

Leading Article

Addressing the psychosocial impact of COVID-19 on children and adolescents: The need for collaboration

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Introduction

Since COVID-19 was declared a global health emergency on 31st January 2020, more than 126 million cases have been reported globally, with the number of deaths exceeding 2.5 million¹. Children and adolescents account for only a minority of the reported cases and of those, only a limited number required hospitalization¹. Due to the smaller number of infections and lower rates of physical complications, children and adolescents have perhaps received less attention globally during the pandemic. However, the psycho-social effects of the pandemic on children and adolescents have been so staggering that it has been labelled a ‘parallel pandemic’². Research suggests that children and adolescents are more likely to develop negative psychological consequences due to the pandemic than adults. As coping with stress is a developmentally acquired skill, children and adolescents are more likely to lack appropriate skills to cope with the lifestyle changes imposed to control the spread of the pandemic.

School closure is one factor that has contributed substantially to development of psychological problems in children. According to the UNICEF (2020) and the United Nations (2020), around 188 nations have imposed country-wide school closures affecting more than 1.6 billion children. In Sri


Lanka, schools closed for the first time on 13th March 2020 and were re-commenced at the end of August, only to be closed within a few weeks due to the rise in the number of infections. The Western Province was worst affected, with schools re-commencing for grades 5, 11 and 12 on 15th March 2021, the rest re-commencing on 29th March 2021. Schools not only deliver education but also serve to provide routine and structure, social interactions and peer relationships, all of which are critical in developing socio-emotional skills in children and adolescents. With school closure, children have lost their daily routine and structure. They have had to adapt to virtual education, with no prior warning or preparation. Extra-curricular activities have ceased and they have lost contact with their peers and teachers^{2,3}. Furthermore, children and adolescents in dysfunctional families were confined to their maladaptive home environments. Moreover, with school closure, children have lost the psychological support they receive through school counsellors⁴. All these factors when combined are likely to place children and adolescents at a high risk potential for developing mental health problems. This article discusses the impact of COVID-19 on child and adolescent mental health, highlighting the need for inter-sectoral collaboration to provide optimal support for children to overcome their mental health difficulties.

COVID-19 and learning in children

Studies have reported a decrease in student’s academic motivation and attention since in-person learning was replaced by distance learning⁵. This was more prominent in younger children who had weaker digital skills and needed more supervision to engage in on-line learning^{3,5}. Availability of resources, affordability of data, parental education level and parent competence with digital technology all play a role in the success of distance learning⁶. This makes students from socio-economically disadvantaged families to be much more vulnerable to falling behind academically and the school dropout rates across the globe are expected to rise as a result⁷. In addition, children who contract COVID-19 may be at risk of developing academic difficulties due to the possible executive functioning weakness, attention deficits and neuro-cognitive

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deficits associated with COVID-19 and may require special attention once school re-commences⁸.

COVID-19 and screen time in children

Cessation of extra-curricular activities, lack of access to outdoor areas and limitation of social events, have led to an alarming rise in screen time in children and adolescents globally³. In studies in Turkey and South Korea, 71.7% and 81% of parents reported that the time their children spent on-screen has increased. A 4-5 hour increase in children's screen time per weekday was reported in Italy³, while another study revealed a 20-66% rise in screen time⁹. Highest increase in screen time was reported in older children with more than 6 hours per day spent on screen-based activities¹⁰. Increased screen time was also seen among pre-schoolers with 30.9% of 1 to 3-year-olds spending more than 3 hours/day on-screen during lockdown, compared to only 2.3% in the pre-pandemic era¹¹. Male gender, low household income, mother engaged in routine employment during lockdown, having no rules related to screen time and inconsistent parenting practices were associated with a higher risk of excessive use of screens. Increased screen time and problematic internet use were shown to be associated with increased psycho-social problems like depression, anxiety, suicidal ideation and Attention Deficit Hyperactivity Disorder (ADHD) as well as physical comorbidities like weight gain, nutritional deficiencies, musculoskeletal problems and chronic pain syndromes. Hence, urgent measures are needed to intervene on this increased use of screen time before it leads to both physical and psychological adversities in this population.

