Community profile based on adolescent drug use patterns within a prevention system undergoing cultural adaptation in Brazil

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Abstract

"Communities That Care" is an evidence-based drug use prevention system currently undergoing cultural adaptation for Brazil. It involves community leaders in developing preventive plans grounded in data on youth risk and protective factors. Using a cross-sectional design and mixed methods, the study included 326 adolescents from three schools in the pilot community who completed the Communities That Care Youth Survey. Descriptive statistics and association tests were applied. Subsequently, focus groups were conducted with 26 students to qualitatively explore the risk and protective data. Results indicated higher consumption levels of alcohol and other drugs among girls, with alcohol use being particularly significant. The qualitative analysis identified multifactorial elements related to high substance use among adolescents, such as family dynamics, social belonging, media influence, and emotional factors. The findings highlight the need for preventive plans that are responsive to contemporary social transformations and gender inequalities that influence adolescent behavior.

Keywords: prevention system, drug abuse, gender perspective, females, adolescents

1 Introduction

The "Communities That Care" (CTC) prevention system, currently undergoing cultural adaptation in Brazil, is grounded in the mobilization of community leaders to develop processes aimed at improving health outcomes. In communities where the CTC intervention is implemented, mobilization efforts focus primarily on addressing issues related to alcohol and other drug use, as well as violence. This system is actively aligned with social mobilization and prevention science, as it is originally based on the "Communities That Care" model developed in the United States [1, 2].

CTC's community-based actions are explicitly tailored to the local context, responding directly to the unique characteristics and needs of the target community. Through this organizational structure, a community prevention plan is developed [1]. This plan is created by local leaders, referred to as the community coalition, and is informed by data that reflect local conditions regarding protective and risk factors. These data are collected using assessment tools designed explicitly for the CTC system and are administered to adolescents residing in the intervention area. Since these tools evaluate both risk and protective factors, the resulting prevention strategies aim to reduce specific risks and strengthen protective factors within the community [2].

The data collected serve as a community diagnosis and reveal patterns of alcohol and other drug use among students in lower and upper secondary education, aged 13 to 18. These findings highlight a public health concern, given the developmental consequences of substance use on youth and their broader social networks. This phenomenon is multifactorial, influenced by diverse spheres of life such as family, school, peer relationships, community context, social and economic inequalities, and racial and gender-based discrimination, among other factors [2]. The problematic use of alcohol and other substances is also associated with various risk behaviors, including unprotected sex, accidents, mental health issues, and involvement in violence—factors that can severely impact adolescents' lives (Brazilian Institute of Geography and Statistics [3, 4].

Substance use patterns tend to vary not only across cultures but also by gender. Globally, there has been a gradual increase in drug use among girls, in some cases reaching or surpassing that of boys, who historically reported higher rates of use. A study conducted in countries across Europe, Central Asia, and

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Canada found that girls aged 13 to 15 reported higher lifetime use of tobacco cigarettes (age 13: 11%; age 15: 26%) compared to boys (age 13: 10%; age 15: 24%), with Denmark reporting particularly high rates among 15-year-old girls (64%) [4]. Lifetime use of e-cigarettes is also increasing, with higher consumption among 13-year-old girls in countries such as Lithuania (41%), Estonia (32%), Bulgaria (33%), Romania (31%), and England (24%). Among 15-year-olds, however, boys tend to report higher lifetime e-cigarette use. Lifetime alcohol use is higher among 15-year-old girls (59%), with Denmark again leading the statistics—though gender differences are minimal (girls: 84%; boys: 83%) [4].

In Brazil, data from the National School Health Survey (PeNSE) corroborate this trend. Historical data reveal an increasing prevalence of alcohol experimentation among girls. In 2019, the prevalence of alcohol experimentation among girls rose to 66.9%, compared to 59.6% among boys. PeNSE also indicated a growing tendency for higher consumption of other drugs among girls compared to boys [3].

