



ISSN: 2832-7942

Annals of Public
Health & Epidemiology

DOI: 10.33552/APHE.2022.02.000527

Iris Publishers

Research Article

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Factors Influencing Psychoactive Substance Use Among Students; Why Juvenile Violence and Delinquency Within Schools in Cameroon. Scope of the Evidence

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Received Date: August 15,2022

Published Date: October 26, 2022

Abstract

Background: The use of psychoactive substances is becoming an enormous public health issue among adolescents and young adults in school in Cameroon. As a result, this review aimed to access evidence base determinants of psychoactive substance use and why the rise in juvenile violence within schools in Cameroon.

Methods: Searches were performed on PubMed, MEDLINE, Cochrane Library, Google Scholar, and grey literatures, using the following keywords: "Determinants OR risk factor", "psychoactive substance", "illicit drugs", "adolescents OR teenager" and "Cameroon OR Camero*" using a combination of Medical Subject Heading (MeSH) and free-text terms. Studies assessing the predictors of substance use, studies that directly assess determinants among young adults, street children, and university students in Cameroon were included as the primary outcome variable, whereas studies on behavioural addiction and studies that did not directly assess factors influencing substance use among adolescents were excluded. Our search was from 1970 till July 2022 that matched the inclusion requirements.

Results: A total of 90 (ninty) articles were selected and after records screened, 05 (five) studies were found eligible for the review. Sex, accessibility to substance use, religion, ethnicity, family history, monthly pocket allowance, peer pressure, and alcohol use were identified as critical factors for drug use and initiation.

Conclusion: This study showed that psychoactive substances(alterno-substance) use is a significant risk factor among adolescents and young adults in school in Cameroon toward violence. Hence, the need for providing education/awareness aiming at preventing substance use was a common established recommendation from all the reviewed articles as essential interventions needed to tackle the rising challenging juvenile psychoactive substance use in Cameroon.

Keywords: Cameroon; Determinants; Risk factors; Adolescents; Substance use



Introduction

When people are denied access to evidence-based care or face discrimination, their suffering from addiction is unintentionally made worse. Addiction can feel like an endless, torturous fight for those who use drugs [1]. Psychoactive substance use can have long-lasting repercussions that harm friends, family members, co-workers, and even entire generations with more devastating physical and mental health consequences especially in early adolescence [1]. If nothing is being done, the markets for illegal drugs can be full established in Cameroon and as such are associated with crime and violence [2]. And at societal level, it can exacerbate and prolong conflict, destabilizing the social and financial atmosphere of any community make it difficult to achieve sustainable development within Cameroon by 2030; the third Sustainable Development Goals (SDGs) which seek to ensure that everyone has access to a more equitable and sustainable future [3]. an action demanding that nations exhibit the political will and capability to strategies in reducing substance use related harms towards the prevention and control of non-communicable diseases [4].

Even though the largest rates of drug use consequences are shown at later ages, the adolescent years (13-18) can be a pivotal stage for initiating substance use [5]. Any amount of drug usage by adolescences is dangerous [2]. In addition to the acute health hazards effects of drugs, drug use is frequently accompanied with an increase in other risky behaviours among adolescences [2]. It can lead to a quicker onset of reliance than in adults, as well as other difficulties in adulthood, some of which are the result of a lower level of knowledge. According to the world drug report of 2022, adolescents have a greater prevalence of cannabis usage in the past year than the overall population of productive age (15-64) [2].

Substance abuse is one of the causes of many juvenile arrests, as well as a source of health problems and delinquency in our society today [6]. Adolescents and young adults are particularly vulnerable to substance misuse during this transformative moment of their lives, and they are frequently exposed to the dangers connected with a lack of substance awareness [6].

More also, the crossover from high school to college is a significant developmental landmark that can lead to personal growth and behavioural change especially indulging in substance-using behaviours regarding initiation and maintenance of substance use [7].

Psychoactive substance is substance that primarily affects the central nervous system, altering cognitive abilities hence the appellation in this report as alterno-substance [8]. They also have the potential to cause short-term changes in perception, emotion, consciousness, and behaviour.

Globally, an estimated 284 million persons between the ages of 15 and 64 had used drugs within the previous year, most of them men [2]. This is equivalent to almost 1 in every 18 persons in that age group, or 5.6%, and represents a 26% increase from 2010 statistic by the United Nation of Drugs and Crimes (UNODC), when it was projected that 226 million people took drugs, and the frequency

was 5%. The increasing population is partially responsible for this increasing global prevalence [2].