COVID-19 and physical activity in children

With lockdown restrictions, children were confined indoors or in small outdoor spaces. Compared to pre-pandemic levels, children and adolescents had less outdoor time and less exercise during the pandemic. The lowest impact on physical activity was seen in pre-schoolers with high-schoolers being worst affected¹². Exercise is beneficial in maintaining healthy growth and development and is important in reducing emotional problems, as well as enhancing cognitive performance in children and adolescents. Physical activity also helps in coping with life stressors and resilience building. Decline in physical activity during the pandemic may predispose children to develop physical complications such as obesity and metabolic syndrome and negative mental health consequences.

COVID-19 and sleep in children

Difficulties with sleeping, including delay in bedtime, increased sleep latency, increased sleep duration, poor sleep quality and delayed waking time, have been described in children since the onset of the pandemic. One study revealed that 28% of

school-going children and 64% of adolescents slept after 11 p.m. during lockdown compared to 0.87% and 12%, respectively, before the pandemic⁹. There are also reports of delayed sleep latency with a high percentage of children and adolescents taking more than 60 minutes to fall asleep. Refusing to sleep in their own bed¹³, anxiety at bedtime, night awakenings, nightmares and sleep terrors have also been demonstrated in the younger age groups⁹. Sleep is intertwined with developmental processes and is crucial for the maturation of central brain functions¹⁴. Sleep also plays a mediating role in human health. Therefore, addressing the sleep problems in the child and adolescent population should be an integral part of psycho-social support following the pandemic.

COVID-19 and emotional and behavioural problems in children

An increase in emotional and behavioural problems in children and adolescents has been reported globally. Among children and adolescents aged 3-18 years, 28% were reported to have worries related to COVID-19, 35% had fear and 32% had irritability¹⁵. Prevalence of depression and anxiety symptoms among adolescents during the pandemic was as high as 40%. In addition, fatigue, loneliness, negative thoughts, lack of enjoyment of activities, boredom and fidgety behaviour have also been reported¹⁶. An alarming 2-3-fold increase in prevalence of psychiatric disorders in children and adolescents have been documented during the pandemic. One study reported the prevalence of psychiatric disorder to rise from 20.5% to 39.7% during the lockdown. A 3-fold increase in the prevalence of ADHD¹⁷ and an increase in the suicidal attempts among adolescents have also been found¹⁸. Female gender, living in a rural area, living in a community with higher numbers of COVID-19 cases, increased parental stress, single parent families, low socio-economic status, maternal mental illness, later bedtime and shorter sleep duration, inadequate exercise, extended use of electronic devices and absence of family routines have been identified as risk factors for mental health problems^{2,4,19}.

COVID 19 and children with neuro-developmental and pre-existing psychiatric disorders

The risk of adverse psycho-social outcomes is estimated to be especially higher in children with neuro-developmental disorders, special educational needs, chronic diseases and pre-existing mental health problems^{20,21}. Children with Autism Spectrum Disorder (ASD) had more intense and frequent disruptive behaviour and worsening of mental health difficulties during the lockdown, which resulted in depression and anxiety in their parents²¹. Adolescents with ADHD were found to have increased inattention, hyper-activity,

impulsivity and oppositional defiant symptoms and worsening of behaviour in all dimensions²². Worsening of existing tic disorders upon separation from parents during quarantine, with resolution of tics once re-united with the parents, has been reported²³. Some studies have reported a worsening in Obsessive Compulsive Disorder (OCD) and the extent of avoidance during the pandemic²⁴. Difficulty in accessing medication due to medication being out of stock and difficulties encountered in obtaining prescriptions were also described¹⁶, which may have contributed to the worsening of emotions and behaviour in these children and adolescents.

COVID-19 and child maltreatment

There is evidence from the United States, China, Brazil and Australia, suggesting increased violence against women and children due to isolation and quarantine²⁵. In UK, an alarming rise in the number of abuse-related head injuries among children during the pandemic has been reported²⁶. In Sri Lanka, a total of 121 complaints related to child cruelty was reported to the National Child Protection Authority (NCPA) between 16th of March to 07th of April 2020. United Nations International Children's Emergency Fund (UNICEF) and the NCPA expressed grave concerns about the dramatic rise in this number since imposing the lockdown measures. Financial difficulties, parenting stress and job loss contribute to this higher risk of child maltreatment. In addition, with school closure and social restrictions, children and adolescents have less contact with other supportive adults such as teachers and extended family. Furthermore, there has been widespread disruption in child protective and community services supporting child welfare²⁷. These factors combined, make children and adolescents especially vulnerable to abuse in the face of the current pandemic. Moreover, increased use of the internet has put children and adolescents at risk of sexual exploitation and exposure to abusive and inappropriate material on-line.

