

Ophthalmic Survey of an Old People's Home in Nigeria.

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ABSTRACT

Background: Old people's home is a relatively new experience in Nigeria. Data on the pattern of ocular morbidity among inmates are examined with the aim of making suitable recommendations.

Method: An old people's home in Port Harcourt was the site of this survey carried out in February 2004. The following data was collected from all inmates-name, sex, age, length of stay, visual acuity, main cause of ocular morbidity, past medical history. Intraocular pressure was measured as indicated. Refractions were carried out on the spot.

Results: The male to female ratio of the 20 inmates was 2:3. The age range was from 70-105 years with a mean of 85 years, 7 months+₋ 12.14(SD). The mean duration of stay was 7 years with 50% staying there less than 5 years. 60% had associated systemic illnesses. 85% had visual acuity of less than 3/60 in the better eye. Cataract was the cause of 40% of the ocular morbidity and also caused 57% of the blindness.

Conclusion: This study emphasizes the need for regular check up of our geriatric population to enable early detection of ocular health problems and thus prevent avoidable disability and dependency. Social support and health insurance could also improve outcome and uptake of treatment options.

KEYWORDS: Ophthalmic; Old people's home, Geriatric; Nigeria.

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INTRODUCTION

Old people's home in Nigeria is a relatively new experience, even though it is well established in other places. The purpose is to keep senior citizens who are either childless, destitute or handicapped or whose offspring are unable or unwilling to keep and care for them at home, in a secure atmosphere where most or all of their needs can be met.

Africans generally have a tradition of caring for their aged ones till they pass on¹. But it has become increasingly difficult these days to carry out these duties probably due to the: High unemployment rates among their children; Smaller and expensive accommodations; Higher costs of living and Children living far away from parents and loved ones e.g. Abroad.

All these may have contributed to the recent sudden popularity of old people's homes in the country. The old people's home focused on in this study is in Port Harcourt and has been run by catholic nuns since July 1978.

It is generally known that ocular morbidity increases with age² especially in people older than 65 years.² Visual impairment or blindness may directly increase mortality rate in older people¹. The aim of this study is to find out the prevalence of ophthalmic problems among these patients and to make appropriate recommendations.

MATERIALS AND METHODS

This survey was carried out in February 2004 on all inmates of the home. The home has one male and two female dormitories housing the 20 inmates with 8 men in the male and 12 women in the female dormitories. They were all examined by an ophthalmologist after a preliminary visit to the nun in charge to secure permission. The examination was carried out in the reception area of the home for the ambulant ones and in their various dormitories for the non ambulatory ones. The following data was collected: sex, name, age, length of stay, reason for stay in the home, visual acuity (using Snellen's chart), main cause of ocular morbidity, past medical history. Intraocular pressure was measured where indicated, using Shiotz tonometry. Dilated funduscopy was carried out for all those with media opacities. Refractions were carried out on the spot. Patients requiring surgery were counselled and referred to the teaching hospital and the nun in charge informed. Medical treatment was offered free and cataract surgery was offered at highly subsidized rates. Glasses were given at highly subsidized rates to those who could afford them and free to the indigent. Ocular health education was offered to them on a one on one basis as most came from diverse language cultures. Data was analyzed using simple statistical methods.

RESULTS

Twenty (20) inmates were seen and examined in the period under survey. There were 8(40%) males and 12 females (60%) giving a male to female ratio of 2:3. Their age range was 70- 105 yrs with a mean of 85.4

years +_ 12.14(SD). The length of stay ranged from 6 months to 25 years with a mean of 7 years 7 months with fifty percent (50%) of them staying there less than 5 years. The reason for stay in the home was no child alive and all children living abroad. Sixty percent (60 %) had systemic illnesses and this included arthritis (35%), previous stroke with hypertension, mental problems and diabetes. One inmate was deaf while another had uterine prolapse. Most inmates were illiterate (90%) with the highest educated being a retired office assistant in a ministry.

Seventeen (85 %) of the inmates had visual acuity of less than 3/60 in the better eye and were therefore blind by WHO criteria⁴. Two (10%) were visually handicapped (vision <6/18 but better than or equal to 3/60 in the better eye). One inmate (5%) had normal vision. Cataract which was the largest cause of ocular morbidity was seen in 8 cases (40%) followed by pterygia in 2 cases (10%) and red eye in 2 cases (10%). Trachoma was not a cause of ocular morbidity here as documented in a study⁵, neither was there any history of previous lid surgery.

