BJGH Brazilian Journal of Global Health
Revista Brasileira de Saúde Global

Impact of COVID-19 pandemic on the mental health of children and adolescents: A review

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ABSTRACT

OBJECTIVE

The unpredictability of the Coronavirus Disease 2019 (COVID-19) pandemic has changed the socioeconomic dynamics around the world. Preliminary findings suggest that the entire context of the pandemic increases the risk of psychological problems. The child population, although less studied, is also vulnerable to the effects of the pandemic. This review brings together the studies published in 2020 aiming to assess the impact of the pandemic on the child population.

METHODS

A total of 15 studies that evaluated the mental health of subjects under 18 years old during the pandemic of COVID-19 were selected and analyzed.

RESULTS

There is an increase in anxious and depressive symptoms in the child population and in their caregivers with quarantine, with a high risk of progressing to mental disorders. However, there is no way to assess the prevalence of mental disorders in this population due to the studies being conducted using online questionnaires.

CONCLUSIONS

Health professionals must be alert to the possible presence of anxiety and depressive symptoms secondary to social isolation, especially in children with chronic diseases or in situations of vulnerability. Future studies are needed to determine the prevalence, risk, and possible treatments for stress-related illnesses.

DESCRIPTORS

Mental Health, Quarantine, Isolation, Caregiver.

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DOI: https://doi.org/10.56242/globalhealth;2022;2;6;6-11

INTRODUCTION

COVID-19 is a severe acute respiratory infection that emerged in Wuhan, China, in early December 2019 and quickly spread around the world. Soon afterwards, on January 30th, 2020, the United Nations (UN) declared COVID-19 as an international public health emergency. To contain the rapid spread of the virus, epidemiological measures, such as the cancellation of non-essential services, closing schools and social distancing, were imposed and international campaigns emerged for families to remain sheltered at their homes, thus avoiding, as much as possible, overcrowding of the population[1]. These measures have brought about a major change in the daily life functionality for billions of people around the world. And despite being efficient in containing the pandemic, they generated risk factors for physical and mental health[2,3,4,5].

Closing schools and services limited social interaction and reduced the daily activities in which children participated[3,5]. Teachers tried to reduce losses in teaching by means of online classes; however, a large portion of the population does not have devices with Internet access and was not included in this initiative[3,4,5].

In the family environment, the domestic quarantine policy reorganized the dynamics[3]. Parents or caregivers became much more necessary in their children's education: support for tasks and learning new experiences, previously carried out by teachers, has now been taken on by them[4]. That is, in addition to working in the home office modality and dealing with economic and emotional stress, caregivers had to take care of their children, help them during online classes and deal with their emotions, such as distancing from friends, depression and anxiety[2,3,4]. This accumulation of functions increases the risk of stress and negative feelings, generating a cascade effect on children's well-being, as parents can become more rigid and abusive, with the possibility of maltreatment[3,4].

Companionship and social interaction are essential for the proper psychological development and well-being of children. With the epidemiological measures imposed, adverse psychological reactions may emerge[6,7], in addition to an increased risk of mental disorders in those in isolation away from the caregivers[2,8].

Extensive literature on COVID-19 was published in the first year of the pandemic, but only a small part investigated the impact on the mental health of children and adolescents. To examine this impact, we gathered cross-sectional and longitudinal studies published in 2020 whose sample involved children and adolescents under the age of 18 or their caregivers. An assessment of the quality and present biases was carried out. We conclude with evidence-based guidelines to reduce the negative impact of the pandemic on the psychological status of children and adolescents and suggestions for future studies.