This article aims to analyze gender differences in alcohol and drug consumption within a community participating in the pilot study of the cultural adaptation of the CTC prevention system in Brazil. Subsequently, the study seeks to understand the meanings attributed to these findings by the students themselves, as a means of supporting the development of the community coalition's prevention plan. This study is part of a master's thesis conducted between 2023 and 2024.

2 Method

This study employed a mixed-methods approach with a descriptive-exploratory design. It analyzed data extracted from a broader project involving the cultural adaptation of the "Communities That Care" (CTC) prevention system, originally developed in the United States. The dataset analyzed pertains to a pilot community that underwent the intervention between 2021 and 2023 [5]. This research was approved by the Ethics Committee for Research Involving Human Subjects (CEP) at the Universidade Federal de Santa Catarina (UFSC), under protocol number CAAE: 50477321.3.0000.0121.

The study involved students from three schools in the target community: one public lower secondary school, one public upper secondary school, and one private school covering both educational levels. In the initial phase of the epidemiological survey, 326 adolescents aged 13 to 18 participated. These students were enrolled from the 8th grade of lower secondary education through the 3rd grade of upper secondary education and completed the questionnaire in August 2022.

The study utilized the translated and validated Portuguese version of the "Communities That Care Youth Survey" (CTCYS), which contains 251 items. Among these, 21 assess risk factors and 14 assess protective factors [6]. The questionnaire was hosted on the online platform SurveyMonkey and administered via mobile phones provided by our research center. Following the quantitative data collection, a qualitative phase was conducted, focusing specifically on the data related to alcohol and drug use from the CTCYS. This second stage aimed to explore students' lifetime and past-30-day use of alcohol and other drugs.

The qualitative phase was carried out in November 2023 and was structured using focus groups and a semi-structured script based on the CTCYS quantitative findings. Inclusion criteria for participation were:
a) previous participation in the quantitative survey; b) current enrollment at the responding school; and c) parental/guardian consent. Based on these criteria, 11 volunteer adolescents from public schools and 15 from private schools participated in the focus groups. The gender distribution included 12 girls and 14 boys.

Quantitative data were exported from SurveyMonkey in SPSS format and processed using R programming language, following importation through the *haven* package. Initial data cleaning was performed, yielding a final sample size of N=326. Survey item data were analyzed using both absolute and relative frequency statistics, as well as contingency tables with categorical outcome variables, such as drug use. Scale scores were examined through univariate descriptive statistics, including mean and standard deviation. To assess differences in drug use prevalence between female and male adolescents, item responses were dichotomized

to differentiate between students who had used alcohol or other drugs at least once and those who had never used them. Prevalence rates for each group and gender differences were then calculated, using male gender as the reference category. A positive difference indicated higher use among female adolescents. Finally, a chi-square test for proportions with Yates' continuity correction was used to test the hypothesis of no gender difference [7].

Additionally, qualitative data were analyzed using Thematic Analysis (TA), as proposed by Braun and Clarke [8]. This analytical method involves a preliminary understanding of the collected content, identification, and organization of the transcripts. During the transcription phase, an in-depth reading of the audio recordings was conducted to generate initial codes. Subsequently, these codes were grouped into overarching themes. This type of analysis seeks to identify meaningful patterns within the data, which are later interpreted using theoretical frameworks. The analysis resulted in 58 codes, which were grouped into seven categories and consolidated into two overarching themes: "Substance Use" and "Gender Issues".

3 Results and Discussion

The majority of respondents were female (57.36%), cisgender (91.41%), and identified as White (70.86%). Most were Brazilian nationals (96.93%), with a mean age of 14.76 years. A greater proportion attended private schools (56.13%), with the majority enrolled in upper secondary education (51.84%) and predominantly studying in the morning period (55.21%) (Table 1).

The results of the survey using the risk and protective factors instrument, the CTCYS, indicated that alcohol and other drug use among students aged 13 to 18 in the pilot community in Florianópolis was high. A higher prevalence was observed among female adolescents for most types of drugs and patterns of use, although only alcohol use reached statistical significance. Data were categorized into "lifetime use" and "use in the past thirty days" (Table 2).

