

# Factors associated with common mental disorder in school teenagers

*Fatores associados ao transtorno mental comum em adolescentes escolares*

*Factores relacionados al trastorno mental común en adolescentes escolares*

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## ABSTRACT

**Objective:** To identify the prevalence of common mental disorders and associated factors in school adolescents. **Method:** Cross-sectional study with 230 adolescents from a public school in Salvador, Bahia, Brazil. We used a questionnaire and an assessment scale for common mental disorders. The data were processed in STATA, version 12. **Results:** The prevalence of common mental disorders in schoolchildren was 52.2%. Multivariate analysis identified a positive association with statistical significance between the condition and the variables: female gender (PR = 3.06; 95% CI: 1.77-5.4), black race (PR = 2.08; 95% CI: 1.04-4.16), having a boyfriend (PR = 2.07; 95% CI: 1.06-4.03) and smoking cigarettes once in a lifetime (PR = 2.88; 95% CI: 1.31 - 6.31). The school increase (OR = 0.52; 95% CI: 0.29-0.91) was identified as a protective factor. **Conclusion:** Female gender, black race, having a relationship, and having smoked cigarettes are factors that increase the chances of adolescents having common mental disorders.

**Descriptors:** Mental Disorders; Adolescent; Illicit Drugs; School Health Promotion; Nursing.

## RESUMO

**Objetivo:** Identificar a prevalência do transtorno mental comum e os fatores associados em adolescentes escolares. **Método:** Estudo transversal com 230 adolescentes de uma escola pública em Salvador, Bahia, Brasil. Utilizou-se um questionário e uma escala avaliativa de transtorno mental comum. Os dados foram processados no STATA, versão 12. **Resultados:** A prevalência de transtorno mental comum nos escolares foi de 52,2%. Análise multivariada identificou associação positiva com significância estatística entre o agravo e as variáveis: sexo feminino (RP = 3,06; IC95%: 1,77-5,4), raça negra (RP = 2,08; IC95%: 1,04-4,16), ter namorado(a) (RP = 2,07; IC95%: 1,06-4,03) e uso de cigarros uma vez na vida (RP = 2,88; IC95%: 1,31-6,31). O incremento escolar (OR = 0,52; IC95%: 0,29-0,91) foi identificado como fator de proteção. **Conclusão:** Sexo feminino, raça/cor negra, ter namorado(a) e ter usado cigarros são fatores que aumentam as chances de os adolescentes apresentarem transtorno mental comum.

**Descritores:** Transtorno Mental; Adolescente; Drogas; Promoção da Saúde Escolar; Enfermagem.

## RESUMEN

**Objetivo:** Identificar la prevalencia del trastorno mental común y los factores relacionados en adolescentes escolares. **Método:** Estudio transversal con 230 adolescentes de una escuela pública en Salvador, Bahia, Brasil. Se utilizó un cuestionario y una escala evaluativa de trastorno mental común. Los datos han sido procesados en el STATA, versión 12. **Resultados:** La prevalencia de trastorno mental común en los escolares ha sido de 52,2%. Análisis multivariado identificó relación positiva con significación estadística entre el agravo y las variables: sexo femenino (RP = 3,06; IC95%: 1,77-5,4), raza negra (RP = 2,08; IC95%: 1,04-4,16), tener novio(a) (RP = 2,07; IC95%: 1,06-4,03) y uso de cigarrillos una vez en la vida (RP = 2,88; IC95%: 1,31-6,31). El incremento escolar (OR = 0,52; IC95%: 0,29-0,91) ha sido identificado como factor de protección. **Conclusión:** Sexo femenino, raza/color negro, tener novio(a) y tener usado cigarrillos son factores que aumentan las probabilidades de los adolescentes presentaren trastorno mental común.

**Descriptorios:** Trastorno Mental; Adolescente; Drogas; Promoción de la Salud Escolar; Enfermería.

## INTRODUCTION

Mental illness is a reality experienced by children and adolescents from all over the world. Although the studies deal with the most diverse expressions of this phenomenon, ranging from common mental disorders (CMD), in which depression and anxiety are the most frequent symptoms, to the most severe disorders, it is essential for health and education professionals to look at identifying the most vulnerable adolescents carefully. They should have priority in health promotion actions aiming at disease prevention.