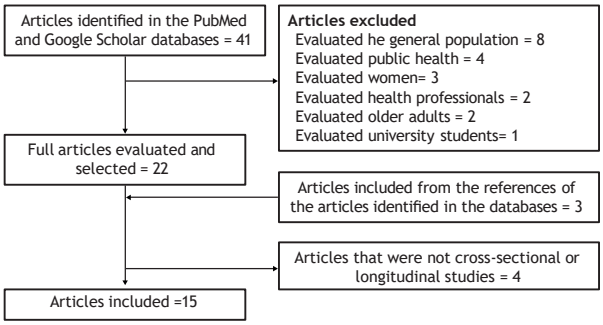
This study aims at bringing together the articles published in 2020 with a focus on the impact of quarantine resulting from the COVID-19 pandemic on the child population and qualitatively assess them, considering biases and limitations. From that starting point, to propose evidence-based recommendations and guide future studies on the subject matter, to complement the current literature.

METHODS

This review focuses on the existing literature about the mental health of children and adolescents in the COVID-19 pandemic. We use the keywords "COVID-19", "mental health", "children", "teenagers", "anxiety", "stress" and "depression" in the PubMed and Google Scholar search platforms. The articles were included if they presented: 1) samples composed of individuals under 18 years of age or their caregivers, and 2) objective of evaluating the association between the pandemic and the direct or indirect risk of emotional and behavioral symptoms in children and adolescents. All articles were published between April and December 2020 and there was no language restriction.

We found fifteen cross-sectional studies, most of them evaluating the mental health of children and adolescents in the general population during the COVID-19 pandemic. Five studies observed groups of vulnerable children: children diagnosed with obesity, chronic respiratory diseases or autism spectrum disorder (ASD) and children in the Family Welcoming System. Finally, one study estimated the risk of child maltreatment secondary to parental stress in quarantine.

Figure 1. Flowchart of literature search.



RESULTS

The characteristics of the analyzed studies are summarized in Table 1. Thirteen studies collected data from online questionnaires, one from telephone calls and one from teleconferencing. In eight studies, the parents and caregivers answered the questionnaires, while the others were answered by children and adolescents in the form of self-reports.

Impact of the pandemic on the general child population

Chen et al. (2020) compared adolescents living in the city of Wuhan with those living in Beijing and Hangzou, China, to assess the relationship between the mental health of Chinese students and their experiences during the COVID-19 pandemic. The adolescents from Wuhan scored higher on GAD-7 (Generalized Anxiety Disorder - 7), a scale that assesses the presence of anxiety symptoms, than those from other urban areas. In this study, they also assessed the parenting style using S-EMBU (Egna Minnen Betraffande Uppfostran - Short Form), a questionnaire that assesses the parenting style from the adolescents' point of view. In this respect, the adolescents from Wuhan reported their parents as less welcoming, less understanding and more protective, in addition to showing more emotional rejection when compared to the parents of teenagers from other urban centers. The study authors also noticed that higher grades in school and female gender were the risk factors most associated with anxiety and depressive symptoms[3].

Similarly, Xie et al. (2020) investigates depressive and anxiety symptoms in students from the province of Hubei, China. However, it compares students from Wuhan with those from Huangshi using CDI-S (Children's Depression Inventory - Short Form) and SCARED (Screen for Child Anxiety Related Disorders) to assess depressive and anxiety symptoms, respectively. In this study, they observed that the students from Wuhan scored higher in CDI-S than those from Huangshi, presenting a higher risk for depressive disorder. The authors also asked about optimism regarding COVID-19 and the concern about the risk of infection. In this sense, they observed an association with the risk of depressive disorders: students who were little or not at all concerned about becoming infected with the virus had lower scores in CDI-S when compared to those who reported greater

concern. And those who were not optimistic regarding the pandemic presented high scores in CDI-S. As for SCARED, the data did not present statistically significant differences in relation to anxiety symptoms and demographic characteristics[9].

