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Letter to the Editor

To save our eyes, urgent public health policies are required after the COVID-19 pandemic



The coronavirus disease 2019 (COVID-19) pandemic, as a result of infection with severe acute respiratory syndrome coronavirus 2, has resulted in one of the most significant public health crises in the past 50 years. Governments all over the world, including that of Thailand, are fighting COVID-19 at the time of writing this letter. The strategies to counter COVID-19 have dramatically changed our lifestyles.¹ In particular, social distancing in various forms, such as lockdowns, working from home and other quarantine strategies, is quickly becoming key components to eradicate this contagious disease. However, social distancing restrictions have led to the disruption in daily routines, such as working and studying patterns. As a result, many organisations have implemented new information technology systems to enable working/learning from home.² Children, adolescents and adults are all required to stay at home for a longer periods of time, resulting in working, learning and recreational activities moving to a virtual environment.^{3,4}

As a consequence of prolonged use of digital display devices, there may be an impact on vision and ocular health problems, such as digital eye strain, dry eye syndrome and myopia progression.³ To assess the impact of social distancing restrictions on vision, urgent investigations must be undertaken. As per government public health concerns, face-to-face data collection cannot be performed during the COVID-19 pandemic. However, knowledge of the associations between ocular health and digital display device usage is still required to develop protection protocols or provide recommendations for guidelines. Notably, a lack of following recommended guidelines might increase the risk of ocular health problems. When most eye care practitioners are unaware of how to protect our vision, the global pandemic will rapidly ignite an era of dramatic increases in vision health problems in the society.

Optometry research in relation to public health has continued to progress during the COVID-19 pandemic.⁵ Several studies in India have shown both children and adults experienced an increased risk of developing digital eye strain and dry eye with increased digital display device use.^{6–8} Importantly, during the COVID-19 pandemic, the requirement to wear protective face masks has also led to the emergence of mask-associated dry eye and increased ocular discomfort.⁹ Moreover, home confinement due to COVID-19 has been associated with substantial myopia progression in children.¹⁰

In conclusion, current research has shown that increased time spent on digital display devices during the COVID-19 pandemic is detrimental to vision and ocular health. All evidence suggests that when children and young adults use digital devices to such a great extent, digital eye strain, myopia progression and other ocular health problems may become significant public health issues after the COVID-19 pandemic has ended. Therefore, at this time, an urgent need exists to educate people about the health consequences

of increased onscreen exposure due to online homeschooling and working from home. Finally, significant new public health strategies and policies are required for protection of ocular health after the end of the pandemic.

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