

World Congress and Expo on

Optometry & Vision Science

July 17-19, 2017 Chicago, USA

A correlation between measurements obtained with the LEA symbols visual acuity chart and the gold standard ETDRS VA chart for a 3 to 7 year old normal

Safiah H Mulla

King Saud University, King Saudi Arabia

Introduction: This study is a comparison between the Visual Acuity (VA) measurements with the preliterate LogMAR LEA symbols VA chart (LH) and the standardized Early Treatments for Diabetic Retinopathy Study VA chart (ETDRS) in young children to help further define reported validity limitations of the former.

Methods: 40 healthy and visually normal children age 40 to 83 months were recruited in a cross-sectional prospective study with all participants being required of being able to recognize the 10 Sloan letters. Under a standardized and controlled clinical setting, VA was measured monocularly and randomly using both the LEA and the ETDRS charts.

Results: VA scores of the two charts were highly correlated with a clinically insignificant over estimation of 0.04 LogMAR in the LEA chart scores regardless of the subject's age or gender. The two charts were in total agreements in the detection of subject's inter-ocular difference.

Conclusion: This study indicates that the preliterate LEA chart can provide a valid alternative to the ETDRS chart among normal preschoolers.

Biography

Safiah H Mulla is a Faculty Staff in the Department of Optometry, King Saud University, Riyadh, Saudi Arabia, where she has been a Member of the Academic Staff since 1997. She holds a BSc (1987) in Optometry from King Saud University and MSc (2007) in Clinical Vision Science from Dalhousie University. From 1990 to 1997, she was running an Optometry clinic at Security Forces Hospital, Outpatient Department, Riyadh, Saudi Arabia. In 2000, she has received a scholarship to Canada to get a diploma in Orthoptic and Master's degree in Clinical Vision Science. She is also a Board Member for the Saudi Association of Optometry and Vision Science as well as a certified Orthoptist.

smulla@ksu.edu.sa

Notes: