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

G J S Tan,*, Y P Ng,*, Y C Lim,*, P Y Ong,*, A Snodgrass,*, S M Saw,**MBBS, MPH, PhD (Johns Hopkins)

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. <u>Materials and Methods</u>: 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. <u>Results</u>: 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. <u>Conclusions</u>: 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.

Ann Acad Med Singapore 2000; 29:740-4

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

* Student

** Assistant Professor

Department of Community, Occupational and Family Medicine National University of Singapore

Address for Reprints: Dr Saw Seang Mei, Department of Community, Occupational and Family Medicine, Faculty of Medicine, National University of Singapore, MD 3, 16 Medical Drive, Singapore 117597.