

Knowledge and Attitude of Eye Hospital Patients Towards Chronic Open Angle Glaucoma in Onitsha

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SUMMARY

Introduction: Chronic Open Angle Glaucoma is the second commonest cause of blindness in the world and a leading cause of irreversible blindness. Most people with glaucoma are usually unaware that they have the disease until significant loss of vision has occurred. We aim to determine the knowledge and attitude of glaucoma amongst patients aged 30 years and above.

Method: Semi-structured questionnaires were administered to consecutive patients seen in Guinness Eye Hospital, Onitsha, 1st to 30th November 2008. The data was analyzed using Statistical Package for Social Scientists (SPSS) computer software.

Result: Four hundred and fifty-five (86.7% of respondents) patients knew about glaucoma. The male/female ratio was 1:1.1. Relations and friends topped the list of sources of information for glaucoma. 180(39.5%) of the respondents had no idea regarding the possible causes of glaucoma. 31.8% of the patients knew that glaucoma ran in families. Fear of visual loss was the main cause of rejection of surgery as a treatment modality.

Conclusion: The study showed that knowledge of glaucoma is still very low in this environment. Fear of visual loss and cost are the major reasons for non-acceptance of surgery as a mode of treatment. The eye care providers should evolve a culture of useful health education and counseling regarding glaucoma, an irreversibly blindness disease.

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Key words: knowledge, attitude, eye hospital patients, chronic open angle, glaucoma, Onitsha

INTRODUCTION

Chronic Open Angle Glaucoma refers to a group of ocular characteristic pattern of neuropathy and visual field defect with increase in intraocular pressure as a major risk factor¹. It is the second commonest cause of blindness in the world and a leading cause of irreversible blindness². Though intraocular pressure is a significant risk factor there is no set threshold for intraocular pressure that causes glaucoma. In Nigeria, glaucoma in people over 40 years has been estimated to be over 10% in incidence³. The devastating effect of this disease is often neglected. Most people with glaucoma are usually unaware that they have the

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disease until significant loss of vision has occurred.

Everybody is at risk of developing glaucoma, but it is more common in people above 30 years of age, the elderly, blacks, and people with family history of glaucoma or refractive errors⁴. Systemic disease like diabetes mellitus also predisposes to glaucoma. A study by the Glaucoma Research Foundation found out that 8.8% of Caucasians did not know anything about glaucoma and 16.1% African-Americans were unfamiliar with glaucoma⁵.

A good knowledge of the risk factors, symptoms and treatment modalities would help people at risk to seek appropriate medical attention. This would surely reduce the scourage of this disease. This study was therefore aimed at determining the knowledge and attitude of glaucoma amongst patients aged 30 years and above, seen at Guinness Eye Hospital, Onitsha.

METHODOLOGY

This study was carried out in Guinness Eye Hospital, Onitsha. This is the only public Eye Hospital East of the Niger River. It is ophthalmic wing of Nnamdi Azikiwe University Teaching Hospital.

A semi structured questionnaire was administered to consecutive patients 30 years and older, seen in the hospital within the study period, 1st to 30th November 2008. The data was analyzed using SPSS (**Statistical Package for Social Scientists**) computer software. The analysis done include tables showing age and sex distribution of respondents, determination of the male/female ratio, diagnoses made on the patients seen, sources of information about glaucoma, knowledge of glaucoma, treatment modalities and acceptance of surgery as a treatment modality. The total number of patients seen in the hospital within the study period was determined.

RESULTS

Six hundred and twenty eight patients were served the questionnaire and 525 were returned and analyzed. The response rate was 83.5%. Total number of patients seen in the hospital within the study period, 1st to 30th November 2008 was 982. Four hundred and fifty five (86.7%) of the respondents know about glaucoma with a male:female ratio of 1.2:1. The commonest disease diagnosed was allergic conjunctivitis (20.2%), followed by cataract (19.9%) then glaucoma (14.9%).

Surgery as a mode of treatment: Two hundred and forty six (46.9%) would accept surgery as a mode of treatment. 279(53.1%) rejected surgery as a treatment modality.

KNOWLEDGE AND ATTITUDE OF EYE HOSPITAL PATIENTS

Table 1: Age and Sex distribution of the respondents

Age in Years	Sex		Total	%
	Male	Female		
30 – 39	55	42	97	18.5
40 – 49	47	63	110	21.0
50 – 59	58	98	166	31.6
60 – 69	38	47	85	16.2
70 – 79	30	25	55	10.5
80 and above	8	4	12	2.2
Total	246	279	525	100%

The male:female ratio is 1:1.1

Table 2: Diagnosis of all patients seen

Diagnoses	Frequency	Percentage
Allergic Conjunctivitis	199	20.2
Cataract	195	19.9
Galucoma	146	14.9
Refractive Error	101	10.3
Pseudophakia	76	7.8
Pterygium	55	5.6
Uveitis	30	3.2
Corneal Ulcer	18	1.8
Corneal Opacity	15	1.5
Presbyopia	14	1.4
Aphakia	11	1.1
Age-related Macular Degeneration	9	0.9
Corneal Foreign Body	8	0.8
Diabetic Retinopathy	7	0.7
Phthisis bulbi	7	0.7
Chalazion	7	0.7
Corneal Laceration	6	0.6
Retinitis Pigmentosa	6	0.6
Optic Atropy	5	0.5
Endophthalmitis	5	0.5
Ocular Hypertension	5	0.5
Retinal Detachment	4	0.4
Preseptal Cellulitis	4	0.4
Strabismus	3	0.3
Vitreous Hemorrhage	3	0.3
Others	43	4.4
Total	982	100.00%

