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Original Article

THE PREVALENCE OF PTERYGIUM AMONG PATIENTS ATTENDING THE EYE CLINIC AT JINJA REGIONAL REFERRAL HOSPITAL. A CROSS-SECTIONAL STUDY.

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ABSTRACT

Purpose of the study
To determine the prevalence of pterygium among patients aged 25-60 attending the Patient Department eye clinic at Jinja Regional Referral Hospital.

Methodology
The study used a descriptive cross-sectional design which was applied quantitatively. 60 respondents were chosen for the study and data was presented using frequency tables, pie charts, graphs, figures, and texts.

Results
From a total of 60 respondents examined, the prevalence of pterygium was 21(35%) in males and 39(65%) in females, 54(90%) had bilateral involvement while 6(10%) had unilateral involvement of pterygium.

Conclusion
The study established that pterygium is more prevalent among females than males, with more bilateral involvement than unilateral.

Recommendations
The Ministry of Health should design sensitization programs on the prevalence of pterygium. The district health officer should mobilize and sensitize the community workers and community members about the prevalence of pterygium.

Keywords: Prevalence, Pterygium, Outpatient Department, Eye Clinic, Jinja Regional Referral Hospital.
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Background of the study
Pterygium is a type of fibrovascular benign growth that develops on the outermost membrane of the eye and is often located in the nasal area. Even if it is primarily a benign disease, visual complaints could occur when it grows through the visual axis, hence affecting one's quality of life (American Academy of Ophthalmology 2020)

It is one of the most common disorders of the cornea and conjunctiva that degrades the visual performance of the eye.

According to Wang Y, et al (2020), the prevalence of pterygium globally varies from 1.1% to 53% in different environmental conditions and low-altitude regions.

In Africa, a cross-sectional study carried out in Ethiopia shows the prevalence of pterygium varies from 8.8% to 38.7% (Anbesse DH, et al 2017).

In Uganda, the prevalence of pterygium among adults aged (25-60) both males and females is 13.6% (Erima et al 2020).

The objective of the study was to determine the prevalence of pterygium among patients aged (25-60) attending the OPD eye clinic at Jinja Regional Referral Hospital.

METHODOLOGY
Study design
This study employed a descriptive cross-sectional study design which was applied quantitatively to determine the prevalence of pterygium among patients aged (25-60) attending the OPD eye clinic at JRRH.

Study Area
The study was carried out at the OPD eye clinic at JRRH in Jinja city, the hospital is located in the eastern region of the country in Jinja city near the source of the Nile. It was founded in 1962 and has a bed capacity of 600. The hospital serves several clients or patients across the region some of whom are referred from other hospitals and health centers. The hospital has 15 wards which include; a surgical ward, medical female and male wards, psychiatric ward, eye ward, gynecological ward, intensive care unit, ear nose and throat clinic, maternity ward, outpatient department, private wing, tuberculosis ward, and HIV testing and counseling, reproductive health and safe male circumcision department. The study area was chosen due to the increasing number of patients aged (25-60) with pterygium among patients attending the OPD eye clinic at JRRH as earlier on stated earlier in the background. The study was carried out from October 2022 to April 2023.

Study population.
The study population comprised all patients aged 25-60 attending the OPD eye clinic at JRRH during the period of study.

Inclusion criteria
The study included all patients aged between (25-60) years who presented with pterygium at OPD eye clinic JRRH and consented to participate in the study. Only those who were willing to consent got involved in the study.

Sample size determination
Sixty (60) respondents were selected and interviewed for the study. A small number of respondents were chosen for easy data collection.
Using Button's (1965) formula to calculate sample size.
S=G(R/O)
Where S=sample size
G= number of respondents interviewed per day
O= maximum time the interviewer spent on each respondent
R= maximum number of days for data collection
G=3 R= 5 O=15minutes
S=3(5/0.25)
S=60participants. Therefore, the sample size was sixty (60).

Sampling technique
A simple probability sampling technique was used to select the 60 respondents and all clinicians were sensitized to enable easy screening of patients with pterygium.

Sampling procedure
Patients were registered at the reception, their age and sex documented regardless of presenting complaints. Whenever a pterygium was identified by the clinician during the patient, he or she directed the patient for assessments.