The survey conducted by the CQC system in the community took place in 2022, close to other epidemiological surveys carried out in Brazil with students. In the pilot community, lifetime and past-30-day alcohol use rates were 68.5% and 36.5%, respectively. In the 2019 PeNSE survey, the values for Florianópolis were 64.9% and 27.6% [3]. In the 2010 survey by the Brazilian Center for Information on Psychotropic Drugs (CEBRID), they were 70.9% and 33.1% [9]. Tobacco data showed differences, with lifetime and past-month use rates in the participating community of Florianópolis slightly higher than previous national figures: 31.3% and 14.8%, respectively. PeNSE indicated national rates of 22.6% lifetime use and 6.8% past-month use among school students, with the highest prevalence in the South Region (8.0%).

E-cigarette data from the pilot community showed high rates, exceeding the most recent national data. This represents a challenging novelty of the last decade, as studies have identified potential physical harm and addictive potential, possibly signaling a reversal of successful tobacco prevention policies [10]. In CEBRID's 2010 survey, this type of tobacco use was not even assessed; however, in the 2019 PeNSE survey, the rate was already significant: 16.8% of students aged 13–17 had tried e-cigarettes, including 13.6% among those aged 13–15 and 22.7% among those aged 16–17, with the highest regional prevalence in the Central-West (23.7%) and South (21.0%) regions.

Table 1: Profile of CTCYS questionnaire respondents in the pilot community in Florianópolis during the cultural adaptation of the CQC Prevention System (N=326)

Variable	n	%
Sex		
Female	187	57.36
Male	139	42.64
Gender		
Cisgender woman	164	50.31
Cisgender man	134	41.10
Non-binary	17	5.21
Preferred not to answer	11	3.37
Race/Ethnicity		
White	231	70.86
Mixed race (Parda)	71	21.78
Black	9	2.76
Asian	3	0.92
Indigenous	2	0.61
Preferred not to answer	10	3.07
Nationality		
Brazilian	316	96.93
Foreigner	10	3.07
Type of School		
Public – Elementary Education	68	20.86
Public – High School	75	23.01
Private – Elementary and High School	183	56.13
School Year		
8th grade – Elementary Education	79	24.23
9th grade – Elementary Education	78	23.93
1st year – High School	34	19.63
2nd year – High School	51	15.64
3rd year – High School	54	16.56
Class Period		
Morning	180	55.21
Afternoon	71	21.78
Evening	75	23.01

Table 2: Lifetime and past 30-day use of alcohol and other drugs among students from public and private schools in the pilot community in Florianópolis, in the cultural adaptation study of the Communities That Care prevention system, collected in 2022, by sex

Substance	Lifetime use				Past 30-day use					
	Total %	Fem %	Masc %	Diff	p	Total %	Fem %	Masc %	Diff	p
Alcohol	68.5	74.9	59.8	15.1	0.007*	36.5	40.2	31.6	0.146	0.451
Binge drinking	19.4	20.8	17.6	3.2	0.580	_	_	_	_	_
Cigarette	31.3	33.1	28.9	4.2	0.493	14.8	17.5	11.2	4.2	0.493
E-cigarette	35.5	39.6	30.1	9.5	0.093	13.7	15.6	11.2	9.5	0.106
Hookah	21.9	25.0	17.8	5.1	0.259	11.6	16.4	5.2	5.1	0.259
Marijuana	21.8	22.0	21.5	7.2	0.161	9.7	11.4	7.4	7.2	0.161
Non-prescribed medication	13.9	16.1	11.0	0.5	1.000	6.6	8.7	3.7	0.5	1.000
Inhalants	9.4	10.9	7.4	3.5	0.383	4.1Adolese	ce 6.0 a e S	au ld5 , v. 20	3.5 3, p	. 0.383
LSD	7.2	7.1	7.5	-0.4	1.000	2.8	2.7	3.0	-0.4	1.000
MDMA	6.8	7.6	6.0	1.6	0.730	1.6	1.1	2.2	1.6	0.730
Cocaine	2.2	1.1	3.7	-2.6	0.231	0.6	0.5	0.7	-2.6	0.231
Amphetamines	1.2	1.1	1.4	-0.3	1.000	0.6	0.5	0.7	-0.3	1.000
Crack	0.0	0.0	0.0	_	_	0.0	0.0	0.0	_	_
Note. Fem = Female; Masc = Male; Diff = Difference between Fem and Masc; $p < .05$										