The causes of blindness were analyzed. The most frequent cause of blindness was cataract in 8 cases (47%) followed by keratitis in 2 cases (11.7%). One patient was aphakic. Glaucoma was responsible for blindness in one case (5.9%). Refractive error, optic atrophy, trauma, age related macular degeneration and pterygium were responsible for blindness in one case each. Diabetic retinopathy was not seen in any patient. (See table below).

Table I. Causes of Blindness

CAUSES	NO. OF CASES	%
Cataract	8	47
Keratitis	2	11.7
Aphakia	1	5.9
Glaucoma	1	5.9
Refractive error	1	5.9
Optic atrophy	1	5.9
ARM [*]	1	5.9
Trauma	1	5.9
Pterygium	1	5.9
Total	17 cases	100%

DISCUSSION

The literature shows a paucity of studies of this nature even in developed countries where such idea as an old people's home is common place. However the relevance of this study cannot be overemphasized as more and more people are sending their geriatric relations to stay in a home for various reasons. This is shown by the fact that a good number of the inmates in

this study moved into the home only in the last 5 years. (50%) although one had been there for 25 years.

As documented by Carter⁶, visual impairment becomes more prevalent with age and part of the normal changes that occur with aging include presbyopia, reduced contrast sensitivity, reduced dark light adaptation, and delayed glare recovery. He also mentioned four ocular diseases: macular degeneration, open angle glaucoma, cataract and diabetic retinopathy, as being the most prevalent in geriatric patients.⁶ The proportion of those who are blind in this study is much higher(85%) than a similar study in an elderly people's home in enugu, Nigeria carried out over 10 years ago(36.5%)⁷(ezepue). Cataract however was the most prevalent in that study(42%) which was also seen in our study(40%) and in keeping with work done in other parts of Nigeria⁸. No macular degeneration was however seen in this study. Diabetic retinopathy was also not seen even though some of them had diabetes, though this condition has been noted to increase the risk of having age related macular degeneration⁹. Cataract which has been known to cause sudden loss of vision in some patients with diabetes¹⁰ was also uncommon among them.

Only 3 members of the inmates enjoyed good ocular health, leaving the vast majority suffering from low vision and blindness. This will considerably shorten their lifespan as documented in a study in Malaysia³. This is more of public health importance if the cause of blindness is avoidable.

In this study 57% of the inmates were needlessly blind (from cataract, uncorrected aphakia, and high myopia). If the cataract patients could have surgery they could at least enjoy mobility vision that will reduce their dependence and improve their quality of life. Health education could have improved on the statistics of surgical uptake.¹¹ Also if they had financial enablement, they may have been able to access care better¹². One patient had cataract surgery without any intraocular lens, years before admission into the home and had lost the glasses given to her. This made her effectively blind. She had her glasses replaced and her quality of life was improved. Five patients needed presbyopic corrections. One patient just needed a myopic correction to convert from blindness. There is need for follow-up of these inmates to detect later refractive changes as this has been documented to change, even in this age group¹³. In three patients, the vision could not be improved because of the severity of their condition, one of which was end stage glaucoma. This may have been inevitable as the economic burden of glaucoma is quite

high¹⁴. Studies have shown that there is a 38.6% pickup rate of new medical conditions if presumably healthy senior citizens are screened¹⁵. Out of this figure over half of the new conditions picked up in that study are due to cataract and other eye conditions (20.3%)

CONCLUSION

This study emphasizes the need for regular check up of our geriatric population to enable early detection of ocular health problems and thus prevent avoidable disability and dependency¹⁶. Adequate funding for screening and treatment, from appropriate bodies (both governmental and philanthropic) could also improve the pickup rate of these conditions. Those with associated systemic conditions like diabetes and hypertension could have regular ophthalmic exams¹⁷. Health insurance cover could also help reduce morbidity and mortality in these people¹⁸. It is well documented that implementing effective prevention programs for older adults and encouraging intervention by agencies on aging can help improve health-related quality of life (HRQOL) among older adults who have little social support¹⁹.

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