In another study, students from Shanghai, China, attending primary, elementary and high school were handed in a questionnaire about satisfaction with life, the perceived impact of quarantine and whether or not there was dialog with the parents about COVID-19. The students also answered DASS-21 (Depression, Anxiety & Stress Scale), which measures psychological stress based on the participant's self-report[5]. The data showed that the anxiety symptoms were the most prevalent, followed by depressive symptoms, which agrees with previous studies[9,10]. Most of the students from Shanghai reported that their lives improved or did not change with the pandemic, suggesting resilience of children and adolescents in the face of adverse events and changes, which was also found by Xie et al. (2020)[9]. Another fact noticed was the increased risk of anxiety, depression, and stress symptoms with advancement in school levels, that is, high school students presented a higher risk of depression, anxiety and stress when compared to students in elementary and primary education. This association was also observed by Zhou et al. (2020) and Chen et al. (2020)[3,9,10]. Similarly, Tang et al. (2020) noticed that the students who had dialog with their parents about COVID-19 were less likely to present symptoms of any kind, suggesting that parent-child communication would be a protective factor against stress-related disorders[5].

Similarly, Zhou et al. (2020) evaluated the prevalence and sociodemographic correlations of anxiety and depressive symptoms among Chinese adolescents attending elementary and high school affected by COVID-19. In this study, the sample evaluated participants from 21 Chinese provinces and autonomous regions and used the PHQ-9 (Patient Health Questionnaire - 9) and GAD-7 scales to assess the presence of depressive or anxiety symptoms, respectively, in the two weeks prior to testing, in addition to sociodemographic and knowledge questionnaires about COVID-19. In this study, the data collected showed a higher prevalence of anxiety and depressive symptoms in rural areas when compared to urban areas. An association between greater knowledge about COVID-19 and less anxiety and depressive symptoms was also observed[10].

Spinelli et al. (2020), Orgilés et al. (2020) and Ezpeleta et al. (2020) evaluated European samples. In all three studies, the reports were made by the caregivers, unlike the Chinese studies[1,4,8]. Spinelli et al. (2020) evaluated families in the Italian red zone (Veneto and Lombardia) and observed that the difficulties in dealing with the stressors imposed by quarantine are associated with parental stress, which directly influences children's emotional and behavioral problems. That is, the more emotionally stressed the parents are, the more difficult it is for them to understand their children's needs and respond to them in a more sensitive way[4]. These data corroborate those of Chen et al. (2020), who associate a more rigid parenting style with a higher prevalence of anxiety and depressive symptoms[3].

The second study compared the impact of quarantine among Spanish and Italian children and reported that most of the caregivers noticed changes in the children's emotional state and behavior during the lockdown. In this study, Italians reported more sadness, reluctance, and loneliness than Spaniards, while the Spanish children had more screen time and sleep compared to the Italian children[8].

In turn, Ezpeleta et al. (2020) used a sample that was longitudinally monitored for ten years to assess the living conditions and psychological problems during quarantine. The families evaluated were mostly Caucasian and had a medium to high socioeconomic status, and the data collected suggested an association between the increase in behavior problems and worsening of the relationships with family members and friends[1].

In Turkey, the assessment of the impact of the pandemic on adolescents was based on a self-reported questionnaire that associated excessive exposure to information about COVID-19 with increased stress and anxiety in adolescents[6]. In India, Saurabh & Ranjan (2020) compared children who were quarantined with those who remained with their families. In this study, they pointed out that 93% of the adolescents in quarantine failed to follow some guidance related to isolation and that, for this group, the most difficult thing was to stay away from family and friends. Another important fact was that children and adolescents who were quarantined presented more psychological problems than those who did not separate from their caregivers[7].

Impact of the pandemic on vulnerable groups of children

In the Netherlands, obese children were assessed using scales answered by caregivers. The data collected showed that there was an increase in anxiety symptoms in the children related to the pandemic and an increase in the rigidity of the isolation imposed by the parents. However, there was no difference in quality of life between the groups that reported and denied increased anxiety during the pandemic[11].

As for the families with children diagnosed with chronic respiratory diseases, they were investigated regarding the needs and challenges faced by the family during quarantine in samples from Macedonia. In this study, despite the families suffering economic losses, the children maintained their general physical condition stable. The parents also reported slight behavioral and emotional changes[2].

