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Profile of Eye Camp: An Assessment of Presbyopia among People

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ABSTRACT

Presbyopia poses an important public health challenges because it affects older people ability to maintain their economic independence. This study on the assessment of presbyopia as a refractive error among ages 40 -60 years was undertaken at Ahmadu Bello University ABUTH Zaria during the eye camp, two hundred and ninety seven had refractive error; forty respondences were selected as the sample size. Systematic sampling technique under the probability sampling was used to select the respondents. Finding shows that ages 40 – 60 had more cases of prebyopia which shows that it is age related. 90% of the respondents have good far vision with visual acuity of 6/6 – 6/18 which is a satisfactory vision for distance vision but unsatisfactory for near vision because of inability to read small prints. Early and periodical eye screening will be necessary for quick diagnosis of presbyopia and it will enable older people maintain their economic independence.

Key words: Presbyopia, Refractive Error, Visual Acuity, Age.

INTRODUCTION

WHO define blindness as, visual acuity of less than 3/60 or its equivalent due to comparable national and international statistics [1]. In order to facilitate the screening of visual acuity by non-specialized persons, in the absence of appropriate vision charts WHO added the "inability to count fingers in day-light at a distance of 3 meters" to indicate vision less than 3/60 or it equivalent. In ophthalmology, the term blindness strictly refers to the inability to perceive light (PL absent). A report stated that the number of people who were blind (visual acuity <3/60 in the better eye was estimated to be 45 million: 8 million blind due to uncorrected refractive error and 37 million blind due to other causes [2].

Presbyopia (from the Greek Presbys, elder or old, and ops, eye) is a progressive condition where the ability to focus on nearby objects is gradually lost as part of the natural aging process [3].

Presbyopia is an integral part of the human aging process; its impact is theoretically universal once middle age has been reached. Nurses who previously could read injection vial and ampoule find it difficult to read same as a result of presbyopic eye. This poses a great danger to the patients in their care as rough injection could be administered to a particular patient. Individuals who enjoy reading as hobby, gradually develop blurring vision and headaches when reading as they approaches the age of 40, this tends to destroys their interest in reading and could also affect their desire for further academic pursuit as they are presbyopic.

Because of the increasing realization of the enormous need for correction of refractive error worldwide, this condition has been considered one of the priorities of the recently launched global initiative for the elimination of avoidable blindness [4]. Refractive error can be easily corrected with spectacle which makes it imperative that effective strategies be developed to eliminate this easily treatable cause of blindness [5]. Blindness due to natural refractive error can hinder education, personality development and career opportunities. In addition to causes of an economic burden on society, however, the impact of blindness from myopia may be different from that of hyperopia and presbyopia [6].

The aim of this study is to assess and document the age distribution of patient with presbyopia as a refractive error during the eye camp and to identify the fraction range of visual acuity presented among patience with presbyopia during the eye camp. Significantly this study will create more awareness on the causes, treatment and magnitude of presbyopia among middle age (40s).

MATERIALS AND METHODS

In this study a descriptive research design techniques was adopted to carry out the study of forty patients who attended eye camp outreach at A.B.U.TH. Shika, Zaria August 2010. It was used to measure the number of presbyopic cases, the age distribution and their various visual acuity. The total number of refractive cases were two hundred and ninety seven, 13.5% of the size which is about 40 patients was used as the sample size. Systematic sampling technique under probability samples was used to select forty patients for the study. This is done by selecting patients in the population at a uniform interval after the count of seven patients.

Method of data collection

Primary data was collected directly from the patients during the eye camp programmed. The data was collected as clients were given numbers as they came into the eye clinics and record of the number was kept. Based on the numbers given to the client visual acuity was carried out by the Post Basic ophthalmic Nurses. The data collected include names, age and sex. The patients were examined by the ophthalmologist who decides to send patient for refraction. The refraction is carried out by the optometrists and who note down various refractive errors and write out a prescription.

Method of data analysis

Data for this research work was analyzed using simple statistical methods of frequency table, bar chart and pie chart for easy understanding.

RESULTS AND DISCUSSION

The result of this finding reveals that 37.5% of patient with Presbyopia were within the age bracket of 40-49 years and 2% starts from 30 years of age as shown in Table 1 and Figure 2. Research has stated that the minimum age at which a subject was prescribed with a reading addition was 30 years of age [3]. Another finding was that 90% of the patient had good far vision with visual acuity of 6/6 – 6/18 as shown in Table 2 and Figure 1. This is in agreement with already reported that "Vision of Presbyopia improves if book is held further away from the ordinary reading distance i.e. 30 cm [8]. Presbyopia is a health condition where the age exhibits a progressively diminished ability to focus on rear objects with age [9].

