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# Children and youth mental health: not all equal in the face of the COVID-19 pandemic

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Introduction Impact of the pandemic in general child and adolescent populations	2
The role of social isolation and loneliness	3
The role of school closure	3
The role of parental stress and other parental outcomes	4
Impact of the pandemic on vulnerable child and adolescent populations	4
The COVID-19 pandemic and child poverty	4
COVID-19 and child protection services/out-of-home settings	5
Recommendations for practices and policies	6
Conclusion	7
References	7

## **Key points**

- The pandemic has had a detrimental impact on children's and youth's mental health.
- Social isolation from peers and significant adults are key factors that have negatively impacted young people's mental health
- Research also indicates social disparities have expanded since COVID, and many families have accumulated multiple stressors that are impacting their well-being and functioning.
- Children and youth with pre-existing mental health disorders, living in financially precarious situations, from racialized groups, and/or involved with child protection services experienced lower levels of resilience when faced with the COVID-19 pandemic.
- Practice and policy measures moving forward must take this reality into account to minimize long-term mental health consequences for young people.

#### Glossarv

Adolescents and youth Refers to any individual from 13 to 18 years of age

Children Refers to any individual from 0 to 12 years of age

COVID-19 pandemic The COVID-19 pandemic, also known as the coronavirus pandemic, is an ongoing global pandemic caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2)

Mental health A state of well-being in which individuals can realize their own potential, cope with normal stressors, study and work productively and contribute to their community

Young people Refers to individuals from 0 to 18 years of age

## Abstract

This article reviews the empirical evidence gathered in the past 2 years on the impact of the COVID-19 pandemic on mental health for children and youth. Grounded in a social justice framework, this review highlights that all are not equal in the face of the pandemic, and that children, youth and families living in precarious contexts have been impacted most. Practice and policy measures moving forward must take this reality into account to help all children and youth thrive and recover from this unprecedented worldwide crisis.

1

#### Introduction

First identified in Wuhan (China) in late 2019, the COVID-19 virus created an unprecedented worldwide crisis. On March 11, 2020, the World Health Organization (WHO) declared COVID-19 a worldwide pandemic, forcing many countries to impose important public health measures to contain the spread of the virus, including forced quarantine, travel restrictions, shutdown of services, and school closures. As of January 9, 2022, over 304 million confirmed cases and over 5.4 million deaths had been reported (WHO, 2022). Although less likely to experience severe health consequences when exposed to the COVID-19 virus, children and youth clearly saw their lives overturned across the globe. It is established that pandemics are linked with increased mental health issues among children and adolescents, which include stress, worry, helplessness, academic concerns, and behavioral problems such as substance abuse and suicide (Meherali et al., 2021). This article reviews the empirical evidence gathered almost 2 years into the COVID-19 pandemic on the impact on mental health for children and youth. Grounded in a social justice framework, this review will highlight that all were not equal in the face of the pandemic and that practice and policy measures moving forward must take this reality into account.

Mental health is a state of well-being in which individuals can realize their own potential, cope with normal stressors, study and work productively and contribute to their community (WHO, 2022). Mental health is not simply the absence of mental disorders and diagnoses. It is a state that allows children and youth to reach their full potential, to achieve different milestones and to experience positive quality of life (Centers for Disease Control and Prevention [CDC], 2021). Concerns about the impact of the pandemic on child and youth mental health were raised at the beginning of the pandemic, pointing out that the pandemic itself, as well as associated public health measures implemented to contain it, could be potentially traumatic for children, youth, and families (Collin-Vézina et al., 2020). As highlighted by Perry (2020), the COVID-19 pandemic corresponds to all criteria of a stressful event: it is unpredictable, extreme, prolonged, and based on an unknown and unfamiliar danger, which makes the experience likely to activate a physiological danger response and produce intense stress.

In the current pandemic context, it thus stands to wonder how children and youth adapted to the situation. This article highlights empirical evidence linking the pandemic to children and youth's mental health challenges by focusing on: (1) worldwide general populations of children and adolescents and (2) vulnerable populations that are more likely to have experienced negative consequences in the midst of the pandemic, notably children living in poverty or involved with child protection services, who are more likely to also be racialized and to be experiencing socioeconomic challenges compared to general populations.

