

Commentary: Digital toxicity: Another side effect of COVID-19 pandemic

The authors of 'Impact of the use of digital devices on eyes during the lockdown period of COVID-19 pandemic',^[1] conducted an online survey to find out the impact of COVID-19 lockdown on the usage of digital devices and their side effects on the eyes and body. This being an online study in the era of smartphones, it was no surprise that 97.85% of participants were mobile users. The authors of 'A novel approach to anterior segment imaging with smartphones in the COVID-19 era',^[2] conducted an online survey to find out the impact of COVID-19 lockdown on the usage of digital devices and their side effects on the eyes and body. This being an online study in the era of smartphones, it was no surprise that 97.85% of participants were mobile users. The usefulness of smartphones for ophthalmologists^[3] and patients^[4] has been covered earlier. Now, during the second wave of COVID-19, the impact of long-term digital toxicity hits more strongly.^[5]

Online classes

Due to the lockdown, schools were closed and students were initially ecstatic. Parents were not happy because they found themselves having to stay at home to help children with online class, or get help from grandparents and others. When the school closure extends for almost 1.5 years, we have to be aware of problems such as obesity^[6] and psychosocial^[7] issues in children, in addition to the ophthalmic symptoms.

Myopia epidemic

Ophthalmologists and optometrists all over the world are seeing an increasing incidence of myopia^[8] in children during this pandemic.^[9] The mechanism of myopia is possibly due to a combination of lack of adequate daylight exposure, prolonged near work, and increased digital screen time.^[10] Would usage of low-dose atropine eyedrops until home confinement ends help in preventing this?

Work from home

Many major industries which did not have a work from home option available in 2019 before COVID-19 quickly put together all facilities to work from home. Contrary to expectations, this increased the workload and work hours despite avoiding the time spent in travel. Many who worked from home did not have a comfortable workspace and were also managing things at home simultaneously. This led to eyestrain, poor sleep, body aches, and other issues related to poor ergonomics.

Social networking

When not working, social networks are a fun way to spend time. Due to social distancing and lack of social interactions, most people took up to social networking websites and apps in a big way, in order to keep in touch with other humans. Extroverts felt this effect much more than introverts, with some introverts relieved to have an excuse to avoid social gatherings. Unfortunately, some people used these social networking apps to spread misinformation and fake news leading to panic and confusion. These websites and apps were perhaps the only means for many people to stay in touch with their families for the past 1.5 years.

Fear of missing out

Due to the constant stream of news and updates on news channels/websites, social feeds, messenger apps (WhatsApp, Telegram, Signal), many people find themselves constantly checking their smartphones for new information. This "Fear of Missing Out" leads to a constant state of anxiety.

Online meetings

Work meetings became easier to set up online with Zoom, Meet, Teams, Webex and others. This led to multiple meetings, many of which were unnecessary and could have been a single, simple email instead. The only solace for many was that the free time limit on one of the most popular platforms was 40 minutes, following which the meeting would automatically end. There were several incidents worldwide of people unintentionally leaving their microphone and/or camera on, causing embarrassment.

Endemic of webinars

Almost all ophthalmic societies and major institutes shifted to online platforms for continuing medical education programs and also annual conferences. At one point, there were as many as 20 different live ophthalmic webinars on a single day. Being online, they potentially had international reach and often kept their registration free. This led to the creation of a vast wealth of free, informative videos on YouTube and other platforms.

Reducing eyestrain and maintaining ergonomics

Due to the inevitable complaints of eyestrain,^[11] insomnia, and myalgia, there were articles published and webinars conducted on ergonomics,^[12] stress management, and relaxation as well. Mask-associated dry eye was recognized as an entity and fogging of eyeglasses due to masks was considered as a reason for getting refractive eye surgery by some.

Restoring balance

While the end of all the waves of the pandemic is still unsure, it is clear that the world's relation with digital devices has been changed permanently and awareness and guidelines for avoiding digital toxicity are indeed need of the hour. The new normal would have digital devices intertwined in many aspects of our daily lives. Future conferences are most likely to have a virtual attendance option. Students can possibly expect "snow days" or "rain holidays" to be online class days instead. Employees calling in sick might have to consider the possibility of being asked to "work from home" instead. Many illiterate people possibly became e-literate because there was no other option for survival. Many parents who had previously sworn not to expose their children to digital devices possibly gave in and used digital devices as virtual babysitters. People realized the power at their fingertips on their smartphones that helped them to access many essential services with the swipe of a thumb.

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