What did we do in this study?

In February 2023, we conducted a RAAB in Plateau State, Nigeria. to assess the prevalence and causes of blindness and visual impairment. We also assessed disability and household wealth to help us understand how these characteristics relate to blindness and visual impairment.

How did we do it?

We randomly selected 4,200 people from 84 clusters in Plateau State. Participants were aged 50 years and above, as most of visual impairment is found in this age group.

We measured participants' presenting visual acuity and used a pinhole and occluder where needed. We examined their lenses and conducted a direct ophthalmoscope exam on people with a visual impairment. We asked for details about cataract operations, and the reasons for not having one. We also asked everyone about their household wealth and whether they had difficulties functioning using validated tools that we know work in settings such as Plateau State.

We collected data using a mobile application and analysed the statistics using Stata software. Many of the results were adjusted for age and sex to account for the differences

between the national population and the people who participated in the survey.

- 3,957 participants in Plateau State were examined, a 94.2 per cent response rate
- The mean age of participants was 63 years
- 56 per cent of the participants were female
- Compared to the national population of Nigeria, the study participants were relatively poorer, with 45 per cent belonging to the top two quintiles and only 22.4 per cent belonging to the bottom two. (If the study population is similar to the national population, the expected share would be 40 per cent).
- The prevalence of disability was relatively high in the sample, with 20.5 per cent of females and 17 per cent of males reporting difficulties in one or more domains of functioning

Key messages

Improvements in quality and quantity cataract surgeries to achieve universal health coverage (UHC) targets

To achieve the ambitious UHC target adopted by the World Health Assembly in 2021, Plateau State will need to increase its effective cataract surgical coverage from 10.8 per cent to 40.8 per cent by 2030. This will require an increase in the number of surgeries conducted and an improvement in the postoperative visual acuity experienced by patients. Further work is required to understand the reasons behind low uptake of cataract services in the state and to identify the key drivers of poor postoperative visual outcomes.

More information

Visit : www.sightsavers.org and www.cbm.org Sightsavers research centre : www.research.sightsavers.org CBM latest annual report: www.loom.ly/v_GIVfU Full report of the RAAB: www.research.sightsavers.org/raab

SightsaversUK

O @sightsavers

SightsaversTV

% @Sightsavers

A

Addressing continued use of traditional practices, increasing the number of trained staff and adopting proven strategies, such as biometry and surgical outcome monitoring tools, will be important in achieving progress.

Gender equity

Women are particularly vulnerable to exclusion from eve care services, and their levels of service use need to be monitored. The eve health programme in Plateau State should consider developing strategies to address cataract burden among women, such as more gender sensitive approaches to service delivery, collaboration with women's community groups and creating engaging awareness messages.

Rapid Assessment of Avoidable Blindness in Plateau State, Nigeria

Rapid Assessment of Avoidable Blindness (RAAB) is a standardised survey methodology. It is designed to measure the magnitude and causes of visual impairment in people 50 years and above and the extent to which services are reaching different groups of people.

> Leading in disability inclusive development

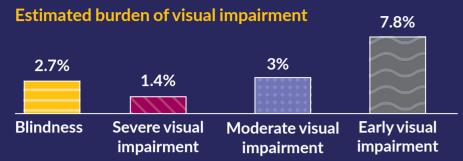






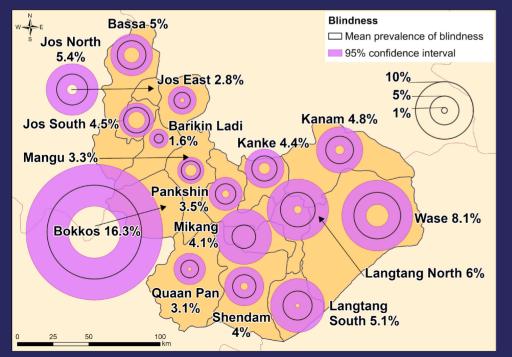
Key findings:

The adjusted prevalence of blindness was **2.7 per cent** in Plateau State. The prevalence of severe visual impairment was **1.4 per cent**.



The average prevalence of all causes of blindness in Plateau State ranged from **1.6 per cent** in Barkin Ladi Local Government Area (LGA). to 16.3 per cent in Bokkos LGA.

Average prevalence in the sample of all causes of blindness in **Plateau State by LGA**



Unoperated cataract was the main cause of blindness and severe and moderate visual impairments.

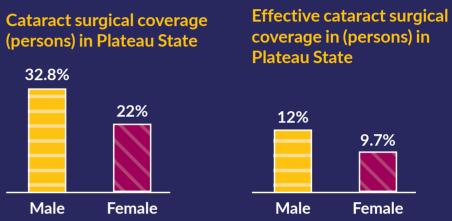
Main causes of blindness

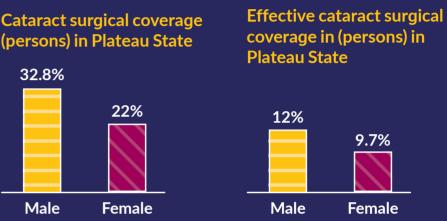
- **Unoperated cataract 65%**
- Glaucoma 17%
- **Cataract surgical complications 7%**
- Other (onchocerciasis, aphakia, refractive error, trachoma corneal opacity, other corneal opacity, other posterior segment) 11%

Main causes of SVI

- Untreated cataract 74%
- **—** Cataract surgical complications 8%
- Glaucoma 6%
- Other (age-related macular degeneration, other corneal opacity, trachoma corneal opacity, aphakia, other posterior segment disease, unaddressed refractive error) 12%







Unaddressed refractive error was responsible for 43.5 per cent of early visual impairment in Plateau State.

Based on the recently updated definitions of cataract surgical coverage, less than one third (27.5 per cent) of people with cataract and visual acuity less than 6/12 had undergone surgery. Coverage was particularly low among women, at **22 per cent**, compared with 32.8 per cent among men.

The practice of couching (a traditional approach of removing the occluded lens with a sharp implement) is still common in Plateau State. Thirty five (12.8 per cent) operated eyes had been couched, of which 80 per cent had poor vision.

The high proportion of poor vision among eyes operated for cataract means that effective cataract surgical coverage is low in Plateau State: **10.8 per cent** of operated eyes have visual acuity less than 6/12. The major reason noted for poor post-operative vision was surgical complications including couching (65.7 per cent), unaddressed refractive error (16.7 per cent), long-term complications (10.8 per cent) and comorbidity (6.9 per cent).