Worldwide, around 2 billion people consume alcohol, with alcohol accounting for 4% of the worldwide illness burden [4]. Alcohol consumption is causing increasing health and societal concerns in most countries of Africa. Alcohol drinking is responsible for an estimated 1.8% of the illness burden in Sub-Saharan Africa [4].

This is also the case with other legal drugs such as cigarettes, in Cameroon, cigarette smoking is consistently expanding. Currently, in developing countries 50% of men and 9% of women smoke cigarette, as compared with 35% of men and 22% of women in developed countries [9].

In Cameroon, the use of psychoactive substances is becoming a major public health issue of concern with a prevalence of drug use estimated at 21% on average [10]. Substance abuse and other drugs related issues are among the most serious public health issues, having far-reaching ramifications especially among youths. Youths (adolescents) are particularly prone to experiment with substances. This is influenced by developmental qualities such as sensation seeking and impulsivity, socialization style, and peer pressure [11]. In Cameroon, juvenile delinquency has become alarming especially within school milieus/ schooling students, 15% of students between 13- and 15-years old smoke tobacco regularly. In addition, 31% of young people are potential drug users or dealers (sells drugs) [12].

In Cameroon on 29 March 2019 marked a dark day in a secondary school in Douala, a 17-year-old student succumbed to his injuries after being stabbed by a former classmate at the bilingual high school in Deido, Douala in a crime and drugs related incident (score settling). On 13 January 2020, a 26-year-old teacher was fatally stabbed by one of his students at Nkolbisson High School in Yaoundé and many other nationwide spotted related incidences [9, 10]. These tragedies shocked the educational community and the population and since then the government has taken measures to through the ministry of educations to put most schools under surveillance and promote health awareness programmes on current social ills like psychoactive substance use, prostitution and juvenile violent in her curriculum for the Citizenship education programmes [11, 12].

However, to date, no known study has examined the major determining factors of psychoactive substance use in Cameroon. As such, this review, attempted to determine the factors that influence why adolescents of schooling age in Cameroon seek or want to try psychoactive substance despite their devastating consequence to health. The results of this study may shed fresh light on drug use in Cameroon, and guide interventions as well as prevention strategies with implications for national and sub-regional policies.

Material and Methods

The research design that was applied to this study was a review of the current literature on the determinants of psychoactive substance use in Cameroon. This review allowed us to conduct a thorough search for primary studies with a focus on the research

topic, selecting studies based on clear and reproducible eligibility criteria, evaluating study quality critically, and synthesising our findings according to predetermined methodologies. Our objective was to compile information from all studies on the factors influencing drug use among adolescents in Cameroon. It is important to recall that an estimated of 284 million people worldwide aged 15-64, majority of whom were men, had used a drug within the last 12 months [2]. This clearly indicates that, psychoactive substance use is not only becoming a muster in Cameroon but is also a global public health challenge [2]. It is in this light that we expect that by comparing similar outcomes across a number of contexts and settings, we would be able to evaluate the quality of available data about the factors that influence drugs use among adolescents and the escalating in violence among studying youths in Cameroon. Additionally, considering that reviews are considered among the best source of evidence, our study which maybe more reliable than evidence from single studies, shall be critical evidence to inform researchers, and guide policy makers as they constantly seek innovative solutions on how to significantly contribute to prevention and control of psychoactive substance use/drug abuse among adolescent in Cameroon.

Search Strategy

We first performed a scoping search to uncover current evaluations on the factors influencing drug use and drug related institutional violence recorded among youths in Cameroon. This permitted us to further highlight relevant search terms and clarify our inclusion and exclusion criteria as well as to avoid duplication in efforts.

Eligibility Criteria

According to our study design and the research topic, we established predefined criteria for study retention in the review as follows:

The inclusion criterion for the review were:

- peer-reviewed original articles that studied the prevalence, risk factors or determinants of substance use such as: tobacco, alcohol, smoking, cannabis, opioids, inhalants, sedative/hypnotics, or stimulants among youths.
- studies conducted between 1970, and June 2022,
- studies or articles conducted or reporting on adolescent population regarding substance use in Cameroon.

