Prevalence of visual impairment and predictors of poor vision among older adults in Saudi Arabia, national survey

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Introduction and Objectives: Visual impairment is one of the most significant health concerns facing both the developed and developing countries as part of age related disabilities. Globally, number of affected people is growing from total of 161 million in 2004 to 285 million are suffering from visual impairment in 2010. Among these, total blindness constitute up to 39 million while the remainder are affected by different levels of visual impairment. In Saudi Arabia a recent study showed 3.3% of the elderly are totally blind. Yet no study conducted in Saudi Arabia concerned with the prevalence of visual impairment in geriatric population. Our aim was to quantify the prevalence and to assess socio-demographic and medical factors associated with the risk of VI.

Methods: Data is part of Saudi National Survey for Elderly Health (SNSEH) which is a nationwide, representative, population-based cross-sectional survey of Saudi older adults 60 years of age or older. Using complex sampling methods 2946 individuals were recruited from 88 clusters in the study. The sampling weight was used in adjusting the prevalence calculations. During household visit visual acuity was measured for each participant with recording the information about socioeconomic and medical characteristics for each one. We defined visual impairment into normal or visually impaired, which include mild, moderate and severe. Logistic regression model was developed to assess the risk factors for VI.

Results: Of 2946 participants in the study 1190 (40.4%) were visually impaired. Females represent 632 (43.3) and males 558 (37.6) of the visually impaired individuals. According to the ICD-10 visual impairment definition, moderate VI was the predominant level with 36.5%, sever VI with 2.7%, legal blindness with 1.2 and the remainder 59.6% classified as mild or no visual impairment. Of those who reported normal vision 21% were found to be visually impaired. After adjusting for possible confounders significant risk factors of VI were age, gender, monthly income, educational level, depression, diabetes mellitus, history of stork and use of glasses.

Conclusion: The prevalence of visual impairment is high and affecting large number of older Saudi population. Several socioeconomic and medical factors have shown to increase the risk of VI significantly. National programs should be developed to promote vision health and prevent VI. Visual assessment should be part of older adult assessment for early detection of VI and enhancement of the quality of life.

Biography
Suliman Al Teriqi has completed his MBBS from Imam Muhammad ibn Saud Islamic University, School of Medicine. He is currently working as a medical intern.

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