Qualitative methods
This was used because it was easy to use a questionnaire and collect information from respondents about the risk factors that contribute to the prevalence of pterygium among patients aged (25-60) attending OPD eye clinic JRRH.

Quantitative methods.
This method was used in the phase of the study to compile data in the form of tables, pie charts, and bar charts.

Data collection method
Interviews were used as a method of data collection using an interview guide with well-structured questions. Data was collected only from patients who presented with pterygium within the age group 25-60.

Data collection tool(s)
Data was collected using a questionnaire which was administered by the assistants and was given to people aged (25-60) years.

Data collection procedure
The study started by creating rapport with the respondents and reassuring them about confidentiality. The questions were read and interpreted for the respondents to understand. The responses were given in local language and written in English. In the end, the respondents were thanked for their cooperation.

Study Variables
Independent variables
These were age, sex, tribe, religion, marital status, education level, and occupation.

Dependent variable
The prevalence of pterygium

Piloting the study.
Before the study, JRRH was visited to obtain permission from relevant authorities to carry out the study and ascertain that the study was relevant and needed.

Quality control
The research was presented to the supervisor for approval. The research assistants were trained on how to apply data collection tools correctly. The study tools were pretested and pilot testing was done to identify any errors. Field editing was done on the spot and data was kept safely in a file.

Data analysis and presentation
Data was analyzed manually using a scientific calculator and tabulations were made to establish the relationship between the variables. Microsoft Excel was used in drawing charts and graphs for a clear presentation of the findings. The results were presented in tables, figures, and narratives.

Ethical considerations
Permission to undertake a study in JRRH was given by the hospital Director of JRRH who then introduced the researcher to the in-charges of the OPD eye clinic after presenting an introductory letter from the principal of the ophthalmic clinical officer's training school Jinja. A consent form was presented to the respondents who voluntarily agreed to take part in the study after a proper explanation of the objectives of the study. The respondents were assured of maximum privacy and confidentiality. The principle of anonymity was strictly adhered to.

RESULTS

Socio-demographic data of the respondents

Table 1: shows the socio-demographic characteristics of the respondents (n=60).

Responses	Frequency(n=60)	Percentage %
Age		
51-60 years	30	50
41-50	15	25
31-40	12	20
25-30	3	5
Sex		
Females	39	65
Males	21	35
Tribe		
Musoga	31	51.6
Muganda	14	23.3
Munyankole	12	20
Mugishu	3	5
Religion		
Protestant	18	30
Born again	16	26.6
Catholic	14	23.3
Moslem	12	20
Marital status		
Married	51	85
Separated	4	6.6
Widow	3	5
Single	2	3.3

Table 2: shows socio demographic characteristics of the respondents (n=60).

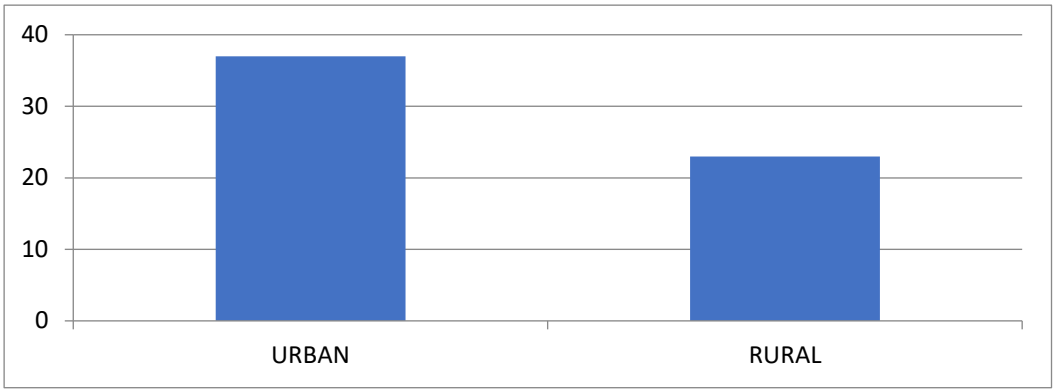
Education level		
Secondary	26	43.3
Primary	20	33.3
Tertiary	14	23.3
Occupation		
Peasant	32	53.3
House wife	10	16.6
Business	9	15
Civil servant	9	15

