

Prevalence of Cataract in Adults in a Rural Community in South-Eastern Nigeria

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Introduction: Cataract is of public health importance worldwide as it remains the leading cause of blindness and visual impairment globally.¹ In Nigeria, reports from the national survey showed that cataract accounted for 43% of blindness and 45.3% of severe visual impairment.² The prevalence of cataract in the Nigeria national survey was 19.8% in persons 40 years and above.³ The magnitude of cataract varies from zone to zone and even within the same zone, some areas may be more affected. Cataract is associated with socio-economic problems leading to degradation of quality of life.⁴ This study was embarked upon 11 years after the Nigerian national survey to determine the prevalence of cataract in Ukpok, a rural community in Nnewi-South Local Government Area of Anambra state, Nigeria.

Methods: A descriptive, cross-sectional, community-based study of normal residents age ≥ 50 years in Ukpok. Participants were selected using a multistage cluster random sampling with probability proportional to size of the selected villages. Ocular examination included visual acuity measurement, anterior and posterior segments examination. The lens was examined and graded using the Mehra and Minassian lens grading system.⁵ Data collected was analyzed using the IBM Statistical Package for Social Sciences version 23.

Operational Definitions

1. **Cataract:** Presence of any opacity in the crystalline lens of the human eye. This includes grades 1, 2A, 2B, and 3 of the Mehra and Minassian lens grading system.⁵
2. **Cataract blindness:** Presenting vision of less than 3/60 which is caused by cataract.

Results: Six hundred and thirty-six participants comprising 249 (39.2%) males and 387 (60.8%)

Table 1: Presenting visual acuity (better eyes)

Visual Impairment (VI) category*	Visual acuity (Snellen)	No	% (95% CI)
Mild or No VI	6/6 - 6/18	254	39.9 (36.1 - 43.7)
Moderate VI	< 6/18 - $\geq 6/60$	319	50.2 (46.3 - 54.1)
Severe VI	< 6/60 - $\geq 3/60$	37	5.8 (4.0 - 7.6)
Blindness	< 3/60 - LP	26	4.1 (2.6 - 5.6)
Total		636	

* Categorization based on the 10th revision of the International classification of diseases (ICD-10)

Table 2: Age distribution of participants with unoperated cataract compared with all participants

Age (Years)	Total Examined (%)	Unoperated cataract (%)
50-59	310 (48.7)	114 (17.9)
60-69	145 (22.8)	117 (18.4)
70-79	143 (22.5)	134 (21.1)
≥80	38 (6.0)	30 (4.7)
Total	636 (100.0)	395 (62.1)

females were studied. They were mostly traders (39%) and farmers (32%). Table 1 shows the presenting visual acuity of all participants. Forty-seven (7.4%) participants wore spectacles for distant vision.

Prevalence of cataract

Out of the 636 participants examined, 395 (62.1%) had cataract in at least one eye; 159 (40.3%) of whom were males, while 236 (59.7%) were females; 107 (27.1%) were unilateral, while 288 (72.9%) were bilateral. The prevalence of cataract was 62.1% (95% CI: 58.3 – 65.9%). The prevalence of cataract increased significantly with age, from 50.8% in persons below 70 years of age, to 90.6% at 70 years and above ($P < 0.001$). The prevalence of cataract was higher in males (63.9%) than in the females (61.0%), but the difference was not statistically significant ($P = 0.466$). The prevalence of bilateral cataract blindness was 2.2%. Table 2 shows a comparison of the age distribution of the participants with cataract in relation to all the participants.

Conclusion: The prevalence of cataract in this population was 62.1%. Direct comparison with other studies is difficult due to the variations in the methods of cataract assessment and grading; the differences in the age group and number of participants studied; the lack of universally acceptable definition of cataract for epidemiologic

studies, and the use of different cut-off points for lens opacity grading, even amongst studies that used the same cataract classification system. The burden of cataract and cataract blindness is still high within the rural communities of Anambra State. Efforts such as awareness creation and incorporation of eye health training into the training of Primary Health Care workers will help in reducing the burden of cataract in rural areas.

References

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