



Social Isolation in Times of COVID-19: Effects on Adolescents' Mental Health

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Authors' contributions

This work was carried out in collaboration among both authors. Both authors read and approved the final manuscript.

Article Information

DOI: 10.9734/AJPR/2021/v5i130164

Editor(s):

- (1) Dr. Lamidi Isah Audu, National Hospital Abuja, Nigeria.
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 - (3) Dushad Ram, Shaqra University (SU), Saudi Arabia.
- Complete Peer review History: <http://www.sdiarticle4.com/review-history/63048>

Mini Review Article

Received 01 November 2020

Accepted 25 January 2021

Published 17 February 2021

ABSTRACT

Introduction: The pandemic caused by the new coronavirus forced the adoption of several measures for individual and collective protection measures, including isolation, which interrupted direct social contact and started to draw the attention of researchers due to its potential risk of damage to people's mental health, notably for the most sensitive groups, such as adolescents.

Aim: This article presents some emotional repercussions observed in groups of adolescents, after six months of social isolation.

Methodology: Literature retrieved through Google Scholar, Medline, PubMed, Scopus, Scielo, and Cochrane Library databases related to the mental health of adolescents during the period of social isolation determined by the coronavirus pandemic, published between January and July 2020.

Results: The studies have found manifestations ranging from mild symptoms, such as boredom, inattention, agitation, irritability, fatigue and excessive worries to those of greater magnitude, such as worsening cognitive performance, exaggerated fear and varying degrees of anxiety and depression

Conclusion: The data allow us to state that social isolation has immediate effects and probably also in the medium and long term, on the behavior and emotional health of adolescents. Both

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healthy teenagers and those who already have a change in the pre-existing emotional state must be carefully observed and supported during the most critical moments of this global crisis.

Keywords: Adolescent; mental health; social isolation; anxiety; depression.

1. INTRODUCTION

In December 2019 the world became aware of a new species of coronavirus that, from China, quickly spread to all continents, forcing the World Health Organization to declare a pandemic situation that has become one of the biggest public health problem worldwide and adopt measures to reduce the speed of contamination of people through intensive hygiene care, the use of masks and social isolation, among others [1].

In the first months of 2020, studies began to be published on the impact of the disease caused by this virus, called COVID-19, highlighting the clinical manifestations of airway involvement that varied from asymptomatic or oligosymptomatic patients to those who needed hospital treatment in intensive care units [2]. However, in addition to the various clinical manifestations and the social and economic consequences that accompany the evolution of this pandemic, about six months after its beginning, the results of studies that sought to assess the repercussions on the emotional health of people affected began to be published. not due to the disease, especially for the most sensitive groups, such as adolescents [3].

Among the various measures adopted for individual and collective protection against infection, social isolation has come to call the attention of researchers due to its potential risk of damage to mental health. In the name of security, direct social contact and socialization activities were abruptly interrupted with the closing of schools, clubs, leisure, and social areas. And, although justifications and explanations for these measures were adopted, convincing adolescents has been a difficult task and has met with resistance, even if involuntary [4].

Given the characteristics of its emotional development process, changes such as the acute loss of daily rhythm and school activities and barriers to social interaction have been shown to be elements that can cause, in addition to physical impairment, emotional stress and trigger deterioration of family relationships, increasing the vulnerability of adolescents [5-7].

Therefore, given the conditions mentioned above and the great physical, social and emotional vulnerability of adolescents, the objective of this article is to present the emotional repercussions observed in them after a period of six months of social isolation.

2. METHODOLOGY

Literature retrieved through Google Scholar, Medline, PubMed, Scopus, Scielo, and Cochrane Library databases related to the mental health of adolescents during the period of social isolation determined by the coronavirus pandemic, published between January and July 2020. The terms used for the research were “adolescent”, “mental health”, “social isolation” and “covid-19”.

2.1 Adolescent Emotional Development

Adolescent emotional development is a process that begins in late childhood and extends to the middle of the third decade of life. During this evolutionary period, which is individually individualized in each social context, the definitive emotional structures of the adult personality will be built through successive stages of maturation of the central nervous system, which occur at different speeds according to the different structures that experience this evolution. Until full maturity is reached, adolescents are still unable to regulate and control emotions and behaviors, becoming vulnerable from the point of view of mental health [8,9].

Thought, previously concrete, is becoming abstract, hypothetical-deductive, allowing reasoning about propositions that are not necessarily true, building hypotheses based on assumptions and creating a world with its own social value. Because they do not fully understand what is happening, they idealize and fantasize situations to satisfy desires [10]. Adolescents suffer many external influences from their peers, adopt models and stereotypes, seek social status and hope to achieve many goals simultaneously [11,12]. The critical view of the family and society leads them to be omnipotent and demonstrate self-assertion, which makes them think that they are invulnerable to risks and

dangers. Egocentrism, demanding attitudes, contestation, impulsiveness, the need to explore the world and escape unpleasant sensations are also characteristic of this phase of life [3,13]. In addition to the natural personality development, some physiological changes that occur during puberty may favor the emergence of emotional problems, especially symptoms of anxiety and depression, feelings of loneliness, fear, low self-esteem and post-traumatic stress [14-18].

2.2 Social Isolation and Its Consequences

Social interaction is a basic human need and permeates all actions of daily life. From the moment the COVID-19 pandemic demanded that distance measures be taken between people and the direct personal relationship became impractical, great changes began to occur around the world. Although people of all ages are subject to the effects of social isolation and the resulting manifestations may be in some respects similar, it is essential to highlight that, for adolescents, the emotional repercussions can be more intense and harmful since their cognitive and emotional state are still immature [19]. Add to this that the loss of contact with protection mechanisms such as schools, churches, clubs, and the uncertainties regarding the duration of this isolation tend to make the situation even more serious.