Despite the concern of national and international researchers, psychological distress, usually expressed by signs of anxiety and depression, is not yet a condition measurable by epidemiological data. That is because, as it consists of a nonspecific discomfort, health professionals have difficulty identifying it and relating it to a risk condition for mental illness in children and adolescents<sup>(1)</sup>. However, mental disorders stand out as the main challenges faced by health services, since many times, before the formal diagnosis of a psychiatric disorder, it is already possible to find, in the clinic, signs of psychological suffering<sup>(2)</sup>.

However, despite the difference between psychic suffering and mental disorder, many studies refer to them as synonyms, and both Brazilian and international literature indicates significant prevalence. In India, out of a total of 7,560 students from 73 schools, the prevalence of this condition was 20.8%. 10.5% of students reported mild psychological distress; 5.4%, moderate stress; and 4.9% severe suffering<sup>(3)</sup>. In Australia, 21,7% (n = 5,500) of the adolescents showed high or very high levels of psychological suffering<sup>(4)</sup>.

In Brazil, some findings point to even more significant percentages, such as the study developed in 1,247 schools in 124 Brazilian cities, which showed a prevalence of CMD in schoolchildren corresponding to 30% (n = 74,589)<sup>(2)</sup>.

Given these figures, action strategies at the school level are urgent to prevent psychological distress in children and adolescents, whose intensification may even lead to mental disorders in this public. Studies have already pointed out the importance of identifying CMD early and its main risk factors, which can help in proposing more specific prevention and control measures throughout the development process of adolescence<sup>(2,4)</sup>. In the meantime, education and health professionals, especially those who work in the field of Primary Health Care (PHC), must be prepared for the recognition of children and adolescents in psychological distress<sup>(5)</sup>, as well as events that may contribute to its appearance.

Given the above, the present study initiates from the following research question: What is the prevalence of CMD, and what are the sociodemographic, sexual/reproductive factors, and alcohol/drug use? Considering the social context in which the adolescent is placed, identifying such factors is fundamental to promote the health of schoolchildren, specifically in the prevention of mental disorders.

## OBJECTIVE

To identify the prevalence of common mental disorders and associated factors in school adolescents.

## METHODS

### Ethical aspects

The study respected the ethical aspects regulated by the National Health Council following Resolution 466/2012, which guides ethics in research with human beings. Adolescents and the guardians signed all consent forms. We highlight that the Research Ethics Committee of the School of Nursing of the Universidade Federal da Bahia (CEPEE/UFBA) approved the project.

### Design, period and place of study

This research is a Cross-sectional study developed with adolescents from a public elementary school in November 2018, located in an outlying neighborhood in the city of Salvador, Bahia, Brazil. The study is linked to the matrix project "University and public school: looking for strategies to face the factors that interfere in the teaching-learning process".

### Population or sample; criteria of inclusion and exclusion

Given the total of 614 adolescents, aged 10 to 19 years old, enrolled in the morning, afternoon and night shift in 2018, based on a simple random sample, the sampling was calculated considering a maximum error margin of 5%, which resulted in a minimum sample of 210 students. The inclusion criteria were: adolescents who were enrolled and attending school. Adolescents who were not found after visiting the school for three different days were excluded from the study, even though they were considered regulars. There was a total of 230 students.

### Data Collection Instruments

Two forms were applied. The first aims to identify the sociodemographic aspects (gender, age, religion, color/race, having a relationship, adolescents' education people who depend on the same income, a financial contribution for living expenses, family life, guardian, guardian's education, housing, number of rooms, people living in the same house, social benefits, internet, car), sexual/reproductive aspects (gender identity, sexual orientation, sexual initiation, age at first sexual intercourse, condom use, having children, abortion) and use of alcohol/drugs (some time in life and the last month).

The second form contains a scale consisting of a mental health research instrument called *Self Report Questionnaire* (SRQ-20), recommended by the World Health Organization for community studies and PHC. In Brazil, the SRQ-20 version was duly validated in previous studies<sup>(6-10)</sup>. This instrument consists of 20 items (yes/no); and we used a score of 7 (or more) to indicate positive screening for CMD in male participants and a score of 8 (or more) to track the condition in girls, as proposed by the author of the scale<sup>(7)</sup>.

### Study Protocol

As a data collection method, we chose the interview (guided

by a scale to assess CMD) and a standardized form, both present in the data collection instruments, as previously described.

The first author and social workers (who have already completed curricular internships at the studied school) applied the research instruments through an interview, together with members of the study group "Violence, Health and Quality of Life," all duly trained by researchers with expertise in addressing the theme among teenage audiences.

