)					
Single	187 (48.70)	62 (50.82)	124 (49.20)	2 (16.67)	0.003
Married	176 (45.83)	56 (45.90)	114 (45.60)	6 (50.00)	
Widowed	21 (5.47)	5 (3.28)	14 (5.20)	4 (33.33)	
Employment status (n, %)					
Employed	214 (55.30)	73 (59.35)	138 (54.76)	3 (25.00)	0.000
Unemployed	126 (32.56)	32 (26.02)	89 (35.32)	5 (41.67)	
Student	27 (6.98)	8 (6.50)	19 (7.54)	0 (0.00)	
Housewife	9 (2.33)	8 (6.50)	1 (0.40)	0 (0.00)	
Retired	11 (2.84)	2 (1.63)	5 (1.98)	4 (33.33)	
Monthly income (n, %) (FCFA)					
<50000	203 (52.45)	72 (58.54)	122 (48.41)	9 (75.00)	0.270
50000-99000	112 (28.94)	33 (26.83)	76 (30.16)	3 (25.00)	
100000-299000	63 (16.28)	16 (13.01)	47 (18.65)	0 (0.00)	
≥ 300000	9 (2.33)	2 (1.63)	7 (2.78)	0 (0.00)	
Level of education					
Primary/no formal education	56 (14.47)	14 (11.38)	38 (15.08)	4 (33.33)	0.075
Secondary	185 (47.80)	69 (56.10)	111 (44.05)	5 (41.67)	
Tertiary	146 (37.73)	40 (32.52)	103 (40.87)	3 (25.00)	
Employment type					
Non-physical	135 (34.88)	43 (34.96)	88 (34.92)	4 (33.33)	0.838
Physical	193 (49.87)	65 (52.85)	122 (48.41)	6 (50.00)	
Combined	59 (15.25)	15 (12.20)	42 (16.67)	2 (16.67)	

The proportions, frequencies, means and SDs are displayed. Chi-square test (for 2×N tables) and t-test (for continuous variables) were used to compare across the two groups. p-value< 0.05 indicated statistically significant difference.
Source: Njingu et al. (2022). Prevalence and predictors of recreational drug use in a conflict affected area in the Southwest Region of Cameroon.

respectively. Other substances such as cannabis, heroin, tobacco, cocaine were also found to be used by a small proportion of the study participants.

Male gender predicted significantly higher likelihood of recreational drug use, this is similar to other studies in conflict situations and in other settings (Zafar et al., 2003; Ajayi and Somefun, 2020; Cotto et al., 2010; Newcomb et al., 2014). Possible reasons for the observed gender differences in recreational use are; males are generally more likely to get involved in unhealthy behaviors compared to females, furthermore, given the cultural context in Africa, there is more stigma around females using recreational drugs compared to males (Ajayi and Somefun, 2020; UNODC, 2018). Internally displaced persons (IDPs) were found to be significantly more likely to use recreational drugs. This is in line with findings from other studies (UNHCR, 2021; Puertas et al., 2006; Ezard et al., 2011). Stress of adapting to life in a new environment, exposure to war trauma, unfamiliar exposure to new recreational drugs and loss or disruption of livelihood (UNHCR, 2021; Karam et al., 2008; Gunawardena et al., 2007; Šantić et al., 2006) are

Table 2. Types, years and number of recreational drug use among ever and current consumers of recreational drugs.

Variable	Prevalence	
	Ever n (%)	Last 30 days n (%)
Alcohol consumption	254 (65.36)	242 (62.53)
Cigarette smoking	98 (25.32)	94 (23.77)
Tramadol/opioids consumption	55 (14.21)	47 (12.14)
Diazepam consumption	47 (12.14)	40 (10.34
Cannabis consumption	38 (9.82)	37 (9.56)
Sildenafil/drugs for erection	29 (7.49)	29 (7.49)
Shisha/water pipe smoking	29 (7.49)	28 (7.24)
Tobacco consumption	36 (9.30)	36 (9.30)
Cocaine consumption	14 (3.62)	14 (3.62)
Heroin consumption	11 (2.84)	11 (2.84)
Intravenous drug consumption	8 (2.07)	7 (1.81)
Years of recreational drug use		
< 5	62 (23.48)	64 (25.40)
5-9	78 (29.55)	73 (28.97)
≥ 10	124 (46.99)	115 (45.63)
Number of recreational drugs used		
1	123 (46.59)	121 (48.02)
2	60 (22.73)	57 (22.62)
≥ 3	81 (30.68)	74 (29.37)

Source: Njingu et al. (2022). Prevalence and predictors of recreational drug use in a conflict affected area in the Southwest Region of Cameroon.