Conversely, marijuana use data in the pilot community were elevated, with lifetime and past-month rates of 21.8% and 9.7%, respectively, whereas IBGE [3] reported a national past-month rate of 5.3%, with substantial variation among capitals. Florianópolis had the highest rate (9.4%), closely matching the findings of this study.

An increasing trend in alcohol and other drug use among female adolescents has been reported in the literature. PeNSE 2019, regarding cigarettes, indicated earlier use among girls aged 13–15 (18.4%) compared to boys in the same age group (15.6%), whereas the 2015 survey found no statistically significant sex difference. Older adolescents (16–17 years) still showed higher rates among boys [3], suggesting a rising consumption trend among younger girls. This sex and age difference in consumption was more pronounced in the South Region, where female adolescents had the highest percentage of cigarette experimentation (25.6%) and the most significant gap compared to male adolescents (19.2%). In contrast, in other regions, the difference was negligible or nonexistent [3]. The 2022 pilot community data corroborate this trend, with lifetime cigarette use at 33.1% among girls and 28.9% among boys, and past-month use at 17.5% and 11.2%, respectively.

Alcohol was the only substance with a statistically significant difference in consumption between girls and boys in the CQC pilot community, both for lifetime use (74.9% vs. 59.8%) and past-month use (40.2% vs. 31.6%). IBGE [3] reported increasing sex differences in past-month alcohol use—30.1% among girls versus 26.0% among boys in 2019—compared to 2015, when no statistically significant difference was found, particularly among younger girls aged 13–15, suggesting a possible behavioral shift in this generation toward greater engagement in risk behaviors.

There was also a difference in the non-medical use of psychotropic medication, with higher rates among girls for both lifetime (17% vs. 11%) and past-month use (9% vs. 2%), as well as higher inhalant use. For some illicit drugs, such as LSD, MDMA, cocaine, and amphetamines, there was little sex difference, consistent with PeNSE findings [3].

These results caught the attention of the community coalition responsible for implementing the CQC, as they reinforce a growing trend in Brazil and worldwide of significantly increased drug use among women, especially adolescent girls. This prompted the coalition to seek a better understanding of the observed differences and their implications. A 2004 review study on psychosocial risk factors in the initiation of alcohol use among adolescents found results contrary to the general expectations of that historical moment, showing that gender was not predictive of alcohol initiation [12].

Freitas et al. [13] in an epidemiological study published in 2012, discussed that among adolescents who had consumed alcohol, girls had higher rates, 44% were boys, and 56% were girls. They also consumed more alcohol in the previous month (a statistically significant difference), indicating that girls were drinking more than boys, contradicting previous literature. "The results of this study highlight that a high proportion of the adolescents investigated had consumed alcohol, with a predominance among females, confirming the reversal of the socially defined profile that positioned men as the main consumers" [13].

The community coalition, therefore, recognized the importance of planning prevention actions that consider gender issues, suggesting further investigation into the meanings young people themselves attribute to these findings. Accordingly, focus groups were conducted with students to discuss the epidemiological data, with the qualitative results described below.

The chosen qualitative data collection model involved open-ended questions. Initially, quantitative data from the previous survey [5] were presented so that all students could visualize alcohol and other drug consumption rates among students, particularly the higher consumption among girls, at both regional and national levels. After the presentation, adolescents were asked about the reasons for increased adolescent consumption—especially among girls.