According to Table 1, the socio-demographic data of the 60 respondents on age, the majority 30(50%) of the respondents were aged between 51-60 years, followed by 15(25%) of the respondents who were aged between 41-50 years, then 12(20%) aged between 31-40 years and lastly followed by 3(5%) who were aged between 25-30 years. The majority 39(65%) of the respondents were females and 21(35%) of the respondents were males. Among the 60 respondents, the majority 31(51.6%) were a blog, followed by Baganda 14(23.3%), banyankole 12(20%), and lastly bagishu 3(5%).

According to religion, most of the respondents 18(30%) were protestants, followed by 16(26.6%) Born Again, then 14(23.3%) Catholics and lastly, 12(20%) were Muslims. Concerning marital status, the highest number 51(85%) of the respondents were married, 4(6.6%) separated, 3(5%) were widows and lastly, 2(3.3%) of the respondents were single.

According to Table 2, the majority 26(43.3%) of the respondents attained secondary level education, 20(33.3%) attained primary education, and a minority 14(23.3%) of the respondents attained a tertiary level of education. On occupation, 32(53.3%) of the respondents were peasants, 10(16.6%) were housewives, 9(15%) of the respondents were civil servants and 9(15%) business people.

Figure 1: The prevalence of pterygium.



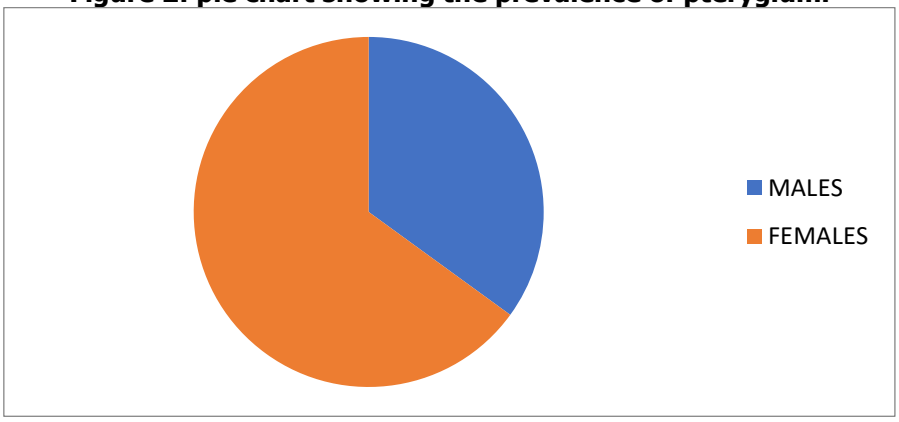
The study revealed that the prevalence of pterygium was higher in urban areas 37(61.7%) than in rural areas 23(38.3%).

Table 2: shows the prevalence of pterygium.

Category	Frequency (n=60)	Percentage(%)
Males	21	35
Females	39	65

According to Table 2, the prevalence of pterygium was 21(35%) males and 39(65%) females therefore females had a higher magnitude than males.

Figure 2: pie chart showing the prevalence of pterygium.



According to Figure 2, the prevalence of pterygium was 21(35%) males and 39(65%) females therefore, females had a higher magnitude than males.

DISCUSSION

From the study, it was revealed that the prevalence of pterygium was higher in urban area 37(61.7%) than in rural area 23(38.3%), this is because JRRH where the study was carried out is found in Jinja city. The prevalence of pterygium was 39(65%) females and 21(35%) males with females having a higher magnitude than males. This is consistent with a study carried out by Supanji et al (2021), who also revealed that 151 (66.5%) were females and males were 76 (33.5%).

Conclusion

The study established that pterygium is more prevalent among females than males, with more bilateral involvement than unilateral.

Recommendation

The Ministry of Health is recommended to design sensitization programs on the prevalence of pterygium. More to that, the district health officer is recommended to mobilize and sensitize the community workers and community members about the prevalence of pterygium. The government should recruit and post more eye health workers in the health centers for easy accessibility in the communities.

Source of funding

The study was not funded

Conflict of interest

The author had no conflict of interest

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