

Are our children physically and emotionally fit?

Yogita K. Adlakha
Associate of the Academy
Translational Health Science and Technology Institute, Faridabad
Email:yadlakha@thsti.res.in

Our purpose of life is not just contributing to the perpetuation of human species; it is definitely way beyond that. One of the purposes is to provide and equip our next generation with all more resources of physical, social, emotional health than we had. But are we justifying our purpose of life? I would say-no, considering ~35% urban population of India.

With overwhelming technological infiltration of our houses, our children haven't remained untouched of it. There are several proofs of how technology is changing and affecting physio-psycho-social health of our children. They are becoming technology dependent and losing their mental ability, attention and agility. Long hours of continuous sitting at computers have led to early rise in problems like back pain, disturbed sleep and eye strain (1). Prolonged poor sitting postures of children can lead to early start of cervical degeneration (2). Associations have also been reported between long hours of screen time and lower psychological well-being where curiosity, self-control, analytical abilities have been compromised (3). Due to their engrossment in technology, and lack of social interaction, children are becoming shy, inarticulate and emotionally sick. Persisting emotional distress can build up depression, due to which suicide cases among adolescents is at alarming stage (4,5). It has been in news for long that young students are attempting suicide if they do not perform well in exams. This shows that our next generation is not emotionally strong.

The effect of technology may start quite early on. Recent studies are flashing out the effect of screen time on language development in preschool aged children. The study reveals that language development is impaired in children who spent more time on a screen (6). The American Academy of Pediatrics (AAP) suggests limiting the screen time as extreme and inappropriate use of screen based media is directly associated with developmental and health risks (7). Language delay, compromised executive function and cognition, poor sleep and decreased parent-child engagement constitute some of the developmental risks (8,9). A decrease in brain connectivity in children is reported depending on the length of exposure to screen (10). Social interaction helps in building the neuronal networks during growth of the

child while isolation or exposure to screen hampers this process. The World Health Organization advocates for restricted screen time in children younger than 5 years and encourages further studies of screen time implications on health and development in their recent guidelines (11). There are reports which also suggest some positive effects of technology, so we should consider these studies with a pinch of salt.

COVID pandemic has restricted outdoor physical activities of children to an enormous extent. Due to which several milestones of physical and emotional development including motor skills, body mass index and team spirit, alertness and openness have been hampered. Social isolation has also resulted in aggressive behavioural changes, frustration, anxiety and irritation in children (1).

Therefore, it is the need of the hour for children to maintain regular physical activity and to escape the sedentary lifestyle. A routine exercises, aerobics and yoga in a safe home environment can be helpful for maintaining healthy lifestyle (12). Cognitive development in children is also governed by a balanced nutrition which has the tendency to affect academic performance (13). Lack of micronutrients particularly, Vitamin D, has been of concern during the pandemic due to less exposure to sunlight (14). It is very important for the parents and caregivers to work with their children to boost their physical, psychological and emotional health. Emotional health can be enhanced in a spiritual way. Adoption of our ancient Indian culture of having at least one meal with children seems helpful in building a strong bond of emotional and affectional attachment between parents and children. Studies suggest that child and early adolescent suicide were highly influenced by interpersonal problems; therefore parents should work to develop interpersonal problem-solving skills and construct a strong foundation of positive emotional and social health quite early in childhood (15). Promoting Alternative Thinking Strategies program (PATHS) is one such intervention program that helps school-aged children by refining emotional and interpersonal skills (16).

Though stimulation of brain is very important to carry out day to day activities yet excessive use of technology may cause long term harms that are not visible today. As a part of scientific community, it's our duty to find out novel scientific ways to enhance physio-psycho-emotional wellbeing of children as they are the future leaders and will contribute to the perpetuation of *homo sapiens* and humanity.

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