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Psychological and Behavioral Impact of COVID-19 Pandemic on Children

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ABSTRACT

The global epidemiological trends led to the declaration of coronavirus (COVID-19) as a pandemic by the World Health Organization (WHO) on March 11, 2020. This necessitated the closure of schools, parks, and recreation and community facilities in most parts of the globe. As a result, there was a rapid shift to online education delivery, and even virtual school graduation ceremonies. Thus, children became part of the sudden behavioural changes needed to mitigate the spread of COVID-19. These changes include social distancing, frequent handwashing and stay-at-home restrictions. Some families had to cancel planned vacations, and others were forced to go into isolation or quarantine as recommended by the public health policies and guidelines.

This paper reviews the psychological and behavioural impacts of the COVID-19 pandemic on school-age children.

Keywords: COVID-19, children, mental illness, behavioural problems, emotional problems

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Introduction

The first outbreak of COVID-19 was in December 2019 in Wuhan, China. The outbreak was declared as a global pandemic by WHO on the 11th of March 2020^[4]. As of 26th of July 2020, the total global number of cases stood at 15,785,641, with approximately 640,016 total number of deaths^[11]. Infection with COVID-19 causes a severe respiratory syndrome that has lead to death in approximately 0.9 percent of infected individuals^[14]. As such, several public health measures were implemented globally, including travel restrictions, use of facemasks, regular handwashing, maintenance of 2 metres of social distancing, and closure of shopping malls, restaurants, schools and parks^[12].

Schools are an important social outlet for children. They represent environments that promote social learning, language acquisition and the expression of age-appropriate emotions and behaviour. However, schools are a potential area of increased risk of the spread of COVID-19 based on lessons learned during the influenza epidemic in 2009^[2]. Consequently, public health experts advised that school closure and social distancing were, therefore, the most effective strategies to mitigate the spread of COVID-19^[12]. This led to a widespread school shutdown that impacted nearly 60 percent of students worldwide^[15]. In response, some schools adopted online programming and virtual social interactions as a means of providing ongoing education. Unfortunately, the effect of school closures and social distancing for children has been associated with an increasing prevalence of sleep disturbances, irritability, anger outbursts, anxiety and depression^[7]. In a cross-sectional study in China, there was a reported increase in the prevalence of depressive symptoms by about 43.7 percent and 37.4 percent of anxiety symptoms in high school students during the COVID-19 outbreak^[18]. Furthermore, Xie et al. (2020) reported that a reduction in outdoor social activities was associated with a great increase in anxiety and depressive symptoms among school-age children^[17]. This was in addition to the reported high level of distress caused by the sudden shift

from traditional classroom teaching to virtual online education^[19]. On the other hand, children who experience bullying in school are likely to have a positive experience of online learning^[5]. In addition, a study by Galea, Merchant, and Lurie (2020) examined the increase in the reported cases of domestic abuse^[6]. The authors reported that the stay-at-home rules due to COVID-19 had increased the vulnerability of children to parental emotional abuse.

Discussion

Although medical literature shows that children are minimally susceptible to the physical effects of COVID-19, they are impacted the hardest by the psychosocial repercussions of this pandemic. Being quarantined in homes and institutions may impose a more significant psychological burden than the physical suffering caused by the virus itself. School closure, lack of outdoor activity, and aberrant dietary and sleeping habits are likely to disrupt children's usual lifestyle and can potentially promote monotony, distress, impatience, annoyance and varied mental health issues^[7,11].

Sudden changes in routines are devastating in children, as it takes away their sense of organization and belonging, and disrupts their adaptation to stress and uncertainty. Stressful life events have been consistently associated with an increase in depressive symptoms in children. In the context of the current COVID-19 pandemic, which is a significant and universal stressor, there are reports of increased prevalence of depression and anxiety in youth. According to Zhou et al. (2020), adolescents in China had a higher incidence of depressive and anxiety symptoms during COVID-19 than adults^[18]. The prevalence of depressive symptoms is significantly influenced by sociocultural and economic contexts, and thus will be different from county to country, region to region, and child to child, which is an important gap in research that needs to be filled^[18].

Being isolated and subjected to a sudden shift in daily structure makes children stressed and irritable, and many parents report anger outbursts and family conflicts that may be hard to control

at times. In school, children can access support systems needed to recognize and manage this type of emotion, which can be challenging at home, as some parents lack the skills to intervene effectively. As a solution, perhaps these parents could be taught that their attention may be a useful behavioural management tool that can help prevent emotional outbursts. Parents could also work on validating their children's emotions, dismissing the bad behaviours and praising the good behaviors and implementing consistent positive reinforcement. School boards have the task of coming up with innovative ways of bringing children together for social bonding purposes; whether by using bubble type systems, where small groups meet and play together, or by using bigger spaces for appropriately distanced in-class learning and social activities ^[1,7].