### Analysis of results

The data were organized with the support of creating the Microsoft Excel 2007 program database and then transferred to the STATA version 12 program to calculate the frequencies. In order to verify the association between psychological distress (outcome) and factors (exposure), a prevalence ratio (PR) and the respective 95% confidence intervals (95% CI) were used. Subsequently, logistic regression was used to obtain the values of *Odds Ratio* and their 95% confidence intervals, adapting the variables using the *Backward model*. Sexual and reproductive variables (gender identification, child, and abortion) were excluded from the multivariate analysis due to the low frequency.

### RESULTS

The prevalence of CMD among the adolescents studied was 52.2%. Regarding sociodemographic characteristics, most adolescents were female (57.8%), aged between 10 and 14 years old (50.9%), reported having a religion (53.5%), declared themselves black (78.7%), attended the 6th/7th grade of elementary school (53.5%) and did not have a relationship (76.5%).

Regarding family life, 63.5% reported living with their parents, and 88.7% had them as guardians. Of these parents or guardians, 50.87% had completed high school, and the majority of students did not contribute to family income (94.3%), and 49.6% had bolsa família (Brazilian social welfare program). As for the housing aspect, most lived in their own home (73.5%), lived with one to six people in their homes (92.2%) and had internet (81.3%) and car (83.9%).

Concerning the sexual/reproductive variables, 1.7% are transgender, 6.9% are gay/lesbian/bisexual, 40.9% have already had their first sexual experience, the majority of which occurred between the ages of 7 to 14 years (68.1%). Of the total of 94 adolescents who reported having started sex, 88.7% said they used condoms, 1.1% had children, and 2.1% said they had never had an abortion. Regarding the use of psychoactive substances, 68.3% reported having used alcohol once in their lives, 32.6% used alcohol in the last month, 17.4% used cigarettes once in their lives, 3.9% smoked cigarettes in the last month, 6.5% used illicit drugs and, among those who used psychoactive substances, most reported having used marijuana (60%).

The bivariate analysis identified a positive association with statistical significance between CMD and female gender (PR = 2.9 and 95% CI: 1.68-4.9). Other positive variables stand out, but without significance: age between 10 to 14 years old (PR = 1.23 and 95% CI: 0.73-2.07), black race (PR = 1.79 and 95% CI: 0.94-3.39), guardians without complete high school (PR = 1.15 and 95% CI: 0.68-1.93), housing that is not their own (PR = 1.59 and 95% CI: 0.88-2.89) and not receiving bolsa família (PR = 1.43 and 95% CI: 0.69-2.82).

**Table 1** - Association between common mental disorder and the study variables, Salvador, Bahia, Brazil, 2019

Variables	Total (N = 230)	p (%) <sup>*</sup>	PR <sup>†</sup>	CI (95%) <sup>‡</sup>	p value
Gender orientation					0.07
Cisgender	226	51.3	1		
Transgender	4	100.0	1.05	0.81-1.37	
Sexual orientation					0.14
Heterosexual	216	50.9	1		
Gay/Lesbian/Bisexual	14	71.4	2.40	0.73-7.91	
Relationship					< 0.001
Yes	54	68.5	2.43	1.27-4.65	
No	176	47.1	1		
Sexual intercourse					0.99
Yes	94	52.1	0.99	0.59-1.69	
No	136	52.2	1		
Age of first sexual intercourse					0.82
7-14	64	48.4	0.90	0.35-2.30	
15-19	24	45.8	1		
Condom					0.64
Yes	76	53.9	1		
No	15	46.6	0.74	0.24-2.26	
Children					< 0.001
Yes	1	100	0.02	0.00-0.15	
No	91	51.6	1		
Abortion					< 0.001
Yes	2	100	0.04	0.01-0.20	
No	81	50.6	1		
Use of alcohol at some time in life					0.04
Yes	157	42.4	1.77	1.01-3.10	
No	73	56.6	1		
Alcohol use in the last month					0.09
Yes	75	60.0	1.6	0.91-2.79	
No	155	48.3	1		
Use of cigarette at some time in life					0.002
Yes	40	47.6	3.3	1.52-7.13	
No	189	75.0	1		
Use of cigarette in the last month					0.05
Yes	9	88.8	7.7	0.94-62.71	
No	220	50.9	1		
Use of illicit drugs					0.015
Yes	15	49.7	6.56	1.44-29.77	
No	215	86.6	1		

Note: <sup>\*</sup> Proportion of positive cases of CMD. <sup>†</sup> Prevalence Ratio <sup>‡</sup> Confidence Interval.

