### UNIVERSITI TEKNOLOGI MARA

# VISUAL STATUS AND REFRACTIVE ERROR AMONG ADULTS WITH DISABILITY

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**JULY 2016** 

#### **AUTHOR'S DECLARATION**

I declare that the work in this proposal is considerably my own, and to the extent that any part of this work is not my own, I have indicate that it is not mine by fully acknowledgment in accordance with the standard referring practices of the discipline. I, hereby, acknowledge that I have been supplied with the Academic Rules and Regulations for Post Graduate, Universiti Teknologi Mara (UiTM) regulating the conduct of my study and research.

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#### **ABSTRACT**

## VISUAL STATUS AND REFRACTIVE ERROR AMONG ADULTS WITH DISABILITY

**Purpose**: To analyse the pattern of visual acuity, refractive error, optometric assessment and ocular characteristics among adults with disability in communitybased rehabilitation center. Methods: Records of eye examination from the year 2012 to 2015 were obtained from UiTM Vision Care clinic. Adults of age 19 years and above with one or multiple disabilities were included. Demographic data, visual acuity, refractive error, optometric assessment and ocular characteristics were extracted. Results: There were 44.4% adults with learning disability, 30.6% with physical disability, 13.9% with multiple disability and 11.1% with mental disability. The mean distance visual acuity for right eye was 0.24±0.29 log and left eye was 0.28±0.32 log. Majority of 41.7% were in normal range of vision on right eye and 44.4% were in near-normal range of vision on left eye. Based on the classification of ametropia, 61.1% subjects were emmetropia, 13.9% were hyperopia, 22.3% were myopia, 86.1% had insignificant astigmatism and 11.1% had mild astigmatism. Cataract was showed to be the highest percentage with 27.8% of eye abnormalities found among adults with disability. From the optometric assessment, 13.8% subjects had eye deviation. Conclusion: Adults with disability was found to have visual problem and reduction of visual acuity. Attention need to be given to this population in order to prevent visual impairment. Early vision screening is crucial for early detection and intervention.

Keywords: Visual acuity, refractive error, optometric assessment, ocular characteristics, adults with disability

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