There should be proper awareness of public through continues health education on the need for routine eye screening especially among civil servants with emphasis on those doing close work activities. This will help reduce the backlog of uncorrected presbyopia in the community thus improve productivity.

Table 1: Age Distribution

Age Distribution	Frequency	Percentage (1%)
20-29 years	8	20%
30-39 years	3	7.5%
40-49 years	15	37.5%
50-59 years	6	15%
60 years above	8	20%
Total	**40 patient**	**100%**

Table 2: Fraction of Visual Acuity

Visual Acuity	Frequency	Percentage (1%)
6/6 – 6/18	36	90%
6/18 – 6/60	4	10%
Total	**40**	**100%**

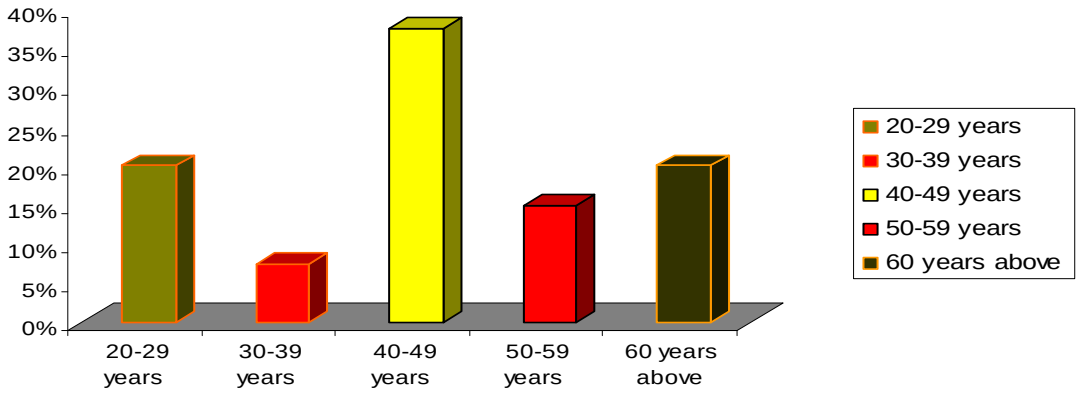

Figure 1: Pie chart of visual acuity

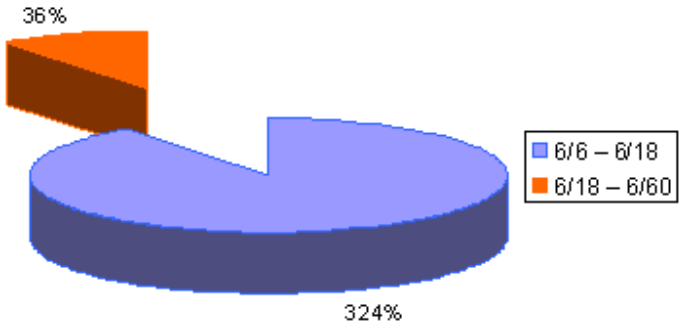

Figure 2: The bar chart of Age distribution

CONCLUSION

The assessment of Presbyopia as a refractive error shows that presbyopia rank the highest type of refractive error with 72.5% among ages 40-60 years.

REFERENCES

[1] Khurana A.K. (**2007**) Comprehensive Ophthalmology 4th edition, roewage International (P) Ltd Publishers 4835/2A Ansari Road Daryaganyi New Delhi India. <http//www/pdffactory.com.
[2] Resnikoff (**2008**). Global magnitude of visual impairment caused by uncorrected refractive errors in 2004. Bull. World health organ. 86:63-70
[3] Koroye Egba A., Ovenseri – Ogbomo G.O. et al (**2007**) Refractive error status in Bayelsa State www. Pdffactory.com.
[4] Rakhi Dandona1 & Lalit Dandona2 (**2001**). Refractive error blindness. Bulletin of the World Health Organization, 79: 237–243]
[5] Thylefors B. [editorial]. *American Journal of Ophthalmology*, **1998**, 125: 90–93]
[6] Dandona L et al. Blindness in the Indian state of Andhra Pradesh. Investigative Ophthalmology and Visual Science (in press)
[7] Jogi R. (**2009**) Basic Ophthalmology 4th edition Jaypee Brothers Medical Publishers (P) Ltd New Delhi India.
[8] Robert P., Rutsteni and Kent. M. (**1998**) Anomalies of Binocular Vision: Diagnosis and Management. Proceedings of the National Academy of Science of the United States of America www.sciencedirect.com.