#### Impact of the pandemic in general child and adolescent populations

The impact of the COVID-19 pandemic on child and youth mental health have been the subject of numerous studies around the world, starting as early as spring 2020. A few rapid and systematic reviews were conducted and summarize the lessons learned on outcomes of the pandemic in general populations.

de Miranda and colleagues' paper (2020) focused on 51 studies, 15 of which included original data, to answer the question: What are the mental health effects of the pandemic on children and adolescents? Most studies they reviewed screened for anxiety and depression symptoms as benchmarks for mental health. Psychometric tools varied across studies making comparisons somewhat difficult, though the presence of clinical levels of anxiety and depression were found to be high across studies ranging from 12.9% to 46.7% for anxiety and from 11.8% to 47.8% for depression. Most studies were cross-sectional and did not measure prepandemic levels of depression and anxiety, therefore not allowing examination of the causal role of the pandemic in the symptoms documented. Papers included in their review showed that older adolescents exhibited more depressive symptoms than children. Findings were mixed regarding anxiety symptoms: some studies documented no significant difference between ages, while others reported higher anxiety with increased age. All studies but one that considered gender in their analysis showed that adolescent girls were more likely to present anxiety and depressive symptoms than male adolescents and younger children. Recent studies not considered in the above review—as they were published in early 2022—confirm that psychological distress during COVID-19 is greater for females (compared to males) and for adolescents (compared to children) (for example, Hébert et al., 2022), suggesting that differential responses should be implemented to address mental health consequences in different populations.

A subsequent systematic review from Fong and Iarocci (2020) looked at child and family outcomes following the first wave of COVID-19 that included 17 original studies, 8 of which captured child outcomes more specifically. These child outcomes ranged from anxiety and depression, as well as post-traumatic-stress disorders, fear and worry, and obsessive-compulsive disorders. These 8 studies' locations were varied, representing many countries and social realities: India, Turkey, China, USA, Australia, and the Netherlands. Rates of anxiety (including post-traumatic stress disorders) and depressive symptoms varied substantially depending on whether parents were reporting those symptoms (for example, 10% for clinical anxiety based on parental reports) or if children were self-reporting their symptoms (for example 22% for depression and 19% for anxiety). As in Marques de Miranda and colleagues' paper, studies were for the most part cross-sectional and thus not able to address whether the pandemic was responsible for causing the symptoms under study.

In November 2021, Public Health Ontario (2021) released a rapid review updating the information presented in earlier reviews. The literature search identified eight studies that focused on adolescents and 13 studies that included parents of preschool and school-aged children in the general population. Most studies were again cross-sectional in nature, based on online surveys, and conducted in the first wave of the pandemic (from March to May 2020). Their review provided more in-depth insights on differential responses to the COVID-19 pandemic for children and youth. In addition, the authors screened for studies that investigated

pandemic outcomes in general and specific populations (e.g., children with severe obesity, children with physical disabilities). They found the impact to be different for young children and adolescents. Parents of young children reported more behavioral difficulties, hyperactivity, and conduct problems. For example, the prevalence of conduct problems was perceived by parents to have increased by 35%–40%. Adolescents reported increased anxiety and depressive symptoms, and 32% mentioned that public health measures implemented during the pandemic made their mental health worse. Studies that investigated suicide, suicidal ideation, and self-harm reported mixed findings in relation to the impact of the pandemic: some showed increased levels of those mental health issues in 2020 compared to 2019, while others showed no difference when comparing those periods. The impact of the pandemic on adolescent substance use before and during the pandemic was also investigated. Although the proportion of adolescents who used alcohol or cannabis did not increase, those who reported use before the pandemic increased their consumption following the outbreak. Further, males were more likely to be using substances alone as compared to females, and higher depression symptoms were linked to higher prevalence of abusing substances alone.

In addition to investigating the prevalence rates of mental health challenges in children and youth populations, these reviews looked at factors that could amplify or mitigate the negative impact of the pandemic, notably social isolation and loneliness, school closure, and parental stress and other parental outcomes.