The exclusion criteria were:

- studies focusing on behavioural addictions (such as gaming disorders, psychiatric drug related disorders, prostitution and drugs pathological gambling, pharmaceutical “drugs”. etc),
- research papers whose full text could not be retrieved
- studies assessing only knowledge, attitude, and beliefs regarding substance use among adolescents.

Timeframe: Papers eligible were papers published in or after the year 1970 to present (July 2022).

Context: We sought studies carried out in any of the 10 regions of Cameroon.

Targeted Study design: Surveys, Prevalence and surveillance studies, qualitative and cross-sectional, reports studies that assessed the factors associated with drug or substance use.

Language: English and French Studies that addressing factors associated with substance use.

For this review, we searched several electronic databases for published and unpublished articles from 1970 to 2022. The search identified a total of 90 articles amongst which only 05 (five) research articles met the inclusion criteria. We decided to start our search in 1970 to ensure we performed an exhaust wide range of determinants or factors influencing drug use over the years in Cameroon.

The Boolean strategy was use to search through the following databases; PubMed, Medline, and Google Scholar databases using search terms, keywords, truncated and wildcard strategies and applying MeSH (Medical Subject Headings) terms approaches like “tobacco OR Smoking” , “Alcohol OR Drinking” OR “Substance use OR recreational drug use”, Recreational drugs OR psychoactive substance AOR Drug Addiction OR Drug Dependence AND “Cameroon OR Republic of Cameroon OR Camero*”, (adolescent OR students) AND (psychoactive substance use) AND (Cameroon OR Republic of Cameroon OR Camero*).

To expand our evidence, and to reduce publication bias caused by the selective availability of studies, we physically looked through bibliographies and conducted hand searches of significant journals on the subject. The most recent comprehensive search for each database was July 22nd 2022, and all relevant studies were exported to Zotero bibliographic software for further reviewed and appreciation.

Data Collection Process

We first of all removed all duplicate articles that we found from the databases. We then performed an initial screening of the titles and abstracts on the basis of the eligibility criteria stated above in order to validate their selection as part of this review. Next, we performed full text screening of selected studies. All the articles that met our inclusion criteria were retained for data extraction. This was done using an electronic standardized data extraction template that was designed by the team in line with the Preferred Reporting Item for Systematic Reviews and Meta-analyses (the PRISMA) data extraction template. This data extraction template was first pilot tested on a representative sample of articles. The titles, abstract and full text screening as well as data extraction was done independently and in duplicate with disagreements resolved via consensus, or exchange communication.

Data analysis

Excel was used to analyse the extracted data. We evaluated the papers on the basis of their validity, dependability, and overall importance to our issue. We compiled, summarised, and categorised the retrieved data so that we could do the analyses.

Results and Discussion

After a thorough analysis of the inclusion and exclusion criteria, only 05 were eligible for review. A PRISMA flowchart was adapted to illustrating the inclusion and exclusion procedure as

shown in figure 1 below. The full texts of the 05 included studies were retrieved, and information regarding research design and characteristics influencing student substance use was extracted (Table 1).

