

# How Does the COVID-19 Pandemic Affect School-Age Children?

COVID-19 Pandemisi Okul Çağı Çocuklarını Nasıl Etkiliyor?

### Gul Yucel<sup>1</sup>, Elcin Balci<sup>2</sup>

<sup>1</sup>Department of Pedodontics, Faculty of Dentistry; <sup>2</sup>Department of Public Health, Faculty of Medicine, Erciyes University, Kayseri, Turkey

# To The Editor,

COVID-19 pandemic, which affects the whole world, is a global crisis element today, and it affects almost every age group in different ways. Health problems caused by the transmission of the virus, impoverishment as a result of the impact of the global economy, quarantine practices and the psychological and physical consequences arising from the closure of schools are striking in childhood.

According to the report of UNESCO, since the start of the COVID-19 outbreak, schools have closed full-time in 31 countries with more than 800 million students worldwide (more than half of the student population in the world), and significant changes ranging from reduced or part-time academic programs are continuing in 48 countries<sup>1</sup>. As a result, many educational institutions try to continue their programs as online education. Considering that the socioeconomic conditions of each student are not equal, problems arise in terms of internet infrastructure and access to technological devices which are necessary for distance education and differences among students are gradually increasing. This situation causes academic activities to lag and students' interest in the lesson decreases over time.

It has been reported that sitting in front of the computer for more than 4 hours causes musculoskeletal pain such as shoulder, back and neck pain<sup>2</sup>. In addition, as a result of prolonged screen exposure, the risk of internet use becoming an addiction rather than a need<sup>3</sup>. Studies have reported that internet addiction, which is a major problem for today's children, can be accompanied by substance use, attention deficit hyperactivity disorder, social anxiety, and depression. Parents should be very careful in this period in terms of comorbid conditions<sup>4,5</sup>. Again, children who have been exposed to screens for a long time due to online education may encounter inconvenient images, videos or sites on the internet or may be exposed to cyberbullying. Children should be warned of pedophilia so that they must not share their personal information, images and videos, and visit inappropriate sites.

Since face-to-face education cannot be done due to the pandemic, the time spent with friends at school, the lack of social activities such as outdoor playing, lack of physical activity and quarantine practices increases the time spent at home and as a result, a more sedentary lifestyle emerges. This situation causes an increase in childhood obesity in the coming years and invites the increase in Type 2 diabetes and cardiovascular diseases in adulthood<sup>6</sup>. At the same time, the mental health of children who experience uncertainty about how long the pandemic will last and how it will end is affected so that their anxiety levels increase. This situation may pave the way for psychological disorders that progress with anxiety increase in the future.

During the COVID-19 pandemic, due to the disruption of the routine examinations of children with chronic systemic diseases, exacerbations of the disease may be missed and there may be difficulties in accessing treatment. Children may have to face permanent problems of their existing systemic diseases. In addition, different outbreaks may occur in societies as a result of a decrease in immunization rate due to the inability to access preventive health services. At the same time, disruptions may occur in the treatment and education of children with special needs.

**İletişim/Contact:** Gül Yücel, Department of Pedodontics, Faculty of Dentistry, Erciyes University, Kayseri, Turkey • **Tel:** 0555 261 12 52 • **E-mail:** drgulyucel@gmail.com • **Geliş/Received:** 09.03.2021 • **Kabul/Accepted:** 23.03.2021

ORCID: Gül Yücel, 0000-0001-7152-1127 • Elçin Balcı, 0000-0003-3203-198X

Although health problems such as hospitalization and staying in intensive care due to COVID-19 are less common in childhood compared to adults, the situation is traumatic for children who lose their relatives for this reason. In the Ebola epidemic in 2015, it was reported that at least 16.600 children in Africa lost one of their parents or caregivers, and 3.600 children lost both parents<sup>7</sup>. Therefore, it can be thought that feelings of hopelessness, despair, fear of death and loneliness increase significantly in children. In addition, it is thought that the rate of exposure to domestic violence has increased within the scope of quarantine measures. In this period, such acts of violence are more likely to occur as a result of increased stress and anxiety levels due to families staying at home for a long time<sup>8</sup>. Every precaution should be taken to protect children from physical, emotional and sexual abuse.

As a result, during the pandemic period, the mental health of children should be closely taken care of, all kinds of conditions that could harm them should be determined and necessary security measures should be taken. Their worries should be reduced by answering the questions about the disease, and the time spent with the family should be increased. Screen exposure and time spent without physical activity should be reduced as much as possible.

*Conflict of Interest* None.

#### Financing Support

None.

## References

- 1. UNESCO figures show Two thirds of an academic year lost on average worldwide due to Covid-19 closures UNESCO.
- Ben Ayed H, Yaich S, Trigui M, Ben Hmida M, Ben Jemaa M, Ammar A, Jedidi J, Karray R, Feki H, Mejdoub Y, Kassis M, Damak J. Prevalence, Risk Factors and Outcomes of Neck, Shoulders and Low-Back Pain in Secondary-School Children. J Res Health Sci 2019;26;19(1):e00440. PMID: 31133629; PMCID: PMC6941626.
- 3. Kuss DJ, Griffiths MD, Karila L, Billieux J. Internet addiction: a systematic review of epidemiological research for the last decade. Curr Pharm Des 2014;20(25):4026–52. doi: 10.2174/13816128113199990617. PMID: 24001297.
- 4. Weinstein A, Lejoyeux M. Internet addiction or excessive internet use. Am J Drug Alcohol Abuse 2010;36(5):277-83. doi: 10.3109/00952990.2010.491880. PMID: 20545603.
- 5. Jorgenson AG, Hsiao RC, Yen CF. Internet Addiction and Other Behavioral Addictions. Child Adolesc Psychiatr Clin N Am 2016;25(3):509–20. doi: 10.1016/j.chc.2016.03.004. Epub 2016 Apr 11. PMID: 27338971.
- 6. Weihrauch-Blüher S, Wiegand S. Risk Factors and Implications of Childhood Obesity. Curr Obes Rep 2018;7(4):254–259. doi: 10.1007/s13679-018-0320-0. PMID: 30315490.
- 7. More than 16, 000 children lost parents or caregivers to Ebola many are taken in by the communities: UNICEF | Africa Renewal.
- 8. Aşkın R, Bozkurt Y, Zeybek Z. Covid-19 Pandemisi: Psikolojik etkileri ve terapötik müdahaleler. İstanbul Ticaret Üniversitesi Sosyal Bilimler Dergisi Covid-19 Sosyal Bilimler Özel Sayısı Yıl:19 Sayı:37 Bahar (Özel Ek). s. 304–318.