#### The role of social isolation and loneliness

Most children and youth had to physically isolate from their peer and support groups at different moments since the pandemic was declared in March 2020. As highlighted by Shen (2020), confinement and social isolation measures imposed upon communities worldwide prevented young people from fulfilling the important development milestone of relying on peer interaction for socialization and identity formation. It is well established that social isolation and loneliness are predictors of depression, anxiety, and suicidal thoughts and actions (see Loades et al., 2020's research review spanning from 1946 to March 2020) and, as a result, researchers have investigated whether this relationship remained true in the context of COVID-19 pandemic. As an example, Cost et al. (2022) examined the impact of COVID-19 emergency measures on mental health for children and adolescents with and without pre-existing psychiatric diagnoses. They found that deterioration in mental health status after the COVID-19 pandemic for both groups was linked to increased stress from social isolation. Children and youth experienced an unprecedented time during which they had to adhere to strict confinement rules implemented at different levels and times across the globe.

Panchal et al. (2021) conducted a comprehensive systematic review focusing exclusively on the impact of the COVID-19 pandemic lockdown on child and adolescent mental health. They identified 61 studies representing nearly 55,000 children and adolescents worldwide. The exposure to COVID-19 lockdown was operationalized in each study (measures in place, length of lockdown). Anxiety, depression, and irritability symptoms were commonly reported by parents or by teenagers themselves. Their results showed that adolescent females presented with more severe symptoms in comparison to boys and to younger children. They found, however, that for a significant proportion of families, the lockdown measures were associated with improved family relationships and mental health conditions, specifically in families reporting positive parent-child communication, further demonstrating that the impact of COVID-19 lockdown measures has been diverse depending on existing protective family factors. Yet, COVID-lockdown was associated with higher psychological distress in populations who had pre-existing mental health challenges. They noted that individuals with previous eating disorders have been among the most significantly affected young people, with 41% of those under clinical care experiencing a reactivation of eating disorder symptoms due, potentially, to lack of weight monitoring by professionals during confinement. They also found that while some young people remained socially connected, for instance through social media, a heavier use of those outlets was a risk rather than a protective factor in predicting psychological distress during the COVID-19 pandemic. Consequently, being "physically isolated but socially connected" did not seem to be a protective factor for most young people, as pointed out by Ellis et al. (2020).

## The role of school closure

Closely related to social isolation and confinement measures, school closures have been identified as a potential detrimental factor to children's learning and mental health. Less than one-third of low-income countries introduced a national distance learning program by April 2020, meaning that many children had no learning opportunities for at least some part of the 1st year into the pandemic (United Nations, 2022). Even in Western countries, models of educational delivery varied greatly across jurisdictions and provinces (i.e., fully remote, fully in-person, and blended models combining both), resulting in differential schooling experiences across student groups (Gallagher-Mackay et al., 2021).

The Fraser Mustard Policy Bench conducted a literature review on the impact of pandemic-related school closures on children and youth (Sansone et al., 2021). Most of the literature located for this review was from the US and Europe, with limited evidence from other countries. The studies reviewed that were conducted early in the pandemic predicted substantial learning losses for children, which would increase achievement gaps in the short term and have potential long-term consequences on educational attainment, employment outcomes, and well-being. Emerging evidence from studies that have measured the initial impact of school closures on academic performance show that, as predicted, the pandemic has contributed to learning losses that are greater than what would have occurred during a regular school year and have exacerbated educational inequalities (Dorn et al., 2020). The available evidence is consistent that learning losses are greater among economically disadvantaged students, who typically begin their education with achievement gaps.

More specific to child and youth mental health, Viner et al. (2021) released a systematic review specific to the impact of school closures. A total of 27 studies were located to document impacts on emotional and behavioral outcomes. However, most studies did not include pre-pandemic data which left the question of the predictive effect of school closure on mental health uncertain. Recently, a few projects have provided more conclusive evidence of the impacts of school closure and social isolation on children and youth. Despite their inability to assess the specific impact of school closure against the influence of other lock-down measures that occurred simultaneously (e.g., social isolation), their longitudinal design made conclusions more robust. For example, Larsen et al. (2021) analyzed data from the Norwegian Family Dynamics Study to investigate the impact of school closure and social isolation on children's emotional, somatic/cognitive and worry reactions. They compared data collected in April and May 2020 (when most schooling happened remotely in Norway) to information already gathered between 2017 and 2019 in a sample of 374 children. They found that children on average coped better emotionally in 2020 in comparison to previous years, but did more poorly in terms of sleep and concentration.