The repercussions of social isolation on the mental health of adolescents have attracted the attention of many researchers, especially after the first 3 months of its inception, when several studies began to be published highlighting the importance of identifying more vulnerable groups and warning signs that make it possible to develop preventive or therapeutic actions, earlier. Ranging from mild symptoms such as boredom, inattention, agitation, irritability, fatigue and excessive worries [3,20,21]; even those of greater magnitude such as worsening cognitive

performance, exaggerated fear and varying degrees of anxiety and depression [22-24], the different emotional manifestations have been recognized through the use of validated instruments and made available online to participants [25]. Table 1 shows the main emotional manifestations highlighted in the studies.

To date, most studies published on this topic have been carried out with Chinese adolescents, since China is the country that first began to experience the effects after the beginning of the health crisis. Zhou et al[12] analyzed questionnaires answered by 4805 students, aged between 11 and 18 years and found 1899 (39.5%) who reported having some symptoms of depression, with a higher prevalence among those over 15 years of age, who slept less 6 hours / night and did not practice physical activity. Chen F et al. [26] found 11.8% depression, 18.9% anxiety and 6.5% depression and anxiety among the 1036 adolescents living in the same geographic region, with all prevalence being higher for females and those with over 15 years old. Another study carried out with adolescents aged 12 to 18 years found 43.3% of indicative signs of depression, 37.4% of anxiety and 31.3% of depression and anxiety association [27]. Also among 3254 Chinese adolescents, aged between 13 and 18, Li et al. [25] analyzing questionnaire responses, obtained 29.3% of individuals reporting symptoms related to anxiety and 22.3% of depression, again more frequent in females and in those residents in urban regions.

Qi et al. [28] applied questionnaires to 7202 adolescents aged 14 to 18 years and found 42.4% depression and 36.6% anxiety, highlighting the worst conditions for those with lower socioeconomic status and with less family support. Among 7143 university students interviewed by Cao et al. [29] 24.9% had manifestations of some degree of anxiety.

Table 1. Emotional manifestations presented by adolescents during social isolation

Author	Date	Key findings
Guessoum SB et al.	2020	Post-traumatic stress, depression, anxiety
Orgilles M et al.	2020	Difficulties of concentration, boredom, irritability, loneliness
Duan L et al.	2020	Depression, anxiety
Zhou et al.	2020	Psychological stress, anxiety, depression, inattention, fatigue, worry, agitation, exaggerated fear
Chen F et al.	2020	Depression
Fegert JM et al.	2020	Depression, low mood, irritability, insomnia

In the only study carried out with adolescents of a nationality other than Chinese, so far, Kiliñel et al. [30] evaluated 745 Turkish students, aged between 12 and 18 years old and found 88.2% of them with signs of anxiety, showing concern with news related to COVID-19, being more prevalent in those who reported having knowledge of positive cases in the family or in the neighborhood. Also worthy of mention are the results of other studies that sought to identify factors that were related to the increased emotional vulnerability of adolescents subjected to this current reality of isolation. Behavioral changes such as disorganized sleep and wake patterns³, altered eating habits [31], decreased physical activity, physical inactivity, increased screen time with greater exposure to inappropriate content and subject to harassment and bullying, in addition to differences between family members and domestic violence constitute a large set of factors that certainly interfere with the adequate emotional development of adolescents [32,33]. In addition to behavioral aspects, it is important to highlight that female adolescents, those who showed greater sensitivity and emotionality, residents in urban regions and cities with high rates of disease incidence were also identified as being more subject to negative interference in their emotional development [8,21]. Studies have also identified some factors related to the family and that contribute to the emotional instability of adolescents, namely: children of parents who work in places with a higher risk of contagion [34], family members who have lost jobs and income and having lost a relative or friend with a diagnosis of covid-1935.

3. CONCLUSIONS

Despite the short time that has elapsed since the beginning of the pandemic, the small number of studies published on the topic and the lack of evaluations in other cultures and societies, the results released to date allow us to affirm that social isolation has immediate effects and probably also in the medium and long term, on the behavior and emotional health of adolescents [35]. Both healthy adolescents and those who already have an altered pre-existing emotional condition, must be carefully observed, and supported during the most critical moments of this global crisis [36]. Although some adolescents will only manifest emotional problems in the future, the moment to act is immediate; early identification of those most at risk and instituting measures that can prevent injuries and promote health [16,37,38]. And, given the dynamism and

speed of evolution of events that can cause damage to mental health, it is necessary to develop more researches, new precise and specific instruments, to ensure early identification of emotional changes that may affect individuals in full growth and development [6].

In view of this new reality, parents, family members, caregivers, health teams and educators must be articulated to develop actions that can reduce the impact of social isolation on the emotional health of adolescents. One of the first measures is to seek to expand social networks with healthy and responsible interaction that includes protection factors and diversified activities that can meet the demands of different groups [21,39-41]. This is associated with the rediscovery of the role of the school as a space for emotional support and opportunities for the development of these activities, offering knowledge about the current reality through reliable sources and vehicles of communication. Practicing physical activity, improving sleep conditions, using time with varied entertainment with artistic and cultural activities, exercising new relationships that bring together and strengthen the family bond[42-44], trying to take advantage of the mandatory proximity imposed by isolation can also contribute to minimize the damaging effects of social isolation.

CONSENT

It is not applicable.

ETHICAL APPROVAL

It is not applicable.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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Peer-review history:

The peer review history for this paper can be accessed here:
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