

CHALLENGES FACED BY VISUALLY IMPAIRED LEARNERS AMONG PATIENTS ATTENDING EYE HEALTH CARE SERVICES AT JINJA REGIONAL REFERRAL HOSPITAL. A CROSS SECTIONAL STUDY.

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ABSTRACT

Purpose of the study

To determine the challenges faced by visually impaired learners among patients attending eye care services at Jinja Regional Referral Hospital.

Methods:

A cross-sectional study was conducted at the eye clinic and data was collected using interviews, administered questionnaires, interpreted, and analyzed where 100 respondents were chosen for the study.

Principal findings:

The study revealed that the majority of the participants in the study were females 54(54%) and males 46(46%). The study also revealed the majority of the participants were at the secondary level of education 38(38%), tertiary level 25(25%), primary level 23(23%), and the least at the University 14(14%). Negative attitude towards visually impaired learners was the main challenge 44(44%) followed by lack of resources 24(24%) and school timetable was the least challenge 07(7%).

Conclusion:

According to the study, females posed a high number of participants, and negative attitude towards visually impaired learners was the main challenge faced by the participants.

Recommendations:

The Ministry of Education and Sports should establish more special needs schools even in hard-to-reach areas and emphasize training more personnel who can handle the visually impaired learners to realize their maximum potential. The government should budget for resources needed by the learners. More assessment units for example; well-equipped health centers should be established in the communities because most of the communities don't have the equipment and even personnel to manage appropriately the eye problems and most of the good hospitals are mostly located in urban centers which are not easily accessible by visually impaired due to distance and financial constraints.

Keywords: Challenges, Visually Impaired Learners, Eye Care Services, Jinja Regional Referral Hospital.

Submitted: 2023-11-23 Accepted: 2024-01-19

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INTRODUCTION

According to the International Council for Higher Education on visual impairment, visually impaired persons are a distinct group of persons, their needs are unique and they need to be recognized as a specific sub-group within a larger group of persons with visual impairment. According to (WHO, 2023) visual impairment can be broadly defined as having a vision or significant visual handicap involving

significant useable residue vision. The classification includes; visual acuity of 3/60 as blindness and visual acuity of less than 6/18 but equal to or better than 3/60 as visual impairment (Mulinde, Ben et al, 2022).

In Africa, visual impairment is defined as acuity of less than 6/60. The visual impairment population is estimated at 125000(35%) and in Zimbabwe which has no clear-cut

visual impairment definition there is an estimation of 190000 persons with visual impairment (2%)

In East Africa, schools for the blind in Uganda, Kenya, and Tanzania demonstrated that the major causes were lens-related disorders, lesions of the whole globe, and cornea scar (Njuguna Margaret et al, 2019)

In Uganda according to (WHO, 2020), a study carried out at Mulago National Referral Hospital 5500 of 12000 (45.83%) people were visually impaired and ophthalmology remains a neglected public health issue with limited data on the prevalence of visual impairment overall with only one ophthalmologist attending to 1 million people. The study aimed to determine challenges faced by visually impaired learners among patients attending eye health care services at Jinja Regional Referral Hospital.

METHODOLOGY

Study design

This was a descriptive cross-sectional study design that employed a quantitative method of data collection.

Study area

The study area was the eye clinic of Jinja Regional Referral Hospital which is located in Jinja city, Jinja district. The hospital serves at least 80 patients daily both referred and non-referred cases. The hospital serves a larger area which includes the 11 districts of the Busoga region and other districts in the neighborhood of the Busoga region such as Busia, Namayingo, Lugazi, etc. Special attention was on visually impaired learners and their performance. The study was carried out from August 2022 to April 2023.

Participants

Study population

The study was carried out among patients between 07- 60 years attending eye health care services at JRRH, Jinja city. The population consisted of learners with visual impairment in Jinja Regional Referral Hospital.

Inclusion criteria

Only patients between the ages of 7 and 60 years, were learners who were present at the eye clinic during the time of the study. Patients who consented were involved in the study.

Exclusion criteria

All patients were not learners and were below 7 years old or above 60 years old.

Sample determination

All patients who attended the eye clinic at JRRH presented with symptoms of visual impairment. This small group of people represented the large group in the study area; this was from August 2022 to April 2023 and those who consented were interviewed.

Using Kish and Leslie formula (1965) formula, the sample size was calculated

$$N = Z^2 p (1-p) / d^2$$

Where N=Z score for 95% confidence interval, which was 1.96

P=prevalence, 20% adopted from Lienchy et al 2009

D=tolerable error, which was of 5%

Z=1.96; prevalence=0.2; 1-p=0.8; tolerable error=5% (0.05)

Sample size N=200. Since the clinic had about 290 patients and due to financial constraints the researcher used a sample size of 100.

Sampling technique

A random sampling method was used to obtain the participants, who responded to the interviews. The researcher had 200 papers half of the papers were written yes and the other half were written No distributed among the participants who had accepted to participate and those who picked yes were involved in the study.

