

Factors related to visual impairment and its association with day to day living activities among elders in the State Elders' Home – Kaithady, Jaffna

Sivapriyan.S¹, Nayanamali. CPTK¹, Rajapaksha SH¹, Theshmaie M¹, Sulochana TM¹, Rajeev R², Kumarendran B³

¹*Faculty of Medicine, University of Jaffna*

²*State Elders' Home, Kaithady, Jaffna*

³*Department of Community and Family Medicine, Faculty of Medicine, University of Jaffna*

Introduction and objective: Vision impairment is a common problem among the ageing population. There are a few studies on factors associated with vision impairment and its effect on day to day living activities of elders. The objective of this study was to describe the sociodemographic and medical factors related to visual impairment and the association between vision impairment and daily living activities among elders.

Methods: A cross-sectional analytical study using non-probability sampling was carried out among 139 elders in the State Elders' Home Kaithady, from February 2022 to October 2023. An interviewer-administered questionnaire and a data extraction sheet were used for data collection. We assessed how activities of daily living (dependent variable) are affected by visual impairment (independent variable). We measured the activities of daily living by using the National Eye Institute Visual Function Questionnaire and the scoring system provided by the National Eye Institute. Vision impairment was categorized according to the classification of distance vision impairment for the better eye (by WHO). Chi square test and t test were used to analyze the data. P value ≤ 0.05 was considered significant.

Results: More than half of the population had either mild, moderate, or severe vision impairment. About a third of the elders had normal visual acuity with no vision impairment (36%), while 5% had blindness. Sociodemographic factors did not show any statistically significant association. When considering age and educational level, elders above 80 years (77.3%) and elders who had studied less than O/L (69.6%) had highest vision impairment. Only about half of the elders had medical records. No medical factors showed a statistically significant association with visual impairment. Elders with hypertension (65.5%) and diabetes mellitus (68.2%) had higher vision impairment. Among the elders without medical records, majority had vision impairment (62.3%). There were no pronounced differences in mean scores for the 11 scales of the NEI-VFQ (SL). Eight scales showed statistical significance and association.

Conclusion and recommendations: More than half of the population had vision impairment. People with advanced age, low educational level and co morbidities such as diabetes mellitus showed a higher visual impairment. Vision impairment was inversely associated with activities of daily living.

Keywords: Vision impairment, Elders, Socio-demographic factors, Medical factors, NEI-VFQ