Digital eye strain in the era of COVID-19 pandemic: An emerging public health threat

Dear Editor:

The mandatory e-learning has emerged as a method for current teaching and learning in private universities and schools with the footfall of the coronavirus disease 19 (COVID-19) pandemic.^[1] Without any specific guidelines, it is now a usual routine for our children to spend most of the time (8–12 h per day) attending e-classes in front of a computer or mobile screens. These devices cause harm by emitting short high energy waves that can penetrate eyes and can eventually contribute to photochemical damage to the retinal cells, making an individual vulnerable to a variety of eye problems ranging from dry eye to age-related macular degeneration. It is collectively known as digital eye strain (DES) or computer vision syndrome.^[2]

DES is an emerging public health threat and it is directly proportional to the duration of digital screen exposure. The age group that is the most at-risk is children and we assume that their diagnosis could get delayed as children may not complain at the earliest like adults.^[3]

In the modern era, the use of digital screens is quite common for our children. Besides, the instigation of unlimited e-classes for such children has rested overt burden on their already overburdened eyes. And this way unknowingly, we are pushing a cohort of children into a higher risk of DES due to the current trend of unregulated e-learning.

The prevalence of DES in the community ranges from 22.3% to 39.8%.^[4] DES can be evaluated by subjective methods and objective methods. It is commonly managed by non-pharmacologically and pharmacologically; non-pharmacological management includes correct ergonomic practices, maintaining normal blinking, the use of appropriate lighting, careful positioning of the digital device, adjusting image parameters (resolution, text size, contrast, luminance),

and taking breaks, while pharmacological management strategies include using artificial tears.^[4] However, it is always better to prevent the current incidences of DES than to manage it.

We assume that it is the high time now for the policymakers to come up with a stringent guideline to deal with this emerging threat.

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