Abrupt school closures and changes in lifestyle are especially difficult on children and adolescents with pre-existing mental health and educational needs. School routines are important coping mechanisms for young people with mental health issues. When schools are closed, they lose an anchor in life, and their symptoms could relapse. For some children with depression, there will be considerable difficulties adjusting back to normal life when school resumes. Children with special education needs, such as those with autism spectrum disorder or attention deficit hyperactivity disorder, are also at increased risk of becoming frustrated and short-tempered when their daily routines are disrupted ^[8]. Parents' role in creating new schedules and providing extra support is paramount to offer some sense of normalcy. As such, it is prudent that there is development and implementation of routines, especially for children who are out of school, thus ensuring that they have access to regular programmed work. On-line alternatives for daily routines can be extremely helpful, but not all children have access to technologies that enable remote connectivity. Strategies are needed for ensuring structure, continuity of learning, and socialization to mitigate the effect of short and long-term sheltering in place ^[6].

In addition to the reported anxiety and depression symptoms, there are those children that have difficulty articulating their feelings, and they may manifest their distress as disruptive behaviour, noncompliance (defiance), and tantrums. Thus, the behavioural impacts of the COVID-19 pandemic on youth and children represent another topic that deserves special attention. Good sleep and physical activity are crucial for child and adolescent well-being. Despite the evidence indicating the benefits of increased physical activity, reduced sedentary behaviours, and adequate sleep, the prevalence of Canadian children and youth meeting the 24-h movement recommendations was recently reported to be only 12.7% (pre-COVID). According to Moor et al. (2020), during this pandemic lockdown very few children and youth were meeting the combined physical activity daily guidelines (4.8% of children, 0.6% of youth). The screen time increased considerably, especially in youth, who socialize and play online for hours ^[10]. All these changes in lifestyle directly influence the quantity and quality of sleep. While we do not yet know how sleep has been impacted by the COVID-19 crisis, the potential for sleep problems to emerge or worsen during this period is high. This may be even more true for children and adolescents compared to adults, as developmental changes impacting sleep are rapidly occurring, such as those transitioning into adolescence. Although youth may experience worsened sleep as a result of the COVID-19 crisis, it is also possible that some may experience improved sleep in certain domains. First, some children may benefit from the greater flexibility afforded by home learning. Second, there may be more opportunities for obtaining sufficient sleep since less time is spent travelling to and from school or engaging in social and extracurricular activities. It is thus imperative that sleep considerations be part of both clinical and research initiatives aimed at mitigating and understanding the impact of the COVID-19 pandemic in children and adolescents ^[3].

At the individual level, not all impacts of the COVID-19 crisis are negative. For example, home confinement and remote learning may provide opportunities for youth who often struggle in a traditional school environment to succeed at an individualized pace of learning, facilitating higher self-efficacy, perceived competence, and persistence. Stay-at-home orders may afford youth more time to discover new passions, hobbies, or talents, such as experiences with art, music, or nature, which can provide a greater sense of control and meaning in their lives. Intrinsic curiosity and an optimistic outlook may be especially crucial for promoting resilience during the COVID-19 crisis [5]. Besides, youth who experience peer victimization or academic failure may find the break from in-person schooling and activities provides a respite from these stressors. This may, in turn, reduce rumination or distress around bedtime that can interfere with sleep onset and quality. However, this break may only be temporary, and it will be essential to monitor these youth as the novelty of social distancing wears off [3].

The surge in anxiety and depression during the pandemic has come with an increase in substance use in adults, as well as a rise in domestic violence. With schools closed, there is a genuine possibility of an epidemic of child abuse [6]. Child abuse and neglect can lead to myriad long-term health consequences, including mental health disorders, sexually transmitted infections, unwanted pregnancies, and substance abuse. The long-term impact underscores how urgently the current increases in child maltreatment must be recognized and addressed [13]. Children at risk for abuse may have limited opportunities to report or seek help when confined to the home. Systems will need to balance the need for social distancing with the availability of safe places to be for people who are at risk, and social services and supports will need to be creative in their approaches to following up on reports of problems [6].

The long-term effects of a pandemic of such magnitude as Covid-19 in schoolchildren are yet

to be fully understood and studied. Perhaps this difficult moment in time nonetheless offers the opportunity to advance our understanding of how to provide prevention-focused, population-level, and indeed national-level psychological and mental health care, and to emerge from this pandemic with innovative ways of doing so.

Conclusion

Public health and mental health workers must not ignore the reported increase in the prevalence of depression and anxiety symptoms amongst children during the COVID-19 pandemic. Schools and parents need to be more vigilant for signs of any emotional and behavioural changes exhibited by children. The community social services need to be creative and provide innovative virtual support programs to children and parents who are at risk of domestic abuse. There is a need for healthcare researchers to study the long-term effects of the impacts of COVID-19 on children's mental health.

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