**Table 2** - Odds ratio and respective 95% confidence interval for associations between common mental disorder and the sociodemographic variables of the study, Salvador, Bahia, Brazil, 2019

Variables	Initial model OR (95% CI)	Final model OR (95% CI)
Gender		
Women	3.06 (1.77-5.4)	3.06 (1.75-5.34)
Race		
Black	2.08 (1.04-4.16)	2.02 (1.02-4.01)
Religion		
No	0.6 (0.34-1.05)	----
Adolescent's education		
8th/9th grade	0.49 (0.28-0.87)	0.52 (0.29-0.91)
Own house		
No	1.22 (0.64-2.30)	----
Sexual orientation		
Homosexual/Bisexual	1.91 (0.54-6.76)	----

**Table 3** – Odds ratio and respective 95% confidence interval for associations between common mental disorder and the clinic variables of the study, Salvador, Bahia, Brazil, 2019

Variables	Initial model OR (95% CI)	Final model OR (95% CI)
Use of alcohol at some time in life		
Yes	1.32 (0.68- 2.55)	----
Alcohol use in the last month		
Yes	0.99 (0.49-1.98)	----
Use of cigarette at some time in life		
Yes	1.55 (0.61-3.97)	2.88 (1.31-6.31)
Use of cigarette in the last month		
Yes	3.65 (0.37-35.91)	----
Use of illicit drugs		
Yes	2.98 (0.57-15.45)	----

## DISCUSSION

The study revealed that, of the 230 school adolescents, 52.2% had CMD, indicating the significant susceptibility to psychological distress in this population. The report of the World Health Organization revealed similar data, which, based on the analysis of the prevalence of disorders in children and adolescents in countries such as Germany, Spain, Ethiopia, the United States, India, Japan, and Switzerland, pointed out rates around 50%<sup>(11)</sup>.

At the national level, although scholars show lower percentages, the situation is also worrying, as a survey carried out with 74,589 adolescents from different Brazilian municipalities with more than 100 thousand inhabitants pointed out. The survey showed a prevalence of 30% of CMD, and a higher proportion among girls<sup>(2)</sup>. Similarly, another national survey, developed with 102,327 adolescents (12-17 years old), points to a prevalence of CMD of 23% and 11% for girls and boys, respectively<sup>(12)</sup>.

Regarding the positive association variables, the study showed that self-declared black and brown adolescents had a higher chance of developing CMD. Studies already showed that the practice of racism and racial discrimination are polysemic problems that cross the identity formation of these subjects. However, the culture of denial of their existence, combined with these experiences, are factors that generate psychological suffering<sup>(13-15)</sup>.

National research carried out with elementary school students showed that children of black color/race have been suffering from racism, discrimination, and prejudice in the various relationships of school routine<sup>(16)</sup>. That is because, even in childhood, when individuals live with values, beliefs, and stigmatized behavior patterns, which directly reflect on the construction of their identity, non-acceptance, and low self-esteem, they generate high levels of stress consequently, repercussions on their mental health<sup>(17-18)</sup>.

Regarding gender, our study also shows girls' greater vulnerability to psychological distress, which showed a positive association in the multivariate analysis. Similar to the data found in this research, a study developed with 74,589 Brazilian adolescents demonstrated an association of CMD with a higher proportion among girls compared to boys<sup>(2)</sup>, which may find resonance in biopsychosocial changes during puberty<sup>(19-21)</sup>. Specifically, in the biological field, many changes in the adolescent's body can explain the issues of emotional changes. It is worth mentioning that, in

the age range of 8 or 9 years old, as the hormonal production that generates body changes begins, the girl can increase her weight by up to 17 kilograms. It is important to note that such sudden changes may raise concerns, among them the failure to meet the standards of body beauty, which may result in depression<sup>(22)</sup>.

A case study of a 15-year-old African teenager illustrated an example of the interface between a feeling of inadequacy to social beauty standards and psychological distress. She, who had initial complaints related to dissatisfaction with weight, breast size and mood swings tending to depression, started to exhibit persistent suicidal ideation in two years, which resulted in her being distanced from friends and school, generating losses in education, nutrition, including a history of suicide attempts<sup>(23)</sup>.