## The role of parental stress and other parental outcomes

Worldwide, the vast majority of children generally live with their parents or other significant adults providing care for them. This is also the case for adolescents and young adults in many industrialized countries. For example, European youth leave their parents or guardians' homes at age 26.4 years old on average (Statista, 2021). It is thus no surprise that parental stress and other parent-related factors, which young people could have been exposed to in their homes during COVID-19, are considered fundamental factors to predict heightened mental health problems in children and youth. Considering only the most recent review published (Public Health Ontario, 2021), 10 studies identified collected primary data to investigate the role of parental outcomes in children's and adolescents' mental health status, including parental stress, parenting practices, parent-child relationship, parent mental health, parental resilience, and family functioning. They concluded that parental factors such as stress, resilience, and anxiety were significantly associated with their child's mental health outcomes in both negative and positive directions.

On the negative side, some studies revealed that parents struggled to manage their children's behavior and symptoms of anxiety and depression during the pandemic. A few of those studies also demonstrated that cumulative stressors related to COVID-19, including losing employment and income, being unable to provide for family needs, and uncertainties regarding childcare, were significantly associated with perceived stress. High level of stress was unfortunately associated with harsh parenting and poorer quality parent-child relationships, which may have led to increases in family violence and maltreatment. Additionally, studies that focused on parents whose children had a disability showed that the pandemic has put an outstanding pressure on those families, and that parents struggled to cope and needed substantive support to maintain their positive parenting practices.

On the positive side, some of these studies show that parents who perceived parental support and control over the pandemic reported less stress, which in turn influenced more positive parenting practices. In line with the broader scholarship on factors influencing parenting (e.g., Park and Lau, 2015), Fong and Iarocci (2020) concluded their review stating that age of parents (older) and socio-economic factors (higher SES) appeared to mitigate negative outcomes, making these families more resilient in the face of the pandemic. To contrast this, as is highlighted in the next section on vulnerable populations, many families struggling with poverty-related stressors did not have as many protective factors to provide a buffer from adversity caused by the pandemic. This, in turn, may unfortunately have increased their parental stress and weakened their parenting practices, which negatively impacted their children's and adolescents' mental health.

## Impact of the pandemic on vulnerable child and adolescent populations

Social justice paradigms posit that unequal and unfair distribution of power, resources, and obligations within societies make vulnerable groups of children and youth more likely to experience mental health problems. We will focus on three groups of children and youth for whom high rates of mental health issues have been documented prior to and during the pandemic: children and youth living in poverty, in maltreating/abusive homes, and in out-of-home care settings.

## The COVID-19 pandemic and child poverty

UNICEF released a statement in December 2021 to raise awareness of the increase in child poverty due to COVID-19 pandemic. They stated that 100 million more children could be living in poverty by the end of 2021 compared to the pre-COVID situation, which would bring the estimated number of children and youth living in monetary poor households to almost 640 million worldwide (UNICEF, 2021a,b). It is projected that recovery from the pandemic will be experienced unevenly across groups with different SES statuses, and that this trend might be particularly pronounced in low-income countries. In that line, OXFAM International (2021) has coined COVID-19 "the virus of inequality" based on evidence that while the richest individuals have already recovered from financial losses created by the first wave of the pandemic, it will take more than a decade for the poorest people to recover from the economic impacts.

Living in poverty is a clear risk for experiencing more severe health consequences due to COVID-19, primarily due to lack of access to vaccines and healthcare (Tai et al., 2020). Using a very robust meta-analysis strategy that included 68 studies representing 4.3 million patients, Maguesh et al. (2021) confirmed that socioeconomic determinants were strongly associated with COVID-19 health outcomes, and more notably in racial and ethnic minority groups. Indeed, poverty is noted by the CDC (2020) as a long-standing social determinant of health that makes some ethnic and racial groups more at risk to experience deleterious impacts of the COVID-19 pandemic. In the US, for example, the highest national poverty rates are for American Indians and Alaska Natives, and

Black or African Americans (US Census Bureau, 2013). Similar trends of higher poverty among Indigenous and racialized groups have been documented in other countries, including Canada and Australia (Canadian Poverty Institute, n.d.; Markham and Biddle, 2016). Poverty and race/ethnicity are thus social realities that are intrinsically intertwined, and the impact of COVID-19 on children's and youth's mental health must be looked at through those lenses.