Sampling procedure

A random sampling technique was used to pick 100 respondents. Having equal chances for all respondents, 200 papers written on yes and no were distributed to them and only the 100 who picked the papers written on yes were selected to participate in the study.

Data collection methods

The study employed interviews, as a data collection method using an interviewer's guide with structured questions. The toll captured the socio-demographic and any other associated history of visual impairment.

Data collection tools

Pre-tested structured questions formulated under the guidance of the supervisor were used to collect data.

Data collection procedure

Before giving out questionnaires, the questions were fully explained to the respondents and after being answered were used to collect data. Each filled-in questionnaire was checked for accuracy.

variables

Independent variables

These were age, marital status, education level, tribe, and religion.

Dependent variables

Challenges faced by visually impaired learners.

Quality control

This was done through pre-visiting, guidance from senior ophthalmologists who assessed for clarity, consistency of questions before data collection, and pre-testing of data Field editing on the spot and data were kept safely in the file.

Data processing, analysis, and presentation

Data was collected, analyzed, and interpreted. The data filled in the questionnaires was copied and analyzed by tallying it and tabling it in frequency tables identifying how often certain responses occurred and later evaluation was done. The information was later recorded in terms of percentages. The recorded data was later edited and later

interpreted which ensured uniformity, legibility, and consistency. Interview results were coded on frequency tables, pie charts, and bar graphs which were calculated in terms of percentages and presented about the research questions.

Ethical consideration

Permission to undertake a study in Jinja Regional Referral Hospital was given by the Hospital director of JRRH after presenting an introduction letter from the principal of Jinja Ophthalmic Clinical Officers’ Training School, consent was obtained from the respondents after a proper explanation of the objectives of the study. The respondents were assured of maximum privacy and confidentiality of the information obtained from them by burning the papers after use. The principal’s anonymity was strictly adhered to.

RESULTS

Socio-demographic data.

The respondents were asked about some key demographic characteristics like age, sex, marital status, and Education level, and the results were presented as shown below

Table 1 Socio-demographic data of participants among patients attending eye care services at JRRH.

Category	Details	Frequency	Percentage
Age (years)	7-16 years	30	30%
	22-30 years	42	42%
	31-40 years	18	18%
	41-60 years	10	10%
Marital status	Single	87	87%
	Married	23	23%
Education level	Primary	23	23%
	Secondary	38	38%
	Tertiary	25	25%
	University	14	14%
Sex	Female	54	54%
	Male	46	46%

Table 1 shows that the biggest number of respondents were within the age of 22-30 years with a percentage of 42% (42), followed by those within the age of 7-21 years with a percentage of 30% (30), then those within 31-40 years 18% (18) and only 10%(10) of the participants were 40-60 years. Most of the participants were single with 87% (87) and only 23% (23) were married. The majority of the participants were at the secondary level of education at 38% (38), followed by those who were at the tertiary level at 25% (25), then those at the primary level at 23% (23), and only

14%(14) were from universities. The biggest number of participants was females who were represented by 54% (54) while 46% (46) represented the male participants. This shows that females participated in the study to a greater extent.

The challenges faced by visually impaired learners attending eye care services at Jinja

Challenges that visually impaired learners encounter in the process of accessing education

Table 2; Challenges Faced by Visually Impaired Learners In The Process Of Accessing Education

Challenges	Frequency	Percentage
Lack of resources	24	24%
Negative attitude	44	44%
Skilled man power	15	15%
Time table	7	7%
Environmental modification	10	10%
Total	100	100%

The results showed that the major challenge of visually impaired learners was negative attitude with 44% (44), lack of resources with 24% (24), lack of skilled manpower with 15% (15), followed by environmental modification with 10% (10), and then unfavorable time table with only 7% (07).

Discussion Of Results

The results showed that the major challenge of visually impaired learners was negative attitude with 44% (44) and this was because most teachers were not for the visually impaired learners as they felt visually impaired learners were a burden and slow compared to other learners. This kind of attitude affects the learners very much as it lowers their self-esteem. This study agrees with the study carried out by Muhamad Nadhir and Rosila.

The study showed that students faced a challenge of lack of resources as only 24% (24) of the participants were able to access reference materials like books and the library does not provide a special computer for learners with disabilities. Also, most of the books are written in small print which does not favor learners who cannot read small prints without reading aids like reading spectacles.

Skilled manpower was another major challenge with only 15%(15) of learners with trained teachers whereby most teachers don't know how to handle special needs learners mostly in those general schools and the special needs schools are only a few and only located in urban areas which are not easily accessible by the people. These were few compared to the number of pupils with visual problems in institutions.

The study also showed that visually impaired learners also face the challenge of school timetables as learners have problems during lectures as they cannot move at the same speed as the teacher when dictating notes this leads to poor spelling as they write in a hurry to have another class and a

few schools adequately cater for the visual impaired learners with only 7%(07) of visually impaired learners were included in an integration setting. This study supports the research conducted by Amin et al, (2021)

The study showed that visually impaired learners face problems with the environment at school with only 10% (10) students adapting to the environment. These students have several challenges around the school environments that they face during lessons, movement, daily living skills, and socially which eventually affect their academic achievements such as lack of Braille machines, textbooks in Braille form, and slates.