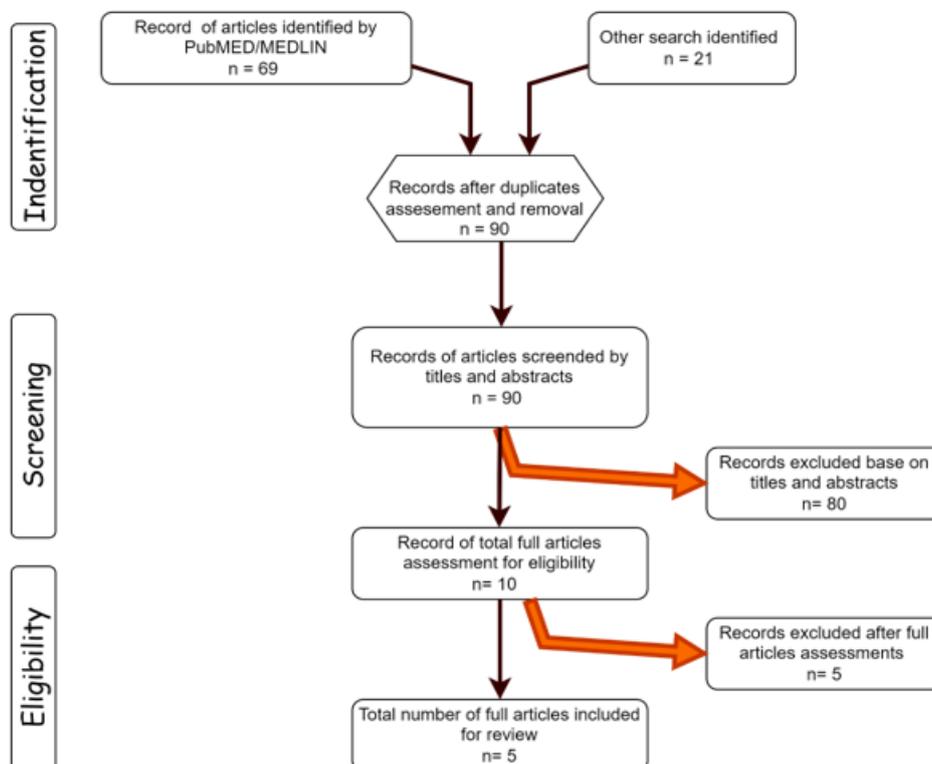


Figure 1: illustrative adaptation from PRISMA flow diagram of the included studies on the review of factors influencing psychoactive substance use among adolescent in Cameroon (1970-July 2022).

Table 1: Factors influencing psychoactive substance use among Youths in Cameroon (1970-July 2022).

SN	Article titles	Publication year	Language	Study area	Study type	Identified determinants / factor influencing drug use in Cameroon
1	Prevalence and predictors of recreational drug use among medical and nursing students in Cameroon: a cross sectional analysis.	2018	English	Buea	Cross sectional study	Presence of illness
2	Prevalence and factors associated with substance use among students in tertiary institution	2022	English	Buea	Cross sectional study	Gender monthly allowance peer pressure curiosity availability
3	Addictive behaviour of street children: inter-culturation and resilience	2014	French	Douala	Mixed study	frustration
4	Substance use among street children in the city of Yaoundé, Cameroon	2021	French	Yaoundé	Cross sectional study	dysfunctional families age level of education source of income long stay in the streets

5	Correlates of cigarette smoking among university students in Cameroon	2013	English	Bafoussam (West), Douala and Yaoundé	Cross sectional study	peer pressure mood swing (performance)
6	Prevalence and predictors of recreational drug use in a conflict affected area in the Southwest region of Cameroon	2022	English	Buea	Cross sectional study	Conflicting situations religious affiliation peer influence

A paradigm to examining the factors influencing psychoactive substance(alterno-substance) use in Cameroon was established base on associate risk or risk outcome. It is important to remember that the repercussions of psychoactive substance (alterno-substances) use and abuse can harm families, potentially beyond decades, as well as colleagues and friends. In early adolescence, drug use poses a significant threat to both physical and mental health of the users [5].

Psychoactive drug trade is linked to violence and other types of criminal behaviours the search for quick money in an area of law enforcement that is a risk and survival atmosphere make dealers or alterno-substance users ready for any challenge should incase such arise [13].

The disrupting impacts as well as the social and economic

consequences of drugs hinder sustainable development. As such the objectives of the every nation and the global community as a whole are focus to protect the health and wellbeing of people [5].

Poor understanding of the interplay of numerous predictor variables, including sociocultural and economic factors, coupled with an overwhelmingly poor awareness on the repercussions to early initiation on psychoactive substances are fundamental challenges in defining policies gear towards assurance of every nation growth [5].

The factors or determinants of psychoactive substance use retrieved after analyses or the eligible articles were grouped into: peers, individual traits, family and social as their possible outcomes as seen in figure 2.

