

HEB

## VERTICAL AND HORIZONTAL WHITE-TO-WHITE CORNEAL DIAMETER AMONG MALAYSIAN ADULTS

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### ABSTRACT:

White-to-white corneal diameter measurement is used frequently in cataract and refractive surgery, contact lens fitting and as well as in diagnosing various corneal diseases, thus the aim of this study was to provide the preliminary normative corneal diameter of young Malaysian adults. Fifty one young healthy subjects (21 males, 30 females) were recruited for this study. The age of the subjects ranged from 19 to 24 years (mean=21±1.76 years). The white-to-white corneal diameter was measured using ruler based on standard procedure. The mean vertical and horizontal corneal diameter were 10.44±0.49 mm and 11.25±0.53 mm respectively. Based on Wilcoxon Signed Rank test, the study found that there is a significant difference between these two parameters ( $p=0.00$ ). Gender factor was not influenced both vertical ( $p=0.327$ ) and horizontal ( $p=0.052$ ) corneal diameter. The study also found no significant difference of vertical ( $p=0.439$ ) and horizontal ( $p=0.216$ ) corneal diameter among different races in Malaysia. In conclusion, the mean value of vertical and horizontal corneal diameter from this study can be used as a baseline for various eye care procedure.

**Keywords:** corneal diameter, adults, Malaysian