suggested reasons for drug use among IDPs. The study also found that being a student was significantly associated with higher chances of using recreational drugs. Other studies such as those conducted by (Ajayi and Somefun, 2020) and (Mbanga et al., 2018) also reported higher odds of using creational drugs among students and factors influencing this operate at individual levels (Ajayi and Somefun, 2020). Stress related to studies especially with exposure to critical situations while on internship could explain the drug use pattern among students (Mbanga et al., 2018). Employment status of housewife was found to be protective against recreational drug use in this study. Given that all housewives are women, the reasons stated above for gender differences in drug use could also be applied here also, social stigma associated with use of drugs by married women. This study has some limitations; a cross-sectional design which impaired ability to determine causality was used, which would have been possible with a prospective cohort design. The findings should be generalized with caution as they reflect the situation of a conflict-affected area and not the general population. In addition, other factors such as religious affiliation and peer influence which could influence the use of recreational drugs were not assessed. We did not evaluate as well the frequency of consumption of some recreational drugs. Despite these limitations, this study brings out the epidemiology of drug use in this conflict-affected part of Cameroon and also identified drivers and protective factors of drug use. Future studies should compare the epidemiology of recreational drug use in a conflict-affected area with that of an area that is not affected by conflict in order to more appropriately appreciate the effect of conflict and displacement situations on drug use.

Conclusion

These findings suggest that the prevalence of recreational drug use in this conflict-affected area in Cameroon is high. The most common recreational drugs found in use in conflict settings were alcohol, cigarettes and opiods. Males, IDPs, and students were found to have higher likelihood of drug use. To the best of our knowledge, this study is the first of its kind in Cameroon to provide evidence of high prevalence and displays the different types of recreational drugs used in a conflict-affected area in the country. Mental health interventions targeting drug abuse and usage in conflict areas should

Table 3. Multivariable analysis showing predictors of ever use drugs for recreational purposes.

Socio-demographic variables	OR (95% CI)	*p*-value	AOR (95% CI)	*p*-value
Age groups				
18-34	1.00		1.00	
35-54	1,72 (1.06-2.80)	0.029	1.65 (0.79-3.48)	0.011
≥55	4.53 (1.32-15.56)	0.046	8.24 (1.62-41.79)	0.184
Gender				
Female	1.00		1.00	
Male	3.94 (2.49-6.230	0.000	3.47 (2.03-5.94)	0.000
Residence				
Not internally displaced	1.00		1.00	
Internally displaced	1.15 (0.68-1.95)	0.595	1.22 (0.63-2.37)	0.550
Marital status				
Single	1.00		1.00	
Married	0.47 (0.15-1.47)	0.196	1.67 (0.32-8.55)	0.537
Widowed	0.50 (0.16-1.57)	0.237	0.80 (0.19-3.48)	0.768
Employment status				
Employed	1.00		1.00	
Unemployed	0.43 (0.09-2.04)	0.287	4.05 (0.45-36.55)	0.212
Student	0.65 (0.13-3.18)	0.018	10.51 (1.15-95.93)	0.037
Housewife	0.53 (0.09-3.01)	0.029	10.77 (0.92-125.58)	0.043
Retired	0.03 (0.00-0.37)	0.007	0.47 (0.03-8.64)	0.613
Monthly income				
<50000	1.00		1.00	
50000-99000	0.52 (0.11-2.57)	0.422	0.94 (0.15-5.79)	0.947
100000-299000	0.68 (0.14-3.47)	0.646	1.31 (0.23-7.39)	0.758
≥ 300000	0.84 (0.16-4.46)	0.837	0.98 (0.17-5.54)	0.977
Level of education				
Primary/no formal education	1.00		1.00	
Secondary	1.13 (0.56-2.29)	0.730	0.71 (0.23-2.20)	0.554
Tertiary	0.63 (0.40-1.02)	0.058	0.55 (0.27-1.13)	0.102
Employment type				
Non-physical	1.00			
Physical	0.73 (0.37-1.45)	0.369	0.75 (0.34-1.65)	0.481
Combined	0.67 (0.35-1.30)	0.235	0.62 (0.28-1.40)	0.251

OR, odds ratio, AOR, adjusted odds ratio, CI, confidence interval.
Source: Njingu et al. (2022). Prevalence and predictors of recreational drug use in a conflict affected area in the Southwest Region of Cameroon

target the above factors to mitigate recreational drug use.