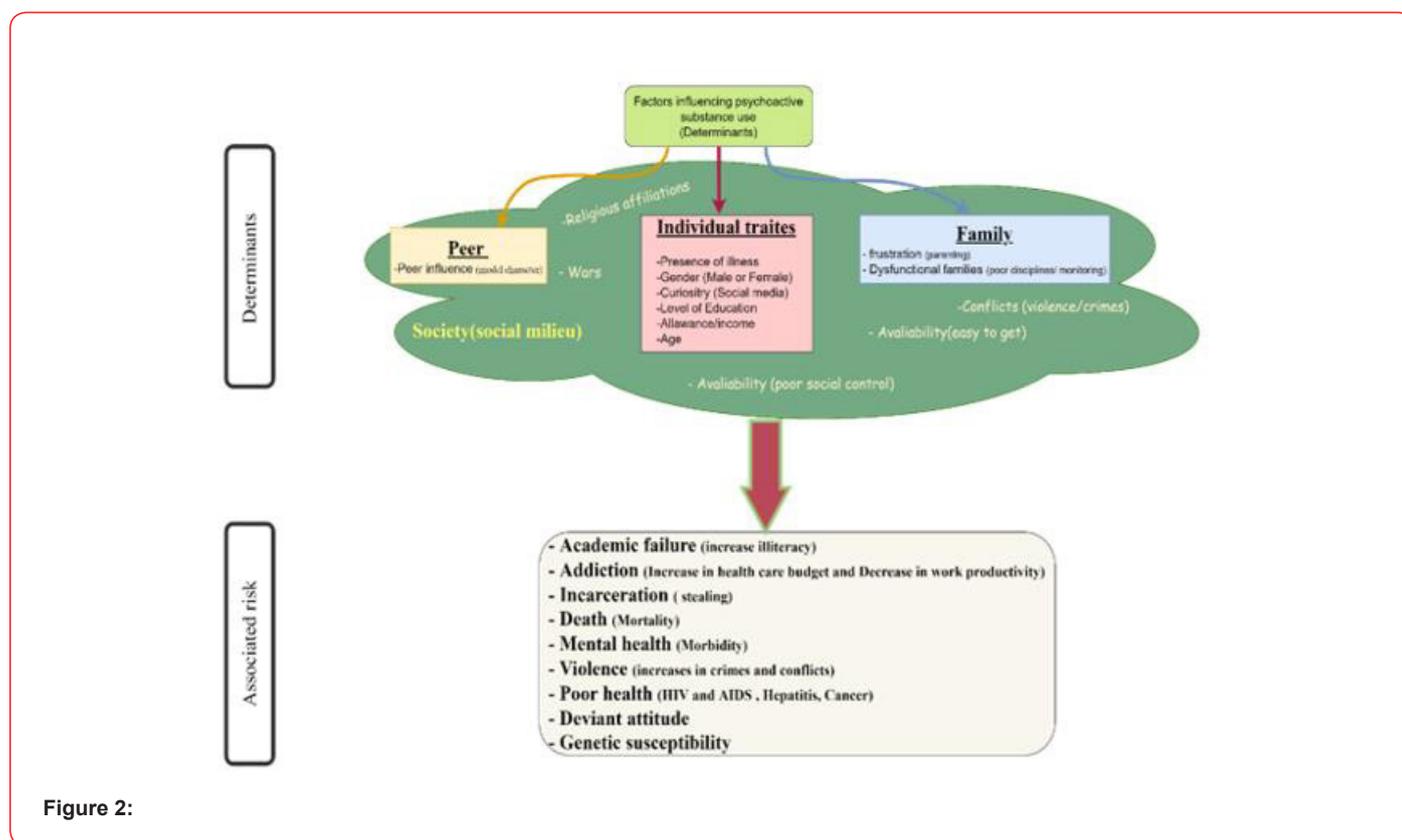


Figure 2:

Discussion

This present review was conducted to assess the determinants of psychoactive substance use (alterno-substance) among students. We found that a significant proportion of students were currently using both forms of alterno-substances that is the licit

or illicit types, although research addressing the predictors of alterno-substance use in Cameroon are sparse as witness during the review analysis, this was in line with finding from Mbanga, et al. also ascertain the sparseness of data on recreational drugs use in Cameroon [14]. It was however, also revealed that there have been

indications of an increase in the use and misuse of the analgesic and opioid medication tramadol by adolescents in the Southern part of the Cameroon, mostly for the purpose of mood and performance enhancement, whereas solvent and gin use were predominantly high among adolescents in the Northern part of Cameroon for purpose of social adhesion [14, 15]. As demonstrated by this review whose main driver was to seek out the determinants of alterno-substance use, it calls for the necessity on documentation or improved recording of predictors or documentation of any related data on alterno-substance use in Cameroon as a way forward to organise and better tackle reporting on the exponential rise in juvenile violence and delinquencies witnessed among youth recently in schools in Cameroon [16-18].