Singh et al. (2020) published a narrative review on mental health outcomes for children and adolescents impacted by the COVID-19 pandemic. Their thematic analysis yielded different themes, one of which was the impact of lockdown on underprivileged children. That theme highlighted multiple ways by which the mental health of children and adolescents living in poverty was at risk due to the COVID-19 pandemic, including increases in child labor and child homelessness. These issues are compounded by the lack of access to education and school services that were replaced by distance learning and online courses not necessarily available to underprivileged young people, particularly those living in rural areas. These challenges, coupled with limited access to community resources, are likely to have created greater vulnerability and exposure to unfavorable economic, social and environmental circumstances. This echoes Ali and colleagues' pre-pandemic findings (2019) that corroborated that youth who are from low-income households and/or from racial/ethnic minority groups are more likely to receive mental health services exclusively from school settings. Other evidence prior to the pandemic suggests that school-based mental health programs are not only effective in providing early assessments and services to at-risk children, but also have indirect benefits on schooling and learning experiences, such as reduced absenteeism and improved academic performance (Yau et al., 2015). School closures may indeed disproportionately limit access to mental health and educational support services for disadvantaged students, thus making subsets of young people more likely to experience learning and mental health challenges resulting from the COVID-19 pandemic.

It is thus no surprise that UNICEF released a statement urging governments to avoid implementing measures that directly impact children and youth, notably school closures. They stated that prolonged, nationwide school closures have compromised decades of progress in education and that a shadow pandemic of mental health issues has taken hold in parallel to the physical health threats of COVID-19 (UNICEF, 2021a,b).

#### COVID-19 and child protection services/out-of-home settings

It is well documented that children and youth living in poverty and from racialized backgrounds are more likely to be investigated and placed in out of home care by child protection services (see for example: Rothwell and de Boer, 2014; Maguire-Jack et al., 2018). Ongoing challenges experienced by families living in precarious situations, coupled with the rise of financial insecurity and elevated parental stress due to the COVID-19 pandemic, have been noted early into the pandemic as risk factors that could lead to increased child maltreatment (Caldwell et al., 2020), notably around issues of chronic neglect which may be mitigated by families' financial resources and access to support systems (Feely et al., 2020). Research investigating the impact of previous major natural disasters and pandemics has undoubtedly shown an increase in child maltreatment and family violence due to increased parental stress, sudden shifts in routines, school closures, and drastic decreases in available community resources (see Campbell, 2020 for a review). With child maltreatment considered one of the most important risk factors for children's mental health (Teicher et al., 2021), the likely increase in family violence is paramount to understanding children's and youth's adaptation to the current pandemic.

However, child protection administrative data on child protection reports amid the first wave of COVID-19 pandemic, compared with pre-pandemic rates, showed that child protection reports did not increase in spring 2020, but rather declined in comparison to previous years. According to Jonson-Reid et al. (2020), a decline of 11%–70% in child maltreatment prevalence was noted across US states. At the international level, although the impact of COVID-19 on rates of child maltreatment varied across countries, many of those noted decreases in child maltreatment prevalence were reported in both low-income and high-income countries (Katz et al., 2021a,b). A decline in rates of child maltreatment would in other circumstances would been welcomed with enthusiasm and hope that fewer children and youth were actually less subjected to abuse and neglect, yet skepticism was expressed by researchers and front-line workers alike. They proposed that these trends reflected decreased monitoring of youth by mandated reporters, including teachers, school personnel, front-line workers, and other service providers (Royer et al., 2020; Jonson-Reid et al., 2020). Indeed, in general, child maltreatment data suffers from an important limitation, which is to include only cases that are brought to the attention of the authorities and are documented in information systems. Given that school personnel are among the most frequent sources of reports of suspected maltreatment to child protection authorities, school closures were identified as a significant factor involved in the decline of reports noted in child protection services during the first wave of the COVID-19 pandemic (Fallon et al., 2020).