Definition of terms and variables

Recreational drugs were defined as legal and illegal drugs used without medical supervision (Hawkes, 2016). By this definition, alcohol, cigarettes, opioids and other illicit drugs were considered as creational drugs in this study. A recreational drug user was defined as someone who has ever used drugs for recreational purposes in their lifetime (Garin et al., 2017). The list of drugs included: alcohol, cigarettes, shisha, cannabis, cocaine, amphetamines, heroin, ecstasy, tramadol, diazepam and sleeping pills, lysergic acid diethylamide (LSD), erection enhancing drugs such as sildenafil. A current recreational

Table 4. Multivariable analysis showing predictors of current use of recreational drugs.

Socio-demographic variables	OR (95% CI)	*p*-value	AOR (95% CI)	*p*-value
Age groups				
18-34	1.00		1.00	
35-54	1.41 (0.88-2.25)	0.153	1.24 (0.60-2.55)	0.559
≥55	1.67 (0.67-4.14)	0.270	3.43 (0.85-13.88)	0.384
Gender				
Female	1.00		1.00	
Male	3.72 (2.39-5.80)	0.000	3.41 (2.04-5.73)	0.000
Residence				
Not internally displaced	1.00		1.00	
Internally displaced	0.80 (0.49-1.32)	0.009	0.81 (0.44-1.50)	0.037
Marital status				
Single	1.00		1.00	
Married	1.18 (0.47-3.00)	0.724	1.80 (0.43-7.45)	0.419
Widowed	1.13 (0.45-2.88)	0.795	0.94 (0.27-3.31)	0.992
Employment status				
Employed	1.00		1.00	
Unemployed	2.18 (0.64-7.38)	0.011	6.95 (1.16-41.47)	0.334
Student	2.89 (0.83-10.05)	0.026	14.73 (2.46-88.36)	0.032
Housewife	2.85 (0.67-12.10)	0.016	17.10 (2.15-96.01)	0.027
Retired	0.15 (0.01-1.64)	0.120	1.22 (0.09-17.13)	0.884
Monthly income				
<50000	1.00		1.00	
50000-99000	0.43 (0.09-2.12)	0.301	0.66 (0.11-3.98)	0.648
100000-299000	0.60 (0.12-3.05)	0.541	1.03 (0.19-5.78)	0.970
≥ 300000	0.84 (0.16-4.46)	0.837	1.07 (0.19-6.08)	0.942
Level of education				
Primary/no formal education	1.00		1.00	
Secondary	0.88 (0.45-1.71)	0.709	1.08 (0.38-3.05)	0.889
Tertiary	0.63 (0.40-0.99)	0.047	0.66 (0.34-1.29)	0.228
Employment type				
Non-physical	1.00		1.00	
Physical	0.76 (0.39-1.47)	0.414	0.82 (0.39-1.73)	0.597
Combined	0.70 (0.37-1.31)	0.262	0.63 (0.29-1.36)	0.239

OR, odds ratio, AOR, adjusted odds ratio, CI, confidence interval.
Source: Njingu et al. (2022). Prevalence and predictors of recreational drug use in a conflict affected area in the Southwest Region of Cameroon

drug user referred to anyone who has used drugs for recreational purpose during the past 30 days (Garin et al., 2017). Former recreational drug user referred to anyone who have used recreational drug before but have not consumed any recreational drug in the past 12 months (Garin et al., 2017). A non-recreational drug user was defined as an individual that has never used drugs for recreational purposes. Units of alcohol consumed per week was calculated as 5% × volume of beer (in ml) consumed per week/1000 (Alcohol Units, 2018). The average concentration of alcohol in alcoholic beer in Cameroon is 5%. Physical type of employment generally

referred to unskilled jobs such as farming, laborer, and other activities that involve mass lifting of > 20 kg. Non-physical type employment referred to skilled jobs and other employment types with mass lifting of < 20 kg (WHO, 2021).

Strengths and limitations of this study

To the best of our knowledge, this is the first study in Cameroon to investigate the frequency of and predictors' recreational drug use in a conflict affected area of thecountry. The high prevalence and pattern of drug use found in this study may vary with setting, sociodemographic and lifestyle characteristics. The cross-sectional design used in this study limits the establishment of causality in the associations identified. Other factors such as religious affiliation and peer influence which could influence the use of recreational drugs were not assessed

ETHICS APPROVAL

Ethical approval was obtained from the Institutional Review Board of the Faculty of Health Sciences of the University of Buea (approval number: 2021/1190/UB/SG/IRB/FHS). Administrative approvals were obtained from the Southwest Regional Delegation of Public Health and the District Medical Officer for Mamfe. Participants also gave written consent to willingly participate in this study after careful explanation of the study scope and purpose. Data were kept completely anonymous and confidentiality was maintained during processing of questionnaires. All investigators worked according to the principles expressed in the Declaration of Helsinki.

CONFLICT OF INTERESTS

The authors have not declared any conflict of interests.

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