Epidemiology of childhood blindness and severe visual impairment in Cross River State of Nigeria

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Key informant (KI) method for surveys

- Full population-based surveys prohibitively expensive
- KIs well known & respected community members
- Selected to cover each subdivision: 1 KI / 2500 population



742 KIs covered all of CRS. Total pop= 2.9million

KI receive standard 1-day training

• After training, KIs have 2 weeks to list all children in catchment area believed to see poorly (talk to parents, teachers, community leaders, & visit homes)



KIs bring listed children to identified facilities

Schools for the blind

- Children in the school for the blind in Obudu CRS were assessed separately since they would not be found in the communities
- Included only those who actually live in CRS in final tally



Examinations

- Performed by pediatric ophthalmologist/team
- Assessed VA by age-appropriate methods
 - Field exam to ascertain cause: torch, direct and indirect ophthalmoscope, portable slit lamp? Referred to clinic if necessary

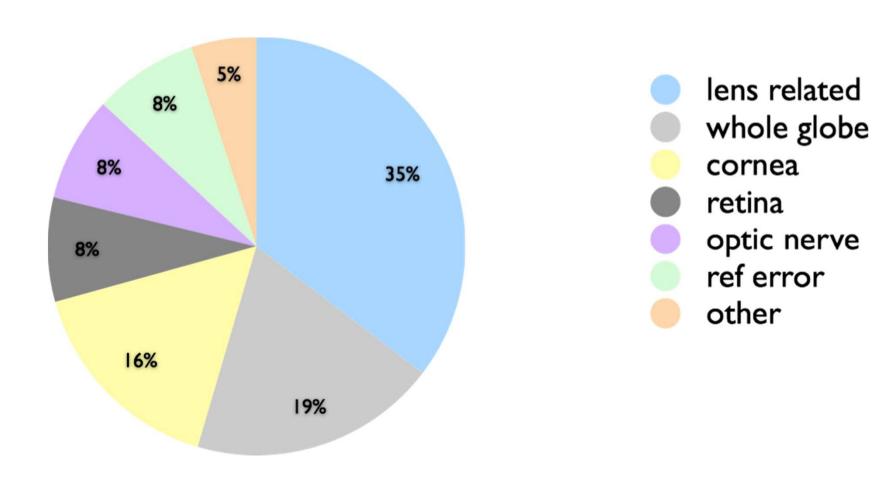


Blind/severe visual impairment (BL,SVI)

Results

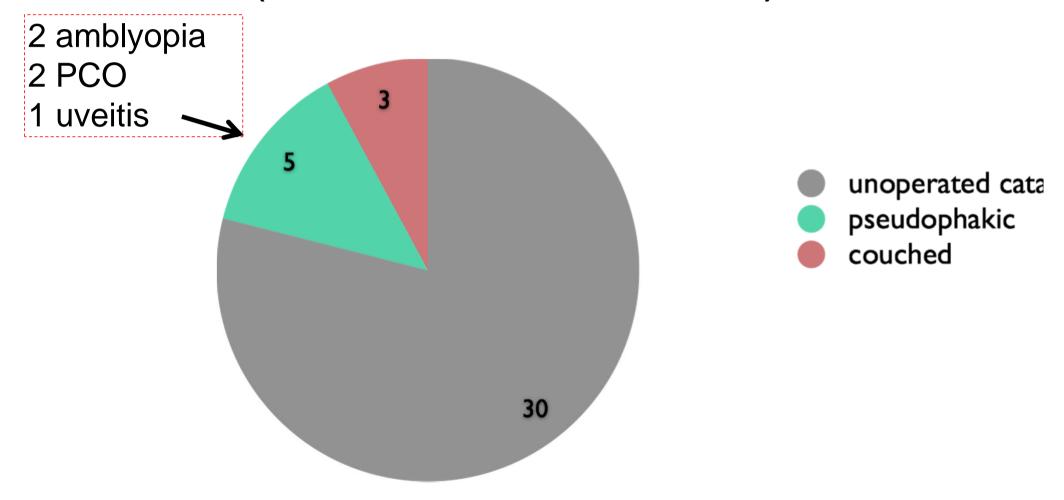
- 1020 children examined
 - 985 (KIs brought) + 26 (schools) + 9 (ID'd not brought by KIs)
- 108 were blind (88 + 12 + 8)
- •Minimum prevalence:
 - 108 /1.16 mill children = 0.09/1000
- •If verification visit was typical then 89% of those not brought were also blind and the true prevalence could be
 - (108+157) / 1.16 million= 0.22/1000

Causes of blindness

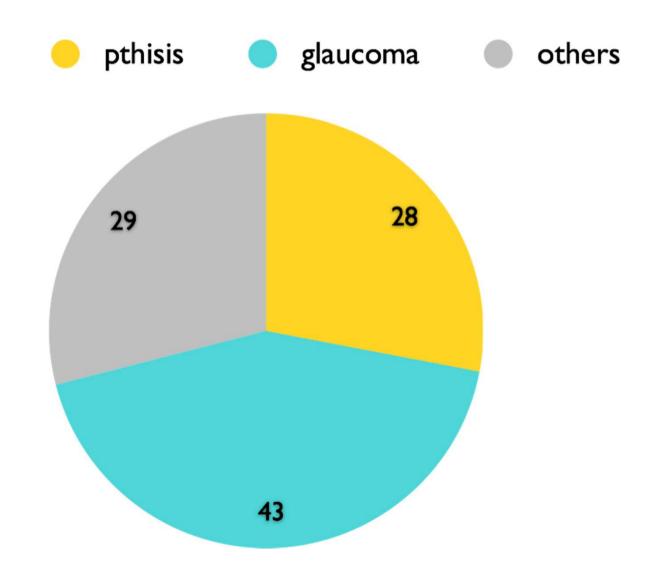


Lens related causes

(35% of all blindness)

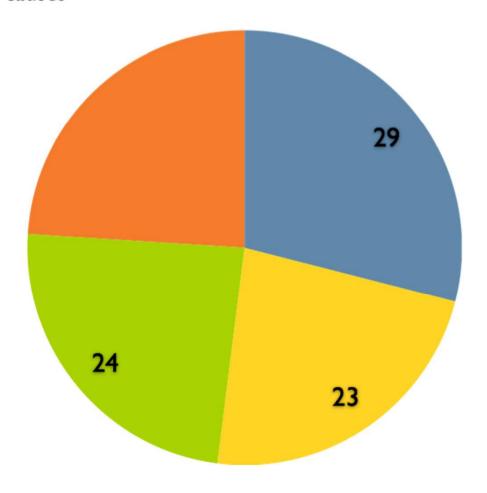


Whole Globe



Corneal Blindness

harmful traditional medication
 measles and vitamin A deficiency
 congenital cau
 unknown causes



Conclusion

- KI methodology a reasonable way to estimate prevalence and causes of blindness but important to consider children in schools and children identified but NOT brought by KIs
- Corneal causes of blindness are decreasing and consequently cataract and glaucoma are becoming relatively more important
- Unoperated cataract is an important cause in CRS. Requires innovative schemes to find the children early and provide good quality surgery and rehabilitation.

Special thanks to...









Thank you for listening.