Children and youth who were subjected to family violence before the pandemic may have also faced supplementary challenges. First, previous traumas endured by children and youth served by child protection services may have induced a lower tolerance for additional stressors thus making them more prone to subsequent mental health problems compared to non-abused individuals (Hammen et al., 2000). Although trauma-informed treatments could continue through tele-mental health routes during the pandemic, these services were not fully adapted or not available at all to meet the needs of all children and youth (Racine et al., 2020).

Second, violence dynamics—which for some families may have been well contained and monitored by social services prior to the pandemic—may have worsened as a result of the current crisis. The shift to non-contact child protection services in some jurisdictions is likely to have limited the capacity of front-line workers to assess risk fully and thoroughly for child abuse and neglect. For example, Tener et al. (2020) interviewed child protection workers from the US and Israel regarding current cases of child sexual abuse they had in their caseload. These workers identified the current confinement and lockdown measures as a deterrent to abuse disclosure, thus impacting child abuse investigation processes and plummeting child abuse reports.

Third, children and youth placed in out-of-home care settings due to child maltreatment concerns in their family of origin have experienced even more severe consequences of lock-down measures. On the one hand, as shown in Musser et al. (2021)'s US study, there was a decrease in the number of youths placed in the foster care system during the COVID-19 pandemic, with the most important reduction in April 2020 when schools were closed through the Safer-at-Home Order. As the name suggests, this policy assumed that children were safer at home (to avoid contracting the virus) when one of the biggest threats to their well-being and mental health was in that very environment. The need for safety and protection due to child abuse and neglect may have been ignored. On the other hand, foster care youth and workers in institutionalized settings (e.g., group homes, residential treatment facilities) had to carry extra burdens during the pandemic, over and beyond all challenges faced by the general population. Through surveys conducted among professionals and caregivers in foster care, Whitt-Woosley et al. (2022) identified several challenges faced in outof-home care settings, related to children and youth mental health including disruptions in service provision and court proceedings, visitation disruptions with biological families, and loss of access to social connections. As pointed out by Lorch and Fuchs (2020), staff and children in out-of-home care settings may have experienced feelings of insecurity for reasons listed above, as well as the lack of clarity of discharge plans and the design and delivery of programs happening on a week-to-week basis depending on the varying public health measures in place. Lastly, many young people in out-of-home care settings reached the age of majority over the course of the pandemic and were left with few resources to enter this new phase of their lives in such a turbulent era. A high prevalence of psychiatric disorders among care alumni has been established. For example, Okpych and Courtney (2018) found in a pre-pandemic study that nearly half of their sample of care alumni screened positive for a mental health or substance abuse disorder in the past year. As a result, many jurisdictions have extended support to youth aging out of care by adopting moratoriums on youth transitions out of the child protection system during the COVID-19 pandemic (for example, see the work of the National Council Youth in Care Advocates, 2022). Yet many youth transitioning out of care around the world are still left unsupported during this important life stage, which may impact their current and future mental health and functioning.

Caldwell et al. (2020) highlight that our attention has been devoted to short-term negative impacts on children and families served by child protection services since the beginning of the pandemic. They suggest that our efforts be redirected to consider long-term consequences of this unprecedented crisis. First, that all child protection services be deemed "essential," to avoid reducing services or shifting to distanced and virtual operations. For example, Herrenkohl et al. (2021) point out that home visiting programs are arguably gold-standard practices that must be sustained in the midst of the pandemic to continue engaging at-risk families from the pre-birth period and prevent child abuse and neglect from happening in the first place.

Second, in the longer term, that permanent universal poverty alleviation policies be developed, offered, and sustained given the high rates of hardship among families involved with child protection services and children and families whose mental health is compromised by economic precarity. Taking a public health prevention and early intervention approach that targets poverty-related factors can improve child mental health outcomes, particularly when rooted in an accessible, relationally based, culturally responsive approach (Herrenkohl et al., 2021). Equitable standards should also be adopted worldwide to support transitions to adulthood for youth in care. This can be achieved by focus on eight rights-based pillars that each can be addressed through different programs and policies: financial; educational and professional development; housing; relationships; culture & spirituality; health & wellbeing; advocacy & rights; and emerging adulthood development (CWLC, 2021).