Another study evaluated Turkish children diagnosed with cystic fibrosis and their mothers for the impact of COVID-19, and compared them to a group of healthy, age-paired children along with their mothers. In this study, Senkalfa et al. (2020) observed that the control group with healthy children obtained higher scores for anxiety symptoms than the study group with children diagnosed with cystic fibrosis. However, the mothers in the study group scored higher for anxiety symptoms than mothers in the control group[12].

In Italy, Colizzi et al. (2020) investigated the impact of quarantine on families with children diagnosed with ASD. The questionnaires were answered by caregivers who reported that the preexisting behavioral problems intensified during lockdown, although they did not worsen to the point of needing emergency care evaluation. They found that separated or single parents presented better outcomes and that half of the participants reported that home visits would help them to better cope with the ongoing emergencies[13].

Children from the Family Welcoming System in Spain were assessed by Vallejo-Slocker et al. (2020). In this study, children in foster homes were compared with children from vulnerable families who received governmental assistance regarding the effects of the pandemic on their dynamics. The authors reported that girls and older children had worse functioning than boys and younger children, respectively. There was no statistically significant difference between the foster homes and vulnerable families' groups[14].

Risk of maltreatment secondary to the stress generated by the pandemic

In a study carried out in western United States, the risk of child abuse due to parental stress in the context of the COVID-19 pandemic was evaluated. The data showed that community support and parental perception of stress are protective measures associated with a low potential for abuse.

Although cumulative stress is strongly associated with child maltreatment, the findings indicate that the stressors associated with COVID-19 may not be sufficient to induce maltreatment in previously unexposed children[15].

Table 1. Characteristics of the studies included.