Our study found that: gender, peer pressure, family, allowance, curiosity and availability of substance use licit and illicit forms are the prevalent linked factors for alterno-substance use among adolescent in Cameroon [13, 14, 18, 19].

Individual traits

A significant related predictor for substance use was discovered to be the male gender. Male gender has been reported to be positively correlated to the use of licit and illicit substances including polydrug use with the female gender showing some rise is alterno-substance use which is contrarily demonstrated that the use of illicit drugs is negatively associated with women [14]. The later is a call of concern that no gender is free from the havoc that come with alterno-substance use disorders.

Peer pressure

The most revealed predictor for alterno-substance initiation among adolescents was Peer pressure or peer influence [15, 19, 20]. This relationship can be explained by the Abraham Maslow's pyramid of hierarchy; love and belonging, once a person's physiological and safety requirements are met, they go to the third level of human wants, which includes the need for love, belonging, and interpersonal relationships. If a person's physiological and safety demands are addressed, they become driven to seek out interpersonal connections, this category includes love, friendship, trust, intimacy, acceptance, giving and receiving affection, and group membership [21].

In search for interpersonal connection by adolescents, we also noted that use of alcohol was an associated factor for the initiation to the use of other drugs (licit and illicit) [14]. This finding can be vital in designing harm reduction or preventives policies gateway by using alcohol which is a more socially accepted alterno-substance and a comorbidity factor for initiation into other drug use among adolescents to fight the rise in alterno-substance use (illicit and licit).

Family

Similarly, family and family history of substance use was revealed to be a factor related with alterno-substance use [13, 14, 18-20]. Family members' shared bio-psycho-social vulnerabilities, this may explain the connection and more also this determinant highlights the potential benefits of preventive strategies for adolescents before any possible engagement into problematic

substance use.

It was reviewed that another predictor of alterno-substance use was compared with adolescent users staying within or away from their families, Staying away from the family in a Country like Cameroon with a society grounded on strong religious and traditional ties were shown to be associated with easy initiation to alterno-substance use [22]. These findings can perhaps be understood in light of the loss of parental supervision, family frustration or the perceived sense of freedom, and subsequent curiosity to experimentation with the alterno-substances.

Juvinale violence

the presence of violence were found to be linked to individual traits and family. Among schooling adolescents, the main source for the rise in violence was the issue of weekly allowance and the presence of pre-existing conflicts [18, 20]. The allowance served as a source on commercial capital to buy and supply to other peers who may inturn use their own allowance as cash to procure drugs [20]. More also, Conflict zones are now understood to be high-risk settings for recreational drug use and the emergence of drug-related issues and gender-based violence. The latter can be very link to a legal drug like alcohol, alcohol consumption are greatly linked to violence which increases injury vulnerability in binge drinking [23].

Implications

This current review highlights one common recommendation by all the reviewed articles which was the call for preventive education and awareness programmes for youths in Cameroon [13, 14, 18-20, 22]. Such recommendation would serve as an important health promotion and prevention strategy, especially for youths who out of curiosity, may want to try alterno-substance (licit and illicit) [20].

Youths must play a crucial role in combating the scourge of alterno-substance abuse (legal and illegal forms) in the society; thus, their involving approach to the issue is crucial.

This review has some important limitations as it did not exploit the area of social media addiction, gambling and psychiatric disorders among adolescents in Cameroon, although there too are emerging problems for concern among youths in Cameroon.

Conclusion

The issue of alterno-substance (psychoactive substance) use is a matter of concern in Cameroon. As such, the rising level of violence and delinquency among Cameroonian students (youth) point to the urgent need for preventive measures as outlined by the reviewed articles. If this persists, Cameroon may miss its goal for promoting mental health and well-being and the goal of strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol. The controversy issue still stands why the juvenile violence and delinquencies in schools went most of the deviance are preventable?.

Family, peer and individual traits are the common factors associated with the initiation or maintenance of alterno-substance use among students in Cameroon. As such a comprehensive mixed

of family, peer and individual traits in sensitizing students(youths) on the impact of alterno-substance use as outline by the various authors by investing in prevention and health awareness educative programmes for students are the potential availing strategies to tackle these arising public health challenges issue among students in Cameroon.

Acknowledgment

The views expressed in this article are that from the authors, which do not necessarily represent the views, decisions or policies of the institution within which they are affiliated.

Conflict of Interest

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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