



# Letter to the Editor: “Self-Reported Student Awareness and Prevalence of Computer Vision Syndrome During COVID-19 Pandemic at Al-Baha University” [Letter]

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## Dear editor

We have read with great interest the study by Alatawi et al<sup>1</sup> titled “Self-Reported Student Awareness and Prevalence of Computer Vision Syndrome During COVID-19 Pandemic at Al-Baha University”. First, we congratulate Alatawi et al<sup>1</sup> for their study on the prevalence of computer vision syndrome (CVS) and totally agree with their outcomes and conclusions.

Second, in their Discussion section, Alatawi et al<sup>1</sup> mentioned that Iqbal et al<sup>2</sup> investigated 4030 medical students in five Egyptian Universities and revealed a great difference between CVS prevalence of 84.8% depending on the subjective self-assessment questionnaire and 56% prevalence depending on the objective ophthalmic examination which means that CVS self-assessment questionnaires might be misleading. We believe that subjective CVS questionnaires are actually overestimating the real CVS prevalence rates, while objective complete ophthalmic examination is really helpful in determining the real CVS prevalence.

However, we would like to make it clear to your readers that our reported CVS prevalence rate of 56% by ophthalmic examination<sup>2</sup> was mainly based on Iqbal’s four major diagnostic criteria for accurate CVS diagnosis (Table 1) that we published in our previous study by Iqbal et al<sup>3</sup> titled “Visual Sequelae of Computer Vision Syndrome: A Cross-Sectional Case-Control Study” as stated in our Methods section in both studies.<sup>2,3</sup> Therefore, accurate CVS diagnosis necessitated the existence of the four criteria together (Table 1); hence, we obtained our 56% CVS prevalence. Interestingly, both studies<sup>2,3</sup> concluded that self-assessment CVS questionnaires are overestimating the real CVS prevalence.

In addition, we would like to highlight that despite the importance of complete ophthalmic examination in documenting the actual CVS prevalence, it cannot alone accurately diagnose CVS unless it is linked to the self-assessment CVS questionnaire outcomes to achieve other diagnostic criteria. Therefore, we linked both subjective and objective tools in these four major diagnostic criteria (Table 1). For example, if a student complains of visual blur and eye strain while ophthalmic examination reveals a refractive error, this does not signify that this student has CVS unless the other criteria are fulfilled such as associated extraocular complaints as headache or neck pain while all complaints must be related to time of the screen use or shortly after, with frequent complaint-attacks over a last 12 months thus accurately diagnose CVS.

Finally, we are very grateful to Alatawi et al<sup>1</sup> for their interest in our study and congratulate them for their recent remarkable publication.

**Table 1** Iqbal's Four Major Diagnostic Criteria for Accurate CVS diagnosis<sup>2,3</sup>

Criteria	Origin	Type	Specification
Criterion 1	Self-assessment questionnaire	Subjective	One or more ocular complaints related to time of the screen-use
Criterion 2	Self-assessment questionnaire	Subjective	One or more extraocular complaints related to time of the screen-use
Criterion 3	Self-assessment questionnaire	Subjective	One or more complaint-attacks every month over the last 12 months
Criterion 4	Complete ophthalmic examination	Objective	Documenting ocular findings as dry eye disease, reduced visual acuity, refractive errors, conjunctival hyperemia, accommodation-convergence imbalance and/or mfERG screen-induced foveal dysfunction

## Disclosure

The authors report no conflicts of interest in this communication.

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