Author	Place	Study design	Instrument	N and profile of the participants	Results	Limitations
Ezpeleta et al., 2020.[1]	Spain	Longitudinal study	Online questionnaire on isolation and SDQ (Strengths and Difficulties Questionnaire).	226 parents.	The highest scores were in behavioral problems and were associated with worsening relationships with family and friends and excessive school activities.	Parents are not the best informants of their children's emotional problems.
Zorcec et al., 2020.[2]	Northern Macedonia	Cross-sectional study	Sociocultural questionnaire, general information about the child, physical and mental characteristics of the child before and during a pandemic, needs and mental conditions of parents/caregivers.	72 caregivers of children with chronic respiratory diseases.	The children maintained a stable general physical condition and showed symptoms or behavioral problems during quarantine.	The assessment was based on the caregivers' reports; there was no clinical interview.
Chen et al., 2020.[3]	China Italy	Cross-sectional study	Questionnaire involving sociodemographic characteristics and issues related to the pandemic. Application of S-EMBU, PHQ-9 and GAD-7.	7,772 adolescents – 2,850 from Wuhan and 4,922 from other urban centers (Beijing and Hangzhou).	The results showed that young people in Wuhan presented more anxiety symptoms than those in other urban centers. There was no difference between the groups with relatives in COVID-19-related jobs or who were quarantined due to infectious disease.	Rural areas were not included; the S-EMBU questionnaire was shortened to 10 items, making it less sensitive; the data were collected in March, with no time for isolation to more intensely impact on the parenting style; the perception of the parenting style was from the adolescent's point of view, which may have a bias created by emotional stress.
Spinelli et al., 2020.[4]	China	Cross-sectional study	Online questionnaire about home conditions, difficulties during quarantine, perception of family stress and children's emotional problems during this period.	854 parents of children aged between 2 and 14 years old.	There was no statistically significant difference between residents of the red area and other areas.	The data were collected shortly after lockdown start.
Tang et al., 2020.[5]	Turkey	Cross-sectional study	Online questionnaire on life satisfaction, perceived impact of quarantine and DASS-21.	4,391 elementary and high school students.	Anxiety, depression and stress rates varied by grade, the impact of quarantine, and conversations with parents about COVID-19.	Parent-child communication was not adequately assessed; some factors, such as academic performance and pressure and relationship with the parents, were not included in the study.
Kılınçel et al., 2020.[6]	India	Cross-sectional study	Sociodemographic Form, State-Trait Anxiety Scale, UCLA (University of California, Los Angeles) Loneliness Survey.	745 Turkish children and adolescents aged from 12 to 18 years old.	The anxiety scores increased 2.41 times in the group that used television as the main source of information about COVID-19.	The assessment was based on self-reports rather than on a clinical interview; the social conditions of the families were not evaluated.
Saurabh & Ranjan, 2020.[7]	Italy and Spain	Cross-sectional study	Questionnaire assessing understanding of quarantine, behaviors during that period and sociocultural information.	252 children and adolescents aged from 9 to 18 years old.	Only 7% of the adolescents followed all the quarantine instructions; most of the respondents reported that not visiting family and friends was the most difficult.	Small sample; information such as education and income was not collected.
Orgilés et al., 2020.[8]	China	Cross-sectional study	Online questionnaire with sociodemographic information, parental perception of how quarantine affected children, parental perception of the family during quarantine and family routine.	1,143 parents of children aged from 3 to 18 years old.	Italian children felt sadder, more reluctant and alone during quarantine; Spanish children had more screen time and slept more than Italian children.	The information was reported by the parents.
Xie et al., 2020.[9]	China	Cross-sectional study	Online questionnaire including sociodemographic information, if they were concerned about COVID-19, CDI-S and SCARED.	1,485 students from Huangshi and 845 students from Wuhan.	The students from Wuhan scored higher in CDI-S than those from Huangshi, with a higher risk of depressive symptoms; there was no statistically significant association between demographic characteristics regarding the anxiety symptoms.	The study does not assess whether the outcomes will remain over the long term, so the researchers continued monitoring the participants to assess duration and how the epidemic affects the students' mental health.
Zhou et al., 2020.[10]	Netherlands	Cross-sectional study	Online questionnaire with demographic data, PQH-9 and GAD-7.	8,079 Chinese students.	The prevalence values of anxiety and depressive symptoms and the combination of both were 43.7%, 37.4% and 31.3%, respectively. Female gender was the most important risk factor for depressive and anxiety symptoms.	They did not use a representative sample, as the participants were volunteers; self-report may not be consistent with a health professional's assessment.
Abawi et al., 2020.[11]	Turkey	Cross-sectional study	Telephone interviews included questions about the isolation and family routine and PedsQL (Pediatric Quality of Life Inventory) collected from the children's medical records.	75 families with children undergoing treatment for severe obesity.	There was a 32% increase in anxiety symptoms, but quality of life was maintained. The families' concerns diminished after information provided by the treating physician in the last appointment performed.	Cross-sectional study without a control group.
Pınar Senkalfa et al., 2020.[12]	Italy	Cross-sectional study	Questionnaire on COVID-19 and STAI-C Anxiety Scale (State-Trait Anxiety Inventory for Children) for children aged from 9 to 12 years old and STAI (State-Trait Anxiety Inventory) for children aged 13 to 18 and mothers.	45 patients with cystic fibrosis and their mothers and a control group with 90 healthy children and their mothers.	Healthy children aged from 13 to 18 years old had higher scores for anxiety than age-paired children with cystic fibrosis; mothers of children with cystic fibrosis scored higher for anxiety than mothers of healthy children.	Small sample: only 20 children completed STAI-C due to the scale's age limitation; there was difficulty in interpreting the results because there was no association between the age group allocations.
*Colizzi et al., 2020.*13	Spain	Cross-sectional study	Questionnaire evaluating sociodemographic and clinical characteristics of the children, impact of the pandemic on well-being and family needs.	529 caregivers of children with ASD.	There was a report of an increase in pre-existing behavioral problems; living with separated or single parents is associated with better results.	They did not include standardized scales in the research; they did not include information about the children's gender.
*Vallejo-Slocker et al., 2020.*14	United States	Cross-sectional study	Online questionnaire with brief sociodemographic form, SDQ, KIDSCREEN-10 and report on how they felt in the last week.	459 children and adolescents from the Spanish Family Welcoming System.	98% of the children received information about COVID-19; the girls scored higher than the boys in emotional problems on SDQ; younger children scored higher than older children in KIDSCREEN 10.	Sample selected incidentally due to a sense of urgency; therefore, it is not known if it is representative of the welfare system; when evaluating children and adolescents, the high rate of use of versions of reports aimed at parents and caregivers made it difficult to compare the results with those in the current literature.

