

# Mental Health and Substance Use among Adolescents during the COVID-19 Pandemic: A Mini Review

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#### **Mini Review**

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### Abstract

The pandemic of COVID-19 generated numerous socioeconomic consequences, amplified social inequalities and potentiated vulnerabilities to which people were exposed, especially the adolescent population, which is in an important phase of neurocognitive, emotional and social development. In this stressful scenario of social isolation and deprivation of interpersonal relationships and restriction of daily activities, research has observed various psycho-behavioral impacts and a high prevalence of problems related to stress, anxiety, depression, and substance use among adolescents and youth. This mini literature review aimed to analyze and discuss some of these studies, aiming to provide reflections and subsidies for the formulation of intervention strategies and mental health focused on the adolescent public.

Keywords: Adolescence; COVID-19; Mental Health; Substance Use

Faced with the context of social isolation established by the pandemic of COVID-19 and its various socioeconomic consequences, researchers have turned to investigate, identify, analyze and understand the effects of the pandemic on the mental health of the population. Currently, there are already several published researches that address the psychological impacts of COVID-19 on different populations and social groups, however, there are still scarce studies that specifically address the adolescent population, which is potentially vulnerable to the heterogeneity, variety, and complexity of bio psychosocial stressors generated by the pandemic context [1-3].

During the pandemic, adolescents have come to face new mental health experiences and challenges and a potential worsening of previous psychological conditions, as they are in a situation of greater individual, family, and social vulnerability as they may experience more situations of prolonged confinement; restricted interpersonal relationships and daily activities physical and emotional neglect; interfamily and extra family violence; feelings of loneliness, boredom, anger, uncertainty, hopelessness, and anxiety; absence of family and social support; and lack of medical and psychological care for health problems and psychiatric and behavioral disorders, including pre-pandemic disorders [4-9], such as stress [10], anxiety (Hawes, Szenczy, Klein, Hajcak, & Nelson, et al. Qi et al. [11,12]), depression (Courtney, Watson, Battaglia, Mulsant, & Szatmari [13]), obsessive-compulsive disorder [14], eating disorders, excessive use of digital technologies [15-17].

The pandemic scenario also potentiated a number of preexisting risk factors that may increase the likelihood of adolescent alcohol and another drug use [18]. Jones, Mitra, and Dhuiyan [19], from a systematic review of the literature ( $N_{TOTAL}$ =40,076), found that adolescents had a

higher frequency of drug use accompanied by higher rates of stress, anxiety, and depression during the COVID-19 pandemic. In Canada, in a study of 1054 adolescents, Dumas, Ellis, and Litt [20], found a decrease in the percentage of users for a large number of substances, with the exception of alcohol and tobacco, substances whose prevalence of use was shown to be high, and symptoms of depression and fear of COVID-19 contamination were predictors of drug use. In another Canadian study, with a sample composed of 622 adolescents and young adults aged 14 to 28 years, it was observed that although a decrease in consumption was observed, a significant portion of the participants met screening criteria for a substance use disorder [21]. Already in California (USA), a follow-up of substance use before and during the pandemic, conducted by Chaffee, Cheng, Cocuh, Hoeft, and Halpern-Felsher, et al. [22] with public school high school students ( $N_{TOTAL}$ =1423), found that e-cigarette use decreased and that the use of other types of tobacco, alcohol, and marijuana did not show significant differences, but still, the authors pointed to the continued need for prevention of substance use by adolescents and youth.

As noted, the data from these and other studies are inconclusive and, in some points, divergent. However, there is a consensus in the scientific literature that analyzes the impacts of the pandemic on the mental health of the population and on the substance use patterns of adolescents: the need for preventive strategies aimed at this public. In the short term, substance use can help in coping with the adversities imposed by the stressful context of environmental deprivation and social isolation. In the long term, however, the pattern of experimental or sporadic consumption may evolve into patterns of harmful use or dependence, leading to social and health harms to individuals, especially in a phase of greater vulnerability such as adolescence [23].

In view of this, the scientific and social relevance of this discussion is justified, which is based on the importance and need for interventions to mitigate the adverse effects caused by the various stressors associated with pandemic and social isolation in adolescence, a phase characterized by significant biopsychosocial changes, including hormonal changes, maturation and refinement of brain structures and functions, and neurocognitive, emotional, and social development [24,25]. Such potential harms to adolescents' cognitive-socio-emotional development can be mitigated by protective resources and assertive coping strategies, such as emotional education, social support, self-efficacy, positive thinking, and active stress coping. According to studies, these personal and environmental strategies and resources are important predictors of mental health and may contribute to better indicators of quality of life and psychological wellbeing during the pandemic period and social isolation [25-27].

Based on this, it is recommended the development of educational, preventive and health-promoting actions in different environments and adapted to the pandemic context. These strategies should be broad, integrative, personalized and effective, in order to meet the specificities of this age group and the singularities and needs of each individual. To this end, we suggest: (1) the development and implementation of early detection strategies for psychological problems in the pandemic context; (2) the formulation of public policies and prevention and treatment interventions aimed at adolescents and adapted to the pandemic scenario (digital interventions and telehealth services, for example), to individual specificities and to the sociocultural characteristics of different populations and groups; (3) the strengthening of family, community, and social support networks for adolescents; (4) the development of personal and environmental resources and assertive coping strategies; and (5) educational actions to prevent and reduce risks and harms associated with the use of alcohol and other drugs, with emphasis on reducing the circumstances of vulnerability and promoting the autonomy and protagonism of individuals.

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