

Visual Function and Vision-Related Quality of Life Among Adults in Jos, Nigeria

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Introduction: Visual function (VF) is important in carrying out normal daily activities and it affects the physical and emotional well-being of an individual.¹ Visual impairment (VI) is known to cause falls, fractures and mortality.² The World Health Organization (WHO) defined quality of life (QoL) as “an individual’s perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns”.³ Visual function is necessary for optimal orientation in functional and social life and it has profound effects on physical, psychological, mental and emotional well-being.⁴ Activity limitation is one of the effects of visual impairment and it is thought to contribute to the negative effects of VI on QoL.⁵ The aim of this study was to assess the impact of QoL of adults seeking eye care services in a tertiary health facility in Jos, Nigeria.

Materials and Methods: A cross-sectional study involving new adult patients (18 years and above) attending the Eye Clinic of Jos University Teaching Hospital. A sample size of 630 was calculated and information on demographic data, ocular and medical history were obtained. Visual function and vision-related QoL were assessed using standardised questionnaires^{6,7,8,9,10}. Detailed ocular examination was done to determine the cause of visual impairment. Data was analysed using SPSS version 20, p-value <0.05 was considered statistically significant.

Results: A total of 625 patients participated in the study. There were more females (55.8%) than males (44.2%). The median age of participants was 50.0 years (interquartile range 35.0 - 62.0 years). Worsening severity of visual impairment was associated with lower visual function ($\chi^2=79.512$, $p<0.001$) and QoL ($\chi^2=64.013$, $p<0.001$) scores. Those who had visual impairment from glaucoma had the lowest scores in most subscales. Those with diabetic retinopathy (DR) had the lowest scores in the subscale of general health. The lowest total visual function ($\chi^2= 38.725$, $p<0.001$) and QoL ($\chi^2= 31.519$, $p<0.05$) scores were also recorded among participants with glaucoma.

Discussion: Increasing severity of visual impairment was associated with decreasing visual function and QoL scores in this study. Similar findings were reported by Adigun et al¹ in Ibadan, the Nigerian National Blindness and Visual Impairment Survey and in the United States^{11,12} This shows that with worsening vision, there is greater limitation of vision dependent activities and increasing need of various forms of assistance in order to carry out daily life activities. As was found in this study, there was also report of low visual function and QoL scores among individuals with glaucoma in the Nigerian National Survey and among an American population.^{11,12} The low score in the subscale of general health among those with diabetic retinopathy might be because diabetic retinopathy can be associated with other complications such as diabetic nephropathy, which will likely make these individuals perceive their general health as not being optimal.

Table 1: Visual acuity distribution among study participants

Presenting VA in the better eye	Frequency	Percent
≥6/18	470	75.2
<6/18-6/60	93	14.9
<6/60-3/60	10	1.6
<3/60	52	8.3
Total	625	100.0

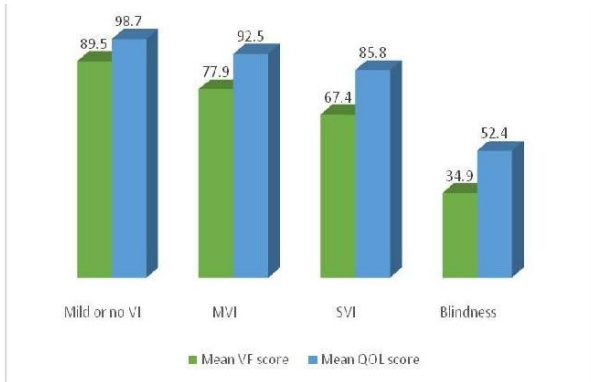


Figure 1: Distribution of mean VF/QoL scores

Conclusion: Periodic assessment of subjective visual function and QoL of clients who access eye care services in various health facilities should be encouraged, as this will bring to the fore those who require psychological support and ultimately improving their quality of life.

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