Computer vision syndrome in the time of COVID-19: Is blue-blocking lens a panacea for digital eye strain?

Dear Editor,

The lockdown has led to an increase in screen time and its influence on the wellbeing of users is a concern to healthcare practitioners. [1] Computer vision syndrome (CVS) is one of these health concerns. CVS, also known as Digital Eye Strain (DES), describes a group of eye- and vision-related problems that result from prolonged use of electronic gadgets. DES symptoms fall into two categories: internal symptoms may be linked to the user's accommodative or binocular vision stress and external symptoms may be related to dry eye. [2] It has been suggested that the short-wavelength blue light emitted from these devices may be the reason for these symptoms, [2] although the evidence to support such a claim is minimal. Though these devices generate blue light in the 380–450 nm range, the radiant energy is at such low levels that they do not in any way represent a biohazard. [3]

Makers of blue light filter lenses claim that the blue light emitted from the computer and mobile phones may cause eye damage. ^[2] However, a recent systematic review reported a low evidence in alleviating DES symptoms using blue-blocking filters. ^[4] More recent work by Rosenfield *et al.* (2020) found no difference in symptoms of DES between lenses with a blue-blocking filter and a clear CR 39 lens. ^[5] So, there is little support for this treatment paradigm at this time.

A comprehensive care plan focusing on control of DES symptoms becomes paramount in the current context. It is important to consider some evidence-based approaches to prevent and decrease DES symptoms, like blinking often, taking breaks from screen time, set devices to night mode, and enlarging screen type sizes for easier reading.^[2] Also, more people should be made aware of the preventive measures that can be taken to prevent DES.

Financial support and sponsorship Nil.

Conflicts of interest

There are no conflicts of interest.

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Quick Response Code:	Website:
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	DOI: 10.4103/ijo.IJO_3786_20

Cite this article as: Sivaraman V, Janarthanam JB. Computer vision syndrome in the time of COVID-19: Is blue-blocking lens a panacea for digital eye strain?. Indian J Ophthalmol 2021;69:779.

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