CONCLUSION

- A validated protocol for screening visual impairment in children aged 3 to 6 years was developed.
- The visual acuity charts demonstrated very high sensitivity and specificity for screening visual impairment in 3 to 6 year old children.
- The stereo acuity charts exhibited good sensitivity and moderate specificity making them good screening but moderate diagnostic tools.
- Plusoptix A09 had moderate sensitivity and specificity for visual impairment screening compared to visual acuity and stereo charts.
- The Intraclass Correlation Coefficient between the visual acuity charts were much superior to stereo charts and refractive techniques.
- Good agreement was observed between Lea and HOTV, Lea and E and HOTV and E vision charts. Therefore, they could be used interchangeably for vision screening of 3 to 6 year olds.
- There was no association between age and gender with visual impairment on doing chi-square test.
- No statistically significant differences were observed in using the Lea, HOTV, E vision charts and Randot preschool stereo test for children residing in rural and urban locality for visual impairment screening.