4 Meanings attributed to alcohol and other drug use

This theme encompasses all content discussed by the adolescents in the community related to this topic. Within this theme, particular emphasis was placed on alcohol and other drug use among individuals identified as female. Two categories were defined to illustrate the theme: "Reasons Attributed by Adolescents for Alcohol and Other Drug Use" and "Perceptions of the Impact of Alcohol and Other Drug Use in Adolescence." The first category addresses the meanings assigned to adolescents' use behavior, shaped by each individual's experiences and subjective realities. The second category addresses young people's perceptions regarding use behavior and the associated health risks.

To protect participants' identities, the study used identifiers that distinguished each volunteer's statements. Female participants in the focus group were labeled with "F" (for female) plus a personal identification number. Male participants followed the same logic, using "M" (for male) plus a personal identification number

Among the reasons provided by students for the increase in alcohol and other drug use, the sense of belonging to a group was particularly recurrent—especially among those identifying as female. This sense of belonging was linked to forming friendships among adolescent girls, as expressed in the statements: "I think, like, there is that thing about popularity, so everyone drinks to socialize, make more friends" [M5]; and "I think girls are drinking a lot because... like... You fit in more... I do not know... everyone is there, so you want to join" [F7].

Other factors related to adolescent alcohol and other drug use were also cited, indicating that such behavior is not explained by a single reason. The specialized literature likewise supports the idea that use is linked to the experience of belonging [12, 14]. Adolescence is a life stage in which bonds are often formed in social contexts, significantly impacting identity formation. Thus, habits and lifestyles of peers influence behavior, fostering the sense of belonging mentioned above. Belonging involves the young person's pursuit of social identification and integration, which can lead to adopting the values and beliefs of certain groups. This may occur through interaction with peers who use alcohol or other drugs in both social and private settings [14].

Aligned with the belonging theme, participants also reported peer and friendship influences, as well as the normalization of alcohol and other drug use in social environments: "In a group of friends where everyone is using, the person goes along and uses too, so they do not feel judged" [F7]; "The places we go with friends, especially social ones, it is really normal to have alcohol or marijuana. It is something that's become normal and expected, right?" [M3].

A literature review identified that peer-related risk factors can be correlated with alcohol use and engagement in violent behaviors [12]. Conversely, social support is an important protective factor, providing knowledge, material assistance, health information, and emotional support. Lack of social support may be linked to a higher risk of drug use. Quality support helps regulate adolescents' emotions in the face of daily challenges, thereby promoting well-being. This underscores the importance of prevention strategies that strengthen social support networks [15].

Another point raised by students was the role of drug use as a coping mechanism for emotional problems: "They might be going through an emotional problem. They are sad, they are angry, and then they take it out on that—on the drug, on the alcohol" [F7]; "Whether you like it or not, it is a way to de-stress" [M7]. The transitional period from adolescence to adulthood can be a risk factor for alcohol and other drug use, as it involves challenges, personal complexities, demands, and delicate moments in interpersonal relationships, which can result in using substances to cope with difficult emotions [16].

Participants also mentioned the influence of social and media networks: "The media influences drug use in general. [...] Any movie you watch always has a scene where they are at a party, everyone drunk, and it is so cool, I do not know. Like, it ends up influencing that a lot" [F2]. Regarding social networks, there was a perceived link to girls' self-esteem: "I think because of the influence of social networks, because of

comparison among women, they end up feeling pressured... and to make up for it, they drink alcohol to feel good" [M3]. In the digital era, adolescents' daily lives are closely tied to online contexts. Research has shown that teenagers often use the internet to construct their self-image, with alcohol sometimes mediating the handling of complex emotions [3]. After the COVID-19 pandemic, the use of digital devices increased, facilitating communication and access to information, but also causing harms—especially for adolescent girls, including body image issues and low self-esteem fueled by unrealistic beauty ideals. These factors contributed to social and real-life disconnection and increased risk behaviors such as substance misuse [17].

Finally, participants cited the family environment as an influential factor in substance use: "I think in a way alcohol can come from the family, because there are many people who live with parents who have that kind of dependency and end up thinking it is normal, so for them it will be normal" [F5]; "I have seen friends like that, drinking with their families, and over time they get used to it [...] from a very young age, drinking with their parents, and then they develop the habit of drinking early" [F5].

