

Covid Myopia-Changing Algorithm of Myopia

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Received: March 24, 2022; **Published:** April 27, 2022

During pandemic unprecedented efforts were witnessed all over the world to provide crucial support in ramping up health care infrastructure services and extending relief to the vulnerable.

Multidimensional digital interventions were implemented to ensure working in academic field. Digital schooling platforms were leveraged through customised app so that children should have their education going on. The growing eyes of children were suddenly exposed to long hours of digital screen. Not only the digital screen but home confinement during the pandemic, restricted outdoor activities, increased near work, no exposure to sunlight and restricted indoor activities in home also led to increase in myopia incidence. Millions of school-age children were confined to their homes and online courses were offered through the internet which appeared to be a easy solution but in long-term this burdened-the incidence of myopia.

Covid myopia slowly emerged during first wave but first was not noticed keenly. After second wave when children started going to school the myopia epidemic was evident. Various population-based studies reported increasing myopia in school going children after the first pandemic wave [1-4].

Wang, *et al.* reported in a cross-sectional study based on photo screening test in 123535 children that home confinement was associated with substantial myopic shift in children aged 6 to 8 years [1].

According to their study the prevalence of myopia increased 1.4 to 3 times in 2020 compared with the previous five years. Younger children refractive status is more plastic and more sensitive to environmental changes compared to teens and therefore younger children are more susceptible to show more myopic progression.

Zhang, *et al.* in their study of two separate longitudinal cohort of children reported 2.5 fold increase in myopia incidence during the COVID-19 pandemic. They also reported the estimated annual change in spherical equivalent refraction was 0.80D in COVID-19 Cohort compared to -0.41 D in pre-Covid 19 Cohort [4].

As of now in most of parts of world schools are open so myopia screening programme should be given priorities and vision screening programmes should be enhanced in school going children. It is the ultimate responsibility of school authorities, government policy holders, non-governmental organisation and clinicians to spread community awareness of this myopia epidemic due to corona pandemic.

International myopia group and policy makers should attend this potential health crisis and appropriate treatment should be advocated to this covid myopia.

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Volume 13 Issue 5 May 2022

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