Interventions to support children and adolescents

The pandemic has a diverse psycho-social impact on children and adolescents, ranging from physical ill health, mental health problems, learning difficulties and child abuse. Therefore, the psycho-social impact cannot be managed by a single specialty, but requires collaboration between multiple sectors involved in providing services to children and adolescents.

Role of health-care providers

Primary health-care workers and paediatricians have a role in identifying early signs of psychological disturbance in children and referring them to mental health services. Previous literature has shown that

20-25% of children attending primary care or paediatric settings have psychological problems²⁸ and the rates may be higher with the pandemic. Hence, health-care providers need to be vigilant about the mental health of children and adolescents, for early identification of mental health difficulties. Routine screening for changes in behaviour, sleep, appetite, level of activity and screen time during or after the lockdown would be helpful in identifying those with mental health issues. Doctors can also encourage regular sleep-wake schedules, rules around screen time, physical activity and family routines, all of which help to ameliorate the negative mental health effects on children.

Role of the education system

Students are likely to have experienced lack of routine and structure, varying levels of discipline and highly inconsistent academic and behavioural expectations during school closure. Therefore, they may struggle with adapting to daily routines, organization of daily activities and time management, once school re-commences. Worries about contracting COVID-19 may make classroom participation as usual and as before the pandemic difficult for some children⁶. Teachers may need to spend more time than usual teaching behavioural expectations, rules and routines. Students should be given an opportunity to discuss their experience during the lockdown, to allow them to ventilate their distress and enable teachers to identify children who are more vulnerable to develop mental health difficulties. Increased opportunities for play and non-academic student-student and student-teacher interactions should be allowed in the initial phases to make-up for the lack of social contact during preceding school closures. Creating opportunities to re-connect with the previous teacher may make transition to the new class easier for the students⁶. Revising the curriculum taught through distance learning needs to take place for the benefit of the students who had limited access to on-line learning and additional help should be available to support these students. Teachers should also be vigilant about the possible indicators of mental health problems in children and adolescents such as inattention, irritability, social withdrawal, school refusal and deterioration in school performance.

Role of child protection, community and social services

As recommended by UNICEF, the NCPA launched their '1929 Sri Lanka app' on 21st January 2021, to allow faster reporting of incidents of child maltreatment. Other measures recommended include adapting telehealth services to keep in contact with children at risk and providing community service workers adequate personal protective equipment to carry out home visits where needed²⁷. Providing emergency cash assistance is

also thought to be beneficial in reducing financial difficulties and parental stress, thus mitigating the risk of child abuse. Community services can also aid in increasing the public awareness on child abuse by providing advice on signs of abuse and the methods of reporting.

Role of parents

Parents need to promote routines at home, encourage regular bedtimes, set limits around screen time and encourage physical activity and hobbies to minimize the likelihood of children developing behavioural problems^{19,29}. Parents also need to take measures to manage their own stress, as there is abundant evidence that parental stress adversely affects the mental health of their children³⁰. Furthermore, parents need to have realistic expectations about distance learning and need to accept that children may not have the same engagement with distance learning as for in-person learning. Parents also need to be aware of any change in behaviour that may indicate an underlying mental health problem in their children, in order to access timely psychological support for their children.

Role of governments

COVID-19 pandemic may go on for a few more years, with possible exacerbations and further lockdowns in the future. Therefore, governments need to learn from past experience and be prepared to address the psycho-social needs of children and adolescents in case of further lockdowns. The government and private sectors should work together to provide flexible working hours for parents so that they can support children with their distance learning endeavours. In addition, as there is a wide variation of distance education provided by different schools, the government should aim to standardize distance learning by formulating guidelines for on-line education. Teacher training in on-line teaching is another important measure to ensure that all teachers have the same competency in conducting distance learning. Parents should also be empowered by providing guidelines and recommendations on supporting their children with their distance learning. As the social distancing measures may limit the access to support services, continuation of these services via tele-health facilities need to be considered and the government should provide the necessary infrastructure to make this possible. Several reports suggest that separation from infected parents may be more harmful to the children than contracting COVID-19 themselves. Hence, recommendations for care arrangements for children who are separated from their parents due to COVID-19 need to be formulated. Finally, data on the psycho-social impact on children in Sri Lanka are quite limited. Therefore, government funding, supporting research in this area, is also needed. That

would be a long-term investment on the future welfare of children who would grow up to be the next generation of Sri Lankan adults.

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