Studies in social development highlight the family as one of the main influences on adolescent drug use, through observation and learning in the family setting, where adolescents absorb and understand patterns, attitudes, and values. Parenting styles can determine protective or risk behaviors [15]. Substance use within the family environment can be influential, as family members serve as role models in the adolescent's development [11]. The way perspectives and values are transmitted directly affects childhood and adolescence. The quality of the parent–child relationship is a key family variable and may predict the onset of alcohol use. Research has found that the likelihood of initiating alcohol and other drug use is linked to adolescents' perception of greater parental permissiveness and lower social support from parents [12].

The meanings attributed by study participants largely aligned with existing specialized literature on reasons for alcohol and other drug use [16, 11, 12, 14, 15].

5 Gender issues

Studies have identified a significant increase in substance use among female adolescents. A systematic literature review examined gender aspects in alcohol and other drug use during youth. Donavan [12] found that gender differences had emerged only recently, reflecting a changing social context in the early 21st century. Nearly two decades later, more recent research has shown shifts in these phenomena, indicating a progressive rise in drug use among female adolescents [3, 4].

The Gender Issues section addresses the role of gender in adolescent alcohol and other drug use behaviors. Two categories were selected for this theme: "Gender Stereotypes" and "Risks of Female Intoxication."

In the female focus group, participants expressed the following views: "I think it is very much society... expecting boys to drink and go out, while girls are very restricted" [F2];

From a young age, society conveys a certain image of how men and women should be treated. There is a big difference, and when you grow up, the way people see you as a woman is like... You have to be delicate, proper. If you have psychological problems, you need to get treatment, and so on. With men, it is totally different [F6].

In the male focus group, comments on the rise in girls' substance use included: "Most of the girls I know go out, party, drink, and use stuff [...] it has become a culture, I think... The person wants to feel accepted, included, maybe climb a social hierarchy, something like that... so they start drinking and doing these things" [M4]; and "Many girls I see do not have a good relationship with their parents because they smoke, use something, or drink too much... this has become very common lately. Before, it was something more associated with men, now I see it with women" [M3].

Differences emerged between female and male narratives about the reasons for higher alcohol and other drug use among girls. Female participants emphasized historical male privilege, social pressure to drink, and the repression of women—framing increased substance use as a form of female emancipation. A systematic

literature review found that one reason for the rise in substance use among adolescent girls could be linked to social changes in women's roles over time, including expanded social participation, greater openness to new experiences, and the double burden of work and household responsibilities [18]. Male participants, in contrast, discussed the normalization of girls' drinking and its possible links to emotional or social pressures they face.

The discussion above relates to gender stereotypes—expectations imposed on individuals to conform to predetermined patterns of living. These patterns originate from historically established hegemonic norms considered "correct". Historically, gender expectations-maintained distinctions between men's and women's social roles: men were often assigned physically demanding tasks away from home. In contrast, women were socially instructed to engage in caregiving and domestic roles. In contemporary society, gender divisions persist but have evolved: women now participate in the labor force, yet remain strongly associated with caregiving roles, such as in health and education [19]. Stereotypes continue to generate stigma and limit cultural diversity by enforcing categorical norms.

The Risks of Female Intoxication category brought forward adolescents' perceptions of the risks associated with female drinking and drug use, particularly in social settings such as gatherings, parties, and other public places. Female participants expressed concerns about being intoxicated: "Girls using more alcohol than boys surprise me, because I am very conscious about not going to parties and getting drunk, because I am afraid of what might happen [...], whereas boys do not have that problem" [F2];

When someone drinks, they usually become more suggestible, more relaxed, and accept things more easily. So, it can be more dangerous for women—if a guy sees a girl more relaxed, he might try something that, when sober, she would not agree to or would react against [F7].