Table 3: Sources of Information on glaucoma

Source	Frequency	Percentage
Relation & Friends	176	38.7
Health Workers	143	31.5
Glaucoma Patients	47	10.4
Information Media	37	8.3
Place of Work	30	6.5
Church	22	4/8
Total	455	100%

Table 4: Knowledge of Possible Causes of Glaucome

Possible Causes	Frequency	Percentage (%)
No Idea	180	39.5
Inheritance	117	25.8
Old Age	103	22.6
Eye Injury	30	6.5
Worms	18	4.0
Others	7	1.6
Total	455	100%

Table 5: Knowledge of Treatment Modalities of Glaucoma

Treatment modalities	Frequency	Percentage (%)
Medical	181	39.8
Surgical	112	24.7
No Idea	70	15.4
Use of glasses	42	9.2
Herbal	30	6.6
Spiritual	20	4.3
Total	455	100%

Table 6: Knowledge of People at risk of having Glaucoma

High Risk Group	Frequency	Percentage (%)
No Idea	212	46.6
People with family history of Glaucoma	145	31.8
Diabetics	62	13.6
People who wear glasses	26	5.7
Cursed people	10	2.3
Total	455	100%

Table 7: Possible actions by respondents if they have glaucoma

Actions	Frequency	Percentage (%)
See a Doctor	387	85.0
See a Nurse	45	9.9
See a Priest	12	2.5
Self medication	11	2.5
Do nothing	0	0.0
Total	455	100%

Table 8: Respondet's Reasons for Non Acceptance of Surgery as a Mode of Treatment

Reasons	Frequency	Percentage
Fear of Visual Loss	134	48.2
Fear of Death	44	15.6
Cost	62	22.3
Lack of confidence in the Surgery	28	10.1
No Reason	11	3.8
Total	279	100%

DISCUSSION

Glaucoma, pratically the chronic open angle galucoma, is commoner under the age of 30 years⁶. This study shows that 455(86.7%) of the respondents know aout glaucoma. This disagrees with a study by Bekibele and Oluleye⁷ which found only 36.4% of the respondents knowing about glaucoma. this disparity may be attributed to the variation in the sample size of the studies for Bekibele and Oluleye's study involved only 22 respondents and the study was also carried out 10 years ago. This study shows that of the 455 paients that know about glaucoma 38.7% and 31.5% got their information from relations and health workers respectively. Health workers in Bekibele and Oluleye's study accounted for 19% of the sources in cataract to this study.

This study shows that the information media and the church which are very good sources of information dissemination have not been adequately utilized in reaching the

populace as far as glaucoma is concerned, having accounted for only 8.1% and 4.8% of the information sources respectively.

Regarding the possible causes of glaucoma 207(39.5%) of the respondents had no knowledge of a possible cause. This disagrees with the study by Bekibele and Oluleye⁷ in which 63% had no idea. In this study inheritance and old age are seen as possible causes by 25.8% and 22.6% of the respondents respectively. These two beliefs will in no doubt affect the acceptability and time of seeking treatment for glaucoma. In this study 46.6% of the respondents had no knowledge of people at risk of being afflicted by glaucoma. 167(3.8%) of the respondents believe that glaucoma runs in families. This is a contrast with other studies^{5,7}. Even the knowledge that glaucoma can run in families has not helped early hospital visitation and acceptability of glaucoma treatment.

Though the study showed that 85% of the respondents would see a medical personal when they have glaucoma, a significant number 26(5%) would still do otherwise. This calls for serious health education campaign regarding glaucoma as an important cause of blindness and the appropriate treatment. 39.8% knew surgery as a treatment modality. A significant 15.4% had no idea of the modality of treatment while 9.2% knew about use of glasses. These two groups would easily fall prey to quacks should they have glaucoma. Surgery as a mode of treatment was rejected by 279(53.1%) of the respondents. Amongst those that rejected surgery as a possible mode of treatment 48.2% had fear of visual loss as their reason for rejection and 62(22.3%) rejected surgery because of cost. The need to educate the public on glaucoma and treatment modalities need not be over emphasized. The eye care providers need to be equally cautious to ensure a good prognostic outcome of treatment because

surgical outcome affects acceptability of surgery as a mode of treatment⁷. There is need for economic empowerment of the citizens to enhance uptake of eye care services available in the hospital.

CONCLUSION

The study showed that knowledge of glaucoma as a blinding disease is still at very low in this environment. There is a serious need for health education on glaucoma and the treatment modalities available. The information media need to be involved or utilized appropriately by the eye care providers in glaucoma health education. The eye care providers should evolve a culture of useful health education and counseling.

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