

Psychological and psychiatric impact of COVID-19 pandemic among children and adolescents

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Summary. *Background:* COVID-19 outbreak and the unprecedented measures imposed by the government, including quarantine and social distancing, cause psychological distress in children and adolescents. *Methods:* we review literature about mental health effects of COVID-19 pandemic by using the keywords “COVID-19”, “coronavirus”, “pandemic”, “mental health”, “psych*”, “adolescent” and “child”. *Results:* early evidence show high prevalence of anxiety and depressive symptoms in children and adolescents, due to the pandemic itself, to social isolation and to parents’ stress. High grade students, females and low-income families are at higher risk to develop psychiatric symptoms. Psychological distress can be reduced by maintaining contact with peers through social networks and by accurate updates provided by the government through the mass media. Online resources such as information about mental health education and preventive measure, video-counselling, telemedicine and telepsychiatry services, can be useful to reduce the psychosocial effects of the novel coronavirus. *Conclusion:* there is urgent need to plan new strategies for early psychological interventions in order to reduce the impact of COVID-19 pandemic on children and adolescents mental health status. (www.actabiomedica.it)

Keywords: COVID-19; mental health, child and adolescent psychiatry, psychological impact, pandemic

Introduction

During COVID-19 pandemic, Italy has been of the most affected country and one of the first, after China, that faced the SARS-CoV-2 outbreak. Great efforts in reducing viral transmission have been carried out by the government and by the population. A huge amount of resources has been employed in public health system and in intensive care units and several volunteers helped in the management of COVID-19 emergency. Anyway, when the infection peak will decrease, health organizations will have to face the psychological impact related to the pandemic. In this situation, population is involved as a whole: patients, hospital workers, families, elderly people and policy makers as well.[1]

For children and adolescents in Italy, COVID-19 pandemic represents the first great stressful community event. It is the first time that the government imposes the closure of schools, public parks, meeting places, recreational and sport activities nationwide. As a consequence, people experienced forced social isolation during the lockdown time and, after that, social distancing at the end of the quarantine. This situation can lead to psychological distress and depressive mood. In addition, during the outbreak peak, when the number of positive cases and deaths is huge, children and adolescents have to deal with the fear of fell ill, but also with the loss of loved ones. Moreover, they perceived the eventual economic losses and stress of their parents, that generates a growing feeling of uncertainty and anxiety.

Purgato et al. reviewed literature about psychological therapies in the past humanitarian crisis and disasters, when a major incidence of post-traumatic stress disorder, depressive, anxiety and somatoform disorder is registered, showing low quality evidence about the efficacy of psychological interventions in reducing these symptoms in children and adolescents.[2]

In this paper, we review recent literature about impact of COVID-19 pandemic on children and adolescents mental health status published in 2020, by using the keywords “COVID-19”, “coronavirus”, “pandemic”, “mental health”, “psych*”, “adolescent” and “child”.

Mental health during pandemic

During previous outbreaks, the psychological impact of widespread infectious disease has to be considered as one of the main consequences, and it involves both patients already suffering from psychiatric disease and people without pre-existing mental health illnesses.

An early online survey collected data about general population in China at the beginning of the COVID-19 outbreaks. It shows moderate to severe psychological impact in the major part of the population studied (53,8%), but also high rate of moderate to severe anxiety (28,8%), depressive symptoms (16,5%) and stress levels (8,1%), with higher percentage in students, females and poor-health status people.[3]

A study conducted in Spain during the pandemic, shows that anxiety, stress and depression symptoms, measured with the DASS scale (Depression Anxiety, and Stress Scale) are higher in younger people affected by chronic disease.[4]

Another cross sectional study estimates that, during COVID-19 outbreak, the prevalence rate of depressive symptoms is 43,7% and of anxiety symptoms is 37,4% among Chinese students aged 12-18 years. Furthermore, 31,3% of them presents a combination of both symptoms, with higher risk in female gender and higher grade students. In particular, adolescents report reduced level of interest in doing things, tiredness, poor or increased appetite, irritability, excessive worries and becoming easily nervous or annoyed.[5]

Literature points out that social isolation can lead to depression, anxiety or somatic symptoms, but also to psychotic bouts and suicidal thoughts, with higher percentage in young people. Addictive and thought disorders can develop, too. Moreover, being ill may trigger fear of death, anxiety, depression and even stigma in those quarantined. Evidence reveal that, during COVID-19 pandemic, feeling of fear, nervousness, sadness and anxiety- related insomnia are higher in quarantined children and adolescent compared to their peers not quarantined.[6,7,8]

The COVID-19 pandemic caused huge changes in everyday life of children and adolescents and it is known that early life stressful events can lead to psychiatric breakdown. [9]

In particular, several mental health disorders rise during adolescence when mental health status is shaping, but, during coronavirus pandemic, social distancing can flare up or worsen psychological imbalance and psychiatric illnesses in people with previous mental health disease. The disruption of daily routines and the loss of contact with the peer support group may generate a feeling of uncertainty, especially in those with pre-existing mental health imbalance. In addition, school closure affects children with special needs, that will be unable to make progress in their essential skills, and their families, which will have to care for them at home without the support of educators and afterschool activities.[10]