Alcohol consumption can be a predictor of physical violence, both from the perspective of perpetrators and victims [20]. An analysis of secondary data from Brazil's Disease Notification System identified gender differences in types of violence, perpetrators, and means of aggression against adolescents. For females, the most prominent forms were sexual violence, violence perpetrated by fathers, partners, and ex-partners, and threats. Drug use by perpetrators and victims was significantly correlated with gender-based violence against women [20, 3].

Another risk factor linked to female intoxication is fear of social exclusion. Girls may feel pressured to adopt group behaviors, such as drinking alcohol, to belong. However, this can also lead to fears of losing control over their bodies and actions, and of being exposed to unpleasant situations. For these reasons, participants emphasized the importance of addressing these issues in adolescent prevention action plans.

6 Final considerations

This study sought to understand, through a mixed-methods approach, the results from the community profile assessment of the target community in the pilot cultural adaptation of the *Communities That Care* prevention system in Brazil. The epidemiological data indicate significant alcohol and other drug use among adolescents in the community, with a higher prevalence among girls. The community coalition sought to complement these data with a qualitative study on students' perceptions, aiming to develop a prevention plan aligned with the community's actual needs.

The findings revealed multiple factors contributing to the rise in adolescent alcohol and other drug use, including among girls. The search for acceptance and belonging within peer groups, the influence of social media, family roles, and individual mental health issues emerged as consistent with previous studies in the field. Students' narratives highlighted how substance use is marked by gender differences, reflecting both local and global shifts in alcohol and other drug use among adolescent girls. Moreover, risk exposure was evaluated in light of the limited critical reflection on the dangers of substance use, considering the adolescents' socio-contextual environment.

The increase in substance use among females also has potential intergenerational impacts, underscoring the importance of public health initiatives and gender-based violence prevention. Preventive interventions should integrate a gender perspective, considering ongoing social and cultural transformations to enhance the effectiveness of actions.

Given this, prevention strategies should include the perspectives of young people themselves, as they live the reality of substance use and can act as agents of change. These adolescents are embedded in a society shaped by historical, cultural, and political factors that influence lifestyles. Thus, risk factors for alcohol and drug use necessarily arise from the contexts in which individuals are situated, spanning micro- and macro-social dimensions, making a dialectical methodological approach essential to capture the complexity of the phenomena.

The integration of multiple data sources—epidemiological indicators, qualitative narratives, and socio-environmental factors—uncovers behavioral patterns and nuances that isolated analyses may overlook. This approach deepens the understanding of the phenomenon and supports the development of context-based preventive strategies within the community engaged in the prevention system. The *Communities That Care* model benefits from this methodology by identifying both risk and protective factors, allowing for interventions tailored to the community's territorial characteristics and lived dynamics. Thus, the study underscores the importance of combining quantitative and qualitative perspectives, demonstrating how both provide a more comprehensive view of the vulnerabilities and strengths present in the target territory.

It should be noted that, while the findings of this study can inform the development of a prevention plan, the prevention system requires continuous updates and careful attention to the strategies adopted, ensuring that the community remains aligned with emerging, real-time demands. Ongoing community assessment enables flexibility in implementing preventive actions in response to contextual changes, contributing to a healthier environment and better life experiences for adolescents.

Some limitations of this study should be acknowledged. Caution is required when generalizing the findings, as the epidemiological survey was conducted in a single community. Similarly, the qualitative component involved only 26 adolescents, male and female, from two community schools, which may also limit generalizability. Since part of the data came from focus groups, self-report biases may have occurred, whereby participants, for various reasons, underreport or distort information related to alcohol and other drug use. The sensitivity of the topic may pose challenges to obtaining entirely accurate information. Furthermore, the cross-sectional design limits causal inferences between the identified factors and substance use, and the analysis may not capture behavioral changes over time—an essential aspect for a dynamic understanding and the development of effective prevention plans.

Despite these limitations, this work contributes to advancing community-based prevention practices and to promoting evidence-based public policies. Employing a multi-method approach, as highlighted above, offers robust support for community leaders' decision-making in addressing challenges related to substance use within their territories.

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