In addition to biological changes, gender issues also contribute to female adolescents' mental suffering, leaving us to look at inequality between men and women<sup>(24-25)</sup>. In this area, we can point out the inequities regarding domestic tasks, considered inherent to the female, which may also be contributing to the illness of girls<sup>(24-27)</sup>, especially when it comes to preadolescents, the age group with the highest incidence in this study. This situation is more explicitly expressed in the most impoverished social classes<sup>(25-26,28-29)</sup>, a scenario in which children and adolescents start to assume the responsibilities of adult people, such as cleaning the house, cooking, ironing clothes<sup>(24,30)</sup> and even taking care of other children, including engaging in the activity of educating them.

In Brazil, in 2016, approximately 160 thousand children and adolescents between 10 and 13 years old carried out work. Of the children between 5 and 13 years old who have an occupation, there is a predominance of 71.8% of black and brown children<sup>(31)</sup>, and the black race is also more susceptible to CMD, according to our findings. This scenario is worrying because the occupation reduces the time available for the child/adolescent to perform leisure activities, to share family life, to attend school, and, therefore, reduces the possibility of living with other children and people in the community. Added to this is the fact that these activities attributed to children and adolescents are not in conformity with the Estatuto da Criança e do Adolescente (Statute of the Child and Adolescent), according to which, in addition to children's rights to access to education, health, and leisure, they must be the target of protection against situations of vulnerability<sup>(32)</sup>, which can cause psychological distress.

Another socially constructed inequality concerns the freedom and sexual encouragement of boys in addition to the prohibition on girls so that when they violate these rules, they are more often faced with conflicts and violence<sup>(33-34)</sup>. It noteworthy that the experience of violence, regardless of the forms of expression, has consequences for the victims' mental and behavioral health. As a study with schoolchildren aged 12 to 18 years old point out, in which, the intrafamily context permeated by offenses, humiliations and physical aggressions, triggered mental illness processes such as sadness, social isolation, self-harm, and suicidal thinking, affecting school performance and making them vulnerable to drug use<sup>(35)</sup>.

Also linked to this, gender education inequality also refers to little or no autonomy over one's body and sexuality, and sexual life initiation through male insistence and decision are common. Our study also identified that having a relationship increases

the chances of adolescents having CMD. This evidence may be related to girls' and boys' emotional and psychological immaturity to sustain a relationship and all its consequences. This suffering can be attributed to the characteristics of loving relationships, which we can conceive as interactions consisting of positive and negative characteristics that interfere with the individual's quality of life or suffering<sup>(36)</sup>.

Separation is an example of rupture behavior inherent in love relationships, encompassing the breaking of affective, sexual, emotional, and material ties. This type of relationship can be responsible for triggering a sentimental diversity present in the affection of people who experience breakouts of this nature, namely: grief, loneliness, anger, desire for revenge, envy, guilt, jealousy, neediness, insecurity, longing, pain, among others. Thus, even though the relationship does not end, setbacks, and common problems of married life, when not ordered and shaped positively, enabling growth and evolution, they allow generating a source of suffering and discomfort<sup>(36)</sup>.

The study also showed a positive association between CMD and tobacco use, corroborating an international study with adolescents between 10 and 14 years old, which found that smoking was more likely in adolescents with behavioral problems (OR: 1.11; 95% CI: 1.01-1.21)<sup>(37)</sup>. It is worth mentioning that tobacco acts on the neurotransmitter system, influencing the psychopathological condition<sup>(38)</sup>, as pointed out by a national survey of schoolchildren that deals with early smoking initiation and its implications for health, such as emotional symptoms, conduct problems, hyperactivity/attention deficit and relationship problems<sup>(39)</sup>.

Although the multivariate analysis did not associate the use of alcohol and illicit drugs with CMD, this factor pointed to statistical significance in the bivariate, so that we consider essential spaces for discussion also about these drugs in the daily lives of people still in the education process. This fact confirms a population-based study, carried out with 109,104 students aged between 13 and 15 years, whose results revealed that problems such as feelings of loneliness, absence of friends and feeling insomnia had a positive association with the consumption of tobacco, alcoholic beverages and illicit drugs<sup>(40)</sup>.

The consumption of such substances can be related to the interactions of these adolescents with family members, especially the figures of the father, as well as with groups of colleagues. A study carried out in Portugal, with 8,215 adolescents with an average age of 14.36 years old, indicated a good relationship with parents as a protective factor for adolescents, as they had less psychological symptoms and less risk for these injuries compared to those who lived in troubled relationships with family members<sup>(41)</sup>. Such events mark their life trajectory, especially if, in the family dynamics, members do not maintain dialogical relationships, do not provide adolescents with examples, and do not give them limits<sup>(42-43)</sup>.