Brown et al., 2020.[15]	United States	Cross-sectional study	Online questionnaire on sociodemographic characteristics, COVID-19 risk factors, risk factors for mental ailments, protective factors, perceived parental stress and potential child maltreatment.	183 parents of children under 18 years old.	Stressors related to COVID-19 are associated with a high stress level perceived by the parents; community support is associated with low potential for abuse.	Small sample; mostly made up by mothers not belonging to minority groups.

DISCUSSION

The COVID-19 pandemic was an event of unexpected proportions worldwide. China and Italy were the countries that presented cities with the highest mortality rate due to the Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-Cov-2) infection in the first months of the outbreak. The virus spread quickly, and more than 200 countries implemented severe restrictions such as lockdowns, school closings and traffic restrictions to contain the disease. However, the consequences of these measures for the well-being of families were little considered[4].

Staying at home without the opportunity to go out to open spaces, such as gardens and backyards, can generate anxiety symptoms and other related problems, such as sleep disorders and physical complaints.[8] Behavioral problems can also occur because of social isolation, especially due to restriction of activities, school closures and home confinement[7,8].

Comparing Spanish and Italian children during the lockdown, Orgilés et al. (2020) observed that differences in household characteristics and governmental attitudes are associated with the better emotional and behavioral response of the Italian children to quarantine, when compared to the Spanish. The Italian government allowed parents to take children under the age of 18 for short walks close to their home, while Spanish children could only leave the house for justifiable reasons. Italians also have more gardens in their homes when compared to Spaniards. However, there was a report of increase in screen time in both countries[8].

Although access to entertainment platforms has a protective effect during quarantine, the excessive increase in screen time can be associated with behavior and peer problems[1]. Changes in physiological functions (eating and sleeping) were also reported by the parents: when they are not at school, children tend to change their routine, becoming less active[1,8]. That is, children spend more time in front of screens and change their sleep pattern and diet, which will result in weight gain and decreased cardiorespiratory endurance[1].

Another important point is the parents' perception of the pandemic. According to several authors, parental perception is closely related to the psychological symptoms of children during quarantine[1,4,8]. Financial losses, unemployment of the providers, uncertainties about the future and unavailability of essential items such as food and water, increase the level of family stress by generating frustration, anger, and anxiety[4,7,10].

The financial pressure faced by the parents can make them overly reactive and generate over-reliance on inconsistent and less effective disciplinary approaches[3,4,7]. An example of this would be a more intense emotional response by the father or caregiver to the child's disobedience, leading to conflicts and compromising the family atmosphere[3,7].

Another factor associated with parental stress is the difficulty in enjoying the experience of the relationship with the child. The more emotionally stressed parents become, the less they understand the needs of children and adolescents. Stress is also associated with rude behavior and difficulty explaining boundaries and discipline[4]. In this way, children feel less understood by the caregivers and may react in negative and aggressive ways, creating a chain of actions that intensifies the already established stress and even increases the risk of maltreatment[4,6,15]. However, Brown et al. (2020) suggest that the cumulative stressors related to the COVID-19 pandemic alone are not sufficient to increase the potential for child abuse by caregivers[15].

The studies evaluated suggest that parents communicate openly and directly with children and adolescents, always using age-appropriate language. Informing about what is happening and the reasons for the restrictions children must face is crucial to prevent negative psychological consequences[1,4,5].

The health system must also assist the parents, as they were left without support after the closing of schools and day care centers[4]. Health professionals and governmental agencies need to provide information on how children of different ages express distress and the importance of sharing and talking about fears and negative emotions, to mitigate the psychological impact of COVID-19 and facilitate early intervention[4,10].