Conclusion

The majority of learners with visual impairment were in secondary level 38(38%) followed by those in tertiary institutions 25(25%), primary level 23(23%) and the least number of participants was at the university 14(14%). In the study, females participated with a bigger number 65(65%) compared to the males 35(35%).

The majority of visually impaired learners faced a challenge of negative attitude from other learners 44 (44%) followed by lack of resources 24 (24%), skilled manpower to handle learners 15(15%) environmental modification 10(10%), and lastly school time table 07 (7%) of the participants.

Limitations of the study

The data collection was relatively expensive to the researcher due to no obvious funding source, and environmental factors like too much rain interfered with the study. There was no specific allocated time on the school timetable and some participants were not cooperative with the investigator.

Recommendations

The community up to the grass root level that is community leaders, parents, teachers, and learners should be sensitized and enlightened on the characteristics of visual impairment and the needs of those who are visually impaired through home visits, outreaches to the communities, visiting schools to carry out health education, and social media and advised if they observe any of them, they should immediately seek for medical attention.

Ministry of Education and Sports should establish more special needs schools even in hard-to-reach areas and emphasize training more personnel who can knowledgeable handle the visually impaired learners to realize their maximum potential.

Resources/devices to help the visually impaired learners have been a challenge to the parents to buy. The government should budget for resources needed by these learners. More assessment units for example; well-equipped health centers should be established in the communities because most of the communities don't have the equipment and even personnel to manage appropriately the eye problems and most of the good hospitals are mostly located in urban centers which are not easily accessible by visually impaired due to distance and financial constraints.

Acknowledgement

First, I thank the Almighty God for giving me strength and wisdom during my study.

I sincerely thank my supervisor Mr. Kyakulaga Adonia for his professional guidance and tireless effort in assisting me during my study.

My appreciation also goes to Jinja Regional Referral Hospital, especially the eye department.

Finally, I thank the administration of the Ophthalmic Clinical Officers' Training School for their outstanding contribution to this research report.

List Of Abbreviations

VA.... Visual acuity
 WHO.... World Health Organization
 BMJ.... British Medical Journal
 NIH.... National Institute of Health
 VA.... Visual Acuity
 VI.... Visual Impairment
 HMIS.... Human Management Information System
 AMREF.... Africa Medical and Research Foundation
 JRRH... Jinja Regional Referral Hospital
 PWD.... Persons with disability
 SNE... Special Needs Education
 HEI... Higher Education Institute
 MoHE.... Ministry of Higher Education

NHEFC.... National Higher Education Fund Corporation

TEM.... Traditional Eye Medication

EMTCT.... Elimination of Mother-to-child HIV Transmission

Source of funding

The study was not funded

Conflict of interest

The author had no conflict of interest

References

- 1) World Health Organization VISION. The right to sight—the global initiative for the elimination of avoidable blindness. Magnitude and causes of visual impairment. Fact Sheet 282. Geneva: World Health Organization; 2020.
- 2) Available from: <http://www.who.int/classifications/icd/2006Updates.pdf>. [Last cited on 2018 Apr 09].
- 3) Mulinde, Ben, Immaculate Atukunda, Ismael Kawooya, Francis O Sebabi, David Mukunya, Charles Batte, Damalie Nakanjako, et al. "Prevalence and Risk Factors for Visual Impairment among Elderly Patients Attending the Eye Clinic at Mulago National Referral Hospital, Uganda: A Cross-Sectional Study." *African Health Sciences* 22, no. Spec Issue (August 2022): 124–32. <https://doi.org/10.4314/ahs.v22i2.18S>.
- 4) "Vision Impairment and Blindness." Accessed January 22, 2024. <https://www.who.int/news-room/fact-sheets/detail/blindness-and-visual-impairment>.
- 5) Njuguna, Margaret & Msukwa, Gerald & Shilio, Bernadetha & Tumwesigye, Cillasy & Courtright, Paul & Lewallen, Susan. (2009). Causes of Severe Visual Impairment and Blindness in Children in Schools for the Blind in Eastern Africa: Changes in the Last 14 Years. *Ophthalmic epidemiology*. 16. 151-5. 10.1080/09286580902738183.
- 6) Amin, Aizan & Sar, Norul & Md Akhir, Noremy & Marziah, Siti & Badri, Raja. (2021). Main Challenges of Students with Visual Impairment at Higher Education Institutions. *International Journal of Academic Research in Progressive Education and Development*. 10. 10.6007/IJARPED/v10-i1/9682.
- 7) Muhamad Nadhir Abdul Nasir, Alfa Nur Aini Erman Efendi & Rosila Bee Mohd Hussain. *Assessing The Situation Of Disability Research In The Philippines: An Exploratory Study*. Vol. 16. No.8 (1-11) ISSN: 1823-884x

Publisher details:

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