

# Key Informant Perceptions of Vision Loss in Children and Implications for Their Training

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## ABSTRACT

**Background:** The role of key informants (KIs) in identifying children with vision loss is expanding, yet there is a minimal understanding of KI perceptions of vision loss in children. The aim of the study was to understand the KI's perception of childhood vision loss in order to design more effective training programmes. **Materials and Methods:** A population-based study on the prevalence and causes of childhood blindness and severe visual impairment was conducted using the KI method. KIs were selected by their communities and trained in advocacy, identification and referral of children with visual impairment. Prior to the KI training, a pre-test was conducted, asking, "what is your perception of vision loss in children and how will you identify these children in your community?". **Result:** The 742 KI provided 1,650 responses. There were three main methods suggested to identify children; observation of a child, vision assessment of a child, and recognition of isolation of a child. **Conclusion:** KI have a good understanding of the impact of vision loss on children. Training programmes should use existing knowledge of KI. Furthermore, training programmes should include the social impact of severe vision loss to help identify children needing the assessment.

**Keywords:** Childhood blindness, key informant, Nigeria, perception, vision

## INTRODUCTION

Task-sharing can strengthen the eye health systems, even extending to include lay personnel such as traditional healers, school teachers, or community members who are willing to learn additional skills and undertake activities such as identifying and referring children who have a vision loss. Experience in some settings suggest that key informants (KI) are more effective and efficient than primary health workers in detecting children with severe visual impairment or blindness.<sup>[1,2]</sup> As KI become more widely used, it is important to better understand their perspective on the tasks being assigned to them. The aim of this study was

to understand the perception of KI of children who are blind or with severe visual impairment (BL/SVI) and how to identify these children in the community. This information is important in order to design effective training programmes.

## MATERIALS AND METHODS

In 2011, we carried out a study of the prevalence and causes of childhood BL/SVI in Cross River State, Nigeria, using the KI methods.<sup>[3]</sup> Prior to the training session, KIs, all of whom were literate, were instructed to write out an answer to the questions: "How can you identify a child who cannot see". Thirty minutes were given for KIs to write their responses. Training was conducted subsequently according to a standard protocol.<sup>[4]</sup> All responses were compiled and two social scientists (SA and EN) identified the themes and illustrative quotes under each theme. The study adhered to the tenets of the Declaration of Helsinki was approved by the Ethics Committee of the University of Calabar Teaching Hospital, Calabar, Nigeria.

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## RESULTS

Seven hundred forty-two KI were included in the study; they had a mean age of 40 years and 42% were women. Among the 742 KI, 675 (91%) answered the questions in commentaries ranging from one to six sentences. The remaining 67 entries were either not legible or the sentences were incoherent. A total of 1650 commentaries (expressions of their opinions and explanations about what they knew or thought) were analyzed and categorized into themes and sub themes. There was no significant difference between comments made by males or females regarding how to identify a child with vision loss. There were three main themes used to identify children: (a) Through assessment of vision (children being able to visually detect certain items/people as tested by the KI), (b) through observation of the child's behavior or observation of the eye, and (c) through recognition of isolation of the child. The table includes some of the comments by the KI. Fourteen people expressed their knowledge on how to identify children using color blindness and some KI reported on the ability to read. The use of spectacles was not mentioned by any KI [Table 1].

## DISCUSSION

An educator once noted, "The most important single factor influencing learning is what the learner already knows. Ascertain this and teach him accordingly."<sup>[5]</sup> The three broad themes identified by the KIs (assessment of vision of the child, observation of the child, and recognition of isolation of the child) show that the KIs understand how vision can practically be assessed and how poor vision can affect a child, whether by limiting the ability to do activities of daily living or by limiting social interactions.

In this group, there were some misconceptions regarding the use of color vision and the assessment of reading as a tool for vision assessment. While assessment of near (reading) vision is an extremely important part of a child's comprehensive vision evaluation, reading involves the ability to identify words and the inability to read can be as a result of a learning disability rather than vision loss. Further, the ability to read does not exclude the presence of a significant refractive error.

These findings suggest that all future KI training for identification of children with vision loss should start with review of KI perspectives on identification techniques and reinforcement, to the entire group, that a range of approaches are needed to identify these children in the community.

**Table 1: Methods suggested by KI for identifying children with severe visual impairment or blindness**

Assessment of vision
"When a child doesn't respond to movement in front of him"
"When a child cannot see a waving hand in front of him"
"When you wave to a child he makes no sign"
"When the child is not making a move to go when you send him"
"The use of candle or torch and the child cannot see the light"
"By showing the child the finger and he cannot see the fingers"
"The child cannot pick out objects which you put in front of him"
"When a child cannot collect something from your hand"
"When a child cannot identify peoples' faces around"
"When a child cannot see the person in front of him"
"When a child cannot see an object pointed"
"When a child does not respond to someone coming"
"When you display objects for the child to pick and the child cannot"
Observation of behavior or observation of the eye
"When I observe the child's behavior"
"When you show him something, the eye will not move to that thing"
"A child has difficulty when her mother sends her "
"By giving a handshake and the child cannot respond"
"I will know when I send the child to carry something"
"Through movement and through waving of things"
"He cannot see and perform work"
"She stretches to see the board"
"Children who stretch their neck in class"
"By the way the child is looking at objects"
"A blind cannot walk in the day or in the night"
"The child cannot walk alone inside or outside the house"
"Slow in movement"
"A child cannot walk alone in the day "
"Always led by someone"
"A child does not move well "
"A child cannot walk freely"
"A child enters into an object and pushes things down"
"A blind child cannot walk alone "
Isolation of the child
"A child cannot play with his/her friend"
"A child is left at home every time "
"The child cannot play or run with others"
"The child cannot play with friend"
"The child cannot play with other friends "
"The child does not play with others in school"
"The child is always neglected among the other children"
"The child is always staying at home"
"The child is left at home every time"
"The child is so quite at home and is always in a corner"
"The child cannot play with fellow brother"
"The child will not be able to go out with the other children to play"
"When the child is abandoned by his parents "

KI: Key informant

Recognition of the social isolation of these children, common in many settings in developing countries, could also be used as a starting point for discussing the often stigmatizing effect of vision loss. Social exclusion is often compounded by the presence of other disabilities, requiring engagement of the wider rehabilitation

community. This may also be an opportunity to discuss all aspects of social isolation.

Summarily, it may be necessary to note that there is some overlap in the three broad themes identified by the KIs. Observation of the child is essentially all encompassing since the child must be observed, assess to have vision and be able to recognize isolation.

While the training and utilization of KI for childhood vision loss has generally been viewed as a one-time event, our findings suggest that this should be re-considered.

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