In some countries, quarantine was carried out in centers organized by the government during the first months of the COVID-19 outbreak. People who had contact with individuals with suspected or confirmed infection by SARS-Cov-2 were isolated 14 days from the day of the last exposure. In India, Saurabh & Ranjan (2020) assessed the adolescents' compliance with quarantine in centers created by the Indian government. In that study, only 7.43% of the participants adequately fulfilled the quarantine requirements. The sample consisted of adolescents. Most reported that not going out to see friends and family members was the most difficult measure to comply with[12].

The child who is in social isolation, whether in a hospital environment or due to contagion containment measures, can present depression, hypotimia, anger, irritability, insomnia, and emotional exhaustion, and has a high risk of developing post-traumatic stress disorder (PTSD). Separation from the parents generates fear and a feeling of abandonment, making the child more susceptible to stress-related disorders[6,7].

Social media can be used to keep in touch with friends and family members during periods of isolation, reducing the risk of psychiatric disorders and increasing adherence to the social distancing measures[7].

Another important point is adequate information for the population, which would improve knowledge about the disease and understanding of the measures to control the infection. A well-oriented population has greater adherence to the norms and increases the effectiveness of policies to control virus transmission[7] in addition to presenting less risk of developing anxiety and depressive symptoms[10].

However, the press can favor stressful situations with the dissemination of false information about the COVID-19 pandemic[3,10]. Kılınçel et al. (2020) observed that Turkish adolescents, who used television as the main information source about the disease, obtained higher scores for anxiety symptoms when compared to those who used other information means[6]. The government must fight this by correcting fake news. In turn, parents can restrict the exposure of children and adolescents to excess information, but always maintaining dialog to provide a sense of security in a family environment[10].

The closing of schools, in turn, generated uncertainties and potentially negative effects on academic development[3,9,10]. The loss of school support and the restriction of peer interaction and physical activities also contributed to the pandemic context of insecurity and stress[4].

In the case of more vulnerable populations, such as children with chronic diseases, several studies report that clinical support was maintained through Telemedicine, ensuring the stability of the baseline condition during the first moment of the pandemic. However, there was a subtle impairment of mental health, generating demand for mental health profes-

sionals not available at the time of the research[2,11,12]. On the other hand, children and adolescents with previous psychiatric disorders presented more intense anxiety symptoms than the general population[6]. Colizzi et al. (2020), in turn, evaluated Italian parents of children diagnosed with ASD. They reported that there was greater commitment to the care of the child during quarantine, as they no longer had the support of school services, private therapists, or outpatient health services. However, there was no need for intervention by specialists or emergency care, due to the handling of demands at home. Only children who already had behavioral problems evolved with an increased frequency of these events[13].

In the case of children in a situation of social vulnerability, they are more susceptible to developing mental disorders in emergency contexts such as the pandemic[14]. They have previous psychological difficulties and usually live in families with low socioeconomic status. They usually live in urban areas and in environments with few rooms and with several people above the local capacity, which hinders the recommended physical distancing. Due to the greater risk of contracting the virus and the greater risk of experiencing the loss of family members, the government must pay special attention and intervene early in this group[14,15].

The mental health of children and adolescents is associated with activities maintained during quarantine, with the quality of relationships and with the way in which adults were affected by the pandemic. Therefore, keeping children active, with well-established routines and in a conflict-free family environment, is essential to reduce the difficulties faced during a state of emergency[1].

CONCLUSION

The emergency resulting from the COVID-19 pandemic resulted in a challenging period for most families worldwide. Health professionals must be alert to the possible presence of anxiety and depressive symptoms secondary to social isolation and its behavioral consequences, especially in children with chronic diseases or in situations of vulnerability. Longitudinal studies can provide more information to guide psychosocial screenings and interventions in children and families most at risk for dysfunctional and maladaptive behaviors.

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