Cross-Sectional Study of Near-work and Myopia in Kindergarten Children in Singapore

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Abstract

Introduction: In view of the high and increasing myopia rates amongst young Singaporean children, we aimed to assess the relationship between near-work and myopia in 414 pre-school children aged 4 to 6 years. Materials and Methods: We measured near-work indices such as tuition classes outside school and other possible risk factors via a questionnaire. We then measured myopia with a hand-held autorefractor. Results: Children who had 3 or more hours per week of near-work classes outside school had a higher rate [odds ratio 1.39 (95% confidence interval 1.02, 2.53)] of myopia. Conclusions: This suggests that there may be an association between near-work and myopia, even at such a young age. Given the increasing emphasis on near-work in Singapore, it may be important to call for increased visual health awareness, although further studies will be needed to establish if near-work causes myopia.

Key words: Close-up work, Epidemiology, Questionnaire, Autorefraction

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