Furthermore, children may experience the loss of loved one for the first time, without the possibility to say them goodbye. Importantly, even after the lockdown, long-lasting effects can affect young people mental health status, and adolescent may present post-traumatic stress disorder or can experience difficulties in return back to social activity with changes in interactions with other people. Anyway, with schools and community services closed, children and adolescent mental health status cannot be detected and access to psychological and psychiatric treatment is difficult to gain. In all these cases, early psychological intervention is fundamental and more resources should be addressed to implement new ways to provide emotional support.[11]

In this context, policy makers and mass media attention is focused on pandemic physical and financial

effects, so psychological aspects tend to be neglected, risking major consequences in general population mental health.[12]

Online resources

Evidence show that, during social isolation, the intensive use of the internet and the practice of the so called online “challenges” can lead to self-harm and suicidal intents in youth.[13]

In contrast, during adolescence, social interaction and face-to-face contacts with peers are fundamental to develop the self-identity. A review collected data about effects of social isolation and loneliness children and adolescents without any previous psychiatric disease, showing that loneliness is negatively associated with wellbeing and mental health, while positive associations are found between social isolation and depression, social anxiety, self-harm, suicidal ideation, eating disorders. The length of the isolation seems to be directly proportional to the development of psychiatric symptoms.[14]

Hence, negative effects of social isolation, can be mitigated by digitally-mediated communications, especially when social media and technologies are actively employed to improve personal relationships.[15]

Economic inequality

The lockdown highlights financial differences. People living in large house or with their own garden spent their quarantine with an higher quality of life compared to poorer one. In this situation, low-income families and crowded households appear to be more vulnerable, due to discrepancy in financial resources, living spaces, technologies access and educational support. For example, the government decided to continue school programs with online lessons, but distance-learning requires internet connection, that may not be available in some families. For the same reason, families with poor financial conditions, worsened by the pandemic, which represent an high risk group for the development of psychological distress, will not have the possibility to access online mental health support and to telepsychiatry.[16,17,18]

Child abuse

Literature points out that child abuse and violence rates increase during school closure.[19]

According to Rosenthal et al., caregivers and parents stress, together with the loss of access to mental health services and minors social isolation, leads to an increased risk of child abuse during the quarantine. In fact, adults experience financial downturn and job losses, changes in everyday routine and the necessity to take care about their children all day long without the possibility to organize recreational activity outdoor. Moreover, social isolation causes lack of emotional support in a time in which both adults and children go through a period of uncertainty about their future. In addition, by closing schools and public places, children are no more in contact with the community and this reduce their possibility to ask for any help.[20]

Interventions

First of all, it is important to identify people at higher risk of psychiatric breakdown, through a screening of the general population and by implementing studies about this topic. For example, general practitioner and paediatricians should be trained in recognizing the first symptoms of mental health disease, to promptly refer the patients to psychological support or psychiatric services and to distinguish between urgent and routine situations. Moreover, national policies should provide general guidelines for early and targeted psychological interventions in this population.

Once again, technologies, with online psychotherapy can help in providing support to these patients. Anxiety and stress-related disorders can improve if resources such as information about mental health education, video-counselling, telemedicine and telepsychiatry services, are available online.[21]

In particular, cognitive behavioural therapy (CBT) and mindfulness-based cognitive therapy (MCBT) can reduce stress and maladaptive coping behaviours.[12]

Beyond CBT, other psychological therapies including common elements treatment approach (CETA), behavioural activation treatment (BA); interpersonal psychotherapy (IPT); thought field therapy

(TFT); and trauma or general supportive counselling are supposed to improve mental health status of people suffering from post-traumatic stress disorders, depression symptoms and anxiety disorder. Anyway, there are low quality evidence of their effectiveness in children and adolescents, hence more studies are needed.[2]

Zhou proposes a cooperative model of psychological services, by including families, social system and schools to gain a synergic effect in youth emotional support.[22]

Moreover, to reduce anxiety and psychological distress, the government should provide scheduled and evidence-based information through the mass media, avoiding the spreading of “fake-news”.

Since conflicting information cause higher anxiety and stress, these updates should be accurate and they should include number of new cases, rate of death and of recovery, but also indications about preventive measure to adopt to prevent the viral transmission. In particular, the use of surgical mask and accurate hand-washing, are easy measure that seems to be related with lower anxiety levels.[3,8]

Despite evidence show negative impact of humanitarian crisis and social isolation on children and adolescents mental health status, it is possible that since this experience is shared worldwide, the awareness of being in the same situations together with other people and with the common aim to reduce the coronavirus transmission, can mitigate psychological distress. In particular, to maintain social networks help children and adolescents to feel part of a community wider than their family, which can give them support and make them experience social rewards.[14]

As regard as adolescents, a survey conducted in Italy, shows that in the first period of the lockdown, their concerns increased, but then they react by metabolizing the situation. In particular, online lessons allow school to maintain its social, and not only educational, function, supporting youth.[23]

In this challenging situation, the main world organizations caring about youth and parenting, are planning to share open-access resources in order to help parents in building positive relationship with their children and in contrasting negative behaviours.[19]

To conclude, COVID-19 pandemic represents an opportunity to implement services to reduce

psychological impact of humanitarian crisis, disasters and outbreaks. Data collected during this period are useful to plan strategies to maintain a balanced mental health status and to help families in the caring for their children and adolescents.

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