Regarding the influence of friendships, we can infer that the approach to legal or illicit drugs is related to their group's thoughts and behavior. It is known that many young people start cigarette smoking out of fashion, in order to feel like adults or to be accepted into a group<sup>(38)</sup>. Beyond confirming that drug experimentation, in general, has been motivated by the desire to belong to groups of peers, research explains that, in the search

for social acceptance, "it is common for individuals to imitate peers, reproducing attitudes and costumes of their group"<sup>(44)</sup>.

Regardless of the situations that motivate the use of drugs, it is worth mentioning that, even in the case of licit drugs, such conduct deserves special attention when we talk about its use by children and adolescents, for whom consumption is prohibited and puts in question the responsibility of parents, including punishments provided for by law<sup>(32)</sup>. Also showing concern with adolescents regarding the consumption of legalized drugs, but whose use violates laws that preclude the non-commercialization and consumption of these by children under 18, research highlights the crucial role of the school, especially in the preventive field, considering that this is a pedagogical space and citizenship formation<sup>(35)</sup>.

It is noteworthy that, although the variables described above were revealed as risk factors for CMD, the study identified the highest level of education as a protective factor. This evidence may occur because, considering the various transformations inherent to the child and youth development, adolescents, especially younger ones, do not always have sufficient emotional maturity to deal with daily conflicts in their relationship with peers - mother, father, teachers, colleagues, and others. In this case, the higher degree of knowledge will undoubtedly contribute to the strengthening of their emotional maturity, allowing them to make choices, position themselves, and say no to what makes them unhappy<sup>(45-47)</sup>. This maturing process favors the adolescent's autonomy by subsidizing better ways of dealing with conflicts, mitigating psychological suffering.

Based on this study, we can infer the highest level of education is linked to the highest age so that older students would be in a condition to protect the development of CMD. However, a national study carried out with 74,589 adolescents showed an increased chance of CMD in those of older age, which occurred for both girls (ranging from 28.1% at 12 years old to 44.1% at 17 years old) and for boys (ranging from 18.5% at 12 years old to 27.7% at 17 years old)<sup>(2)</sup>. In Australia, research to compare the levels of comorbid psychopathology, quality of life and use of mental health services in 3,149 adolescents with probable body dimorphism and without dimorphism revealed substantially higher levels of psychopathology in the first group and pointed to a higher prevalence in those who are older, aged 15 to 18 years old, compared to preadolescents<sup>(48)</sup>.

This incongruity regarding age can be explained by professionals' difficulty and also of family members, in early identifying psychological suffering, and this can influence the late recognition of the disease, although it started at a young age. This situation may be related to these professionals' lack of training in the attendance networks and to the family members' lack of understanding about the importance of immediate referral after realizing any psychic alteration, which causes a delay in treatment and consequent worsening of the condition<sup>(49-50)</sup>.

The difficulty in recognizing children and adolescents in psychological distress, either by health professionals or family members, is related to the lack of perception of signs and symptoms that indicate this process of illness. Therefore, it is essential that professionals who work with children and adolescents, especially in education spaces (for the longest time of living and bonding), are aware of

identifying and valuing the complaints brought so that they can investigate and monitor them in the sense of avoiding psychological suffering and its development as well as the onset of illness.

### Study Limitations

Although the research results do not express a causal relationship due to the limitation of the study design, it suggests that adolescents more vulnerable to social inequities, such as alcohol/drug consumption, gender inequalities, and low socioeconomic conditions, tend to develop CMD, signaling the relevance of investigations that address this gap.

### Contributions to Nursing, Health, or Public Policy Fields

By pointing to the profile of adolescents at risk/protection from the occurrence of CMD, the study is relevant to the area of Public Health and Nursing, since it offers subsidies for guiding actions within the scope of health promotion that favor identifying the most vulnerable groups and, therefore, enabling the creation of care strategies. Also, it provides a theoretical framework for

the development of intersectoral public policies, covering the areas of health and education, for monitoring the health status of these individuals.

In this process, education professionals are essential, due to the closer proximity to schoolchildren, which favors, in addition to identifying the target audience, implementing care actions aimed at preventing psychological distress or intensifying this illness.

### CONCLUSION

The study showed a prevalence of CMD equivalent to 52.2% and a positive association with being a woman, self-declared to be black, having a relationship, and using cigarettes. These variables proved to be factors that make adolescents vulnerable to CMD and signal the profile of schoolchildren with greater exposure to psychological suffering than higher schooling, which proved to be a protective factor for the disease.

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