The current crisis could be an opportunity to redesign support systems related to child and youth mental health, along with child protection practices and policies, and thus build a stronger, more equitable, child protection system.

# Recommendations for practices and policies

The lessons learned from the COVID-19 pandemic and the effects of the restrictions imposed to mitigate infection will likely reveal themselves in the decades to come. Manifestations of inequity are infused in the daily experiences of racial/ethnic minority children, children with pre-pandemic mental health challenges, and children who live in economically disadvantaged situations. The pandemic both exacerbated and highlighted these inequities. Policy solutions are needed to guide helping professionals as they navigate how to assist children and families with the trauma, maltreatment, and educational loss they have experienced during COVID-19.

Overall, this review suggests that there are many actions needed to address the consequences of the current pandemic on child and youth mental health in order to shift our mental health priorities from survival to supporting resilience in children and families (Stark et al., 2020) including:

- Train education, child services, and health care staff on COVID-19-related child and adolescent challenges, with an emphasis on specific risks faced by children and youth with pre-existing mental health challenges, and those living in poverty, from racialized groups, and involved with child protection services.
- Adopt trauma-informed practices and policies to address the stress and exacerbated mental health problems induced by the current pandemic, for children, youth and their caregivers (Collin-Vézina et al., 2020; Cuartas, 2020)
- Identify strategies for providing and sustaining psychosocial support to children and adolescents in schools and other
  community resources, and develop plans to sustain those services despite lockdown and confinement measures (Phelps and
  Sperry, 2020).
- Favor in-person mental health services and therapeutic interventions, particularly for children and youth with pre-existing psychological diagnoses to avoid the risk of exacerbating mental health problems (Pelizza and Pupo, 2020).

- Adapt referral pathways to encourage intersectoral collaborations as a means to minimize strain on existing resources.
- Provide targeted support to care centers, families, and foster families to emotionally support children and engage in appropriate self-care, to reduce parental stress, and improve family connection—all of which are protective factors to child and youth mental health.
- Provide financial and material assistance to families whose income-generating opportunities have been affected to alleviate the
  impact of poverty on child and youth mental health, as well as those whose pre-existing economic vulnerabilities were exacerbated during COVID-19.
- Encourage child and youth engagement in initiatives to imagine our post-pandemic world, as exemplified by the UNESCO #NextNormal global action (2020).
- Continue monitoring child and youth mental health challenges through robust longitudinal studies and improved measurement tools (Ransing et al., 2020).

## **Conclusion**

This article aimed to review empirical evidence linking the pandemic to child and youth mental health challenges, by focusing on (1) worldwide general populations and (2) vulnerable populations that are more likely to have experienced negative consequences in the midst of the pandemic, notably children with pre-existing mental health challenges, living in poverty, from racialized groups, and/or involved with child protection services/out-of home care settings. Regarding general populations, rapid and systematic reviews paint a bleak picture of COVID-19 related mental health outcomes for children and adolescents. Several studies were conducted internationally to document child and youth mental health status amid the pandemic, focusing on anxiety and depression symptoms, post-traumatic stress disorder, conduct and attention problems, substance abuse, and suicide. Virtually all studies were cross-sectional in design thus limiting the possibility of inferring causal links, though by implementing quick surveys these studies filled an important gap in knowledge. Despite this methodological limitation, studies conducted thus far suggest that an important proportion of children and youth have been struggling in the context of the pandemic, and that age and gender must be taken into consideration to appreciate the impact on young people, with female adolescents displaying the highest psychological distress. Preexisting mental health challenges also pose a greater risk for experiencing mental health challenges amid the COVID-19 pandemic, particularly in the context of lockdown measures. Studies based on more robust methods are likely to be underway and their results forthcoming. These future studies will enrich our understanding of the impact of the pandemic on child and youth mental health in the long term. The analysis of factors that amplify or mitigate the impact of the pandemic in general populations suggests that interventions targeting parental stress and parent outcomes and those enhancing social interactions for children and youth should be preferred, as well as policies that only employ school closures as last resort public health measures to contain the spread of the virus. As we start imagining a post-pandemic world, it is paramount to implement practices and policies that will not only focus on preventing the virus from spreading, but to address the shadow epidemic of mental health difficulties experienced by those who will grow up to be the next adult generation.

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