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Eye check practice among non ophthalmic doctors in a tertiary centre

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ABSTRACT

Aims: To evaluate the practice of eye check among non ophthalmic doctors and the possible factors influencing such practice in a tertiary health centre in Ekiti State. **Materials and methods:** A cross-sectional descriptive study conducted at Ekiti state university teaching hospital Ado Ekiti between January 2014 and April 2014 among non-ophthalmic doctors in the health institution. All the consenting doctors were interviewed with pre-tested self-administered questionnaires. Data were analysed using SPSS 20. **Results:** A total of 125 non ophthalmic doctors participated in the study. Seventy four (59.2%) have had their eyes checked by ophthalmologists while the remaining 40.8% (P=.011) had not done so in their entire life. Eighty percent of those who have practised medicine for more than 10 years compared with 51.1% of those with less than 10 years of practice had their eyes checked by ophthalmologists(P=.003). A small proportion (8.1%) of these doctors had never had an eye checked despite using glasses.**Conclusion:** Routine eye check practice was low among these non ophthalmic doctors especially the younger and less experienced ones. Most eye checks were consequent to eye complaints.

Keywords: Ekiti, Eye check, Non-ophthalmic doctors, Practice

Introduction

Ocular conditions, if undetected or untreated, can have substantial long-term implications for the quality of life of anyone and can place a burden on public health resources[1]. Therefore, the need for everyone to have regular comprehensive eye examinations which are critical for early detection, timely treatment, and maintaining vision health had been advocated especially when there are risk factors or family history of eye problems[2].The most important preventive step is receiving routine examinations from a qualified eye care professional[3]. The attitude and practices of healthcare professionals are key to the success of any health programme because they are supposed to be drivers of health issues in the country. Their roles vary from handling health education programmes that highlight the consequences of age related eye disease, benefits of regular eye examinations, and appropriate treatment to the management of systemic diseases that can have impact on eye health as well as encouragement of patients to undergo periodic evaluation by eye care professionals[4,5].This study was therefore carried out to survey the eye check practice of non ophthalmologists in the tertiary health centre. Since utilization of this existing eye care services may very likely serve as a motivational factor for encouraging their patients to do same, consequently strengthening our advocacy to incorporate them into programmes aimed at reduction of the burden of blindness in the State.

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Materials and methods

Ekiti State University Teaching Hospital Ado Ekiti is a tertiary institution that was established in 2008 by the State Government to provide healthcare services to the people of the State and its environs. This institution has in its employment different categories of medical professionals for the purpose of providing specialist care to the people of Ekiti State and Nigeria at large. The institution has an Ophthalmology Department which provides eye care services to communities in Ekiti State and the neighbouring States of Ondo and Osun.This study was carried out in line with the ethical standards according to the Helsinki Declaration of 1975 as revised in 1983. All the consenting doctors working in this hospital were interviewed with a pretested self- administered questionnaire written in

English aimed at obtaining information which included age, gender, specialty of the doctor, duration of practice, history of previous specialist eye check in their entire life and reasons for the eye check. Also, history of spectacle wear and family history of eye disease were obtained. Doctors who were ophthalmologists working in the institution as well as non ophthalmic doctors who declined participation were excluded from the study. Data was imputed into SPSS version 20 and analyzed for simple frequency. Variables were compared using a chi square and statistical significance was inferred at P<0.05.

Results

A total of 125 non ophthalmic doctors consented to participate in the study. The ages of the respondents ranged from 22-64 years with a mean of 34 ±7.75years. The duration of practice ranged from 3months to 35years with a mean of 6.6±7.97 years. There were 96 males and 29 females with a male: female ratio of 3:1. Other characteristics are as shown in Table1.

Table 1 :Basic characteristics of respondents

VARIABLES	MALE	FEMALE	p value
Age(mean years)	35.98±7.91	31.21±5.99	0.003
Duration of Practice(mean years)	7.76± 7.56	2.88± 8.30	0.004
Family history of eye disease n(%)	32(25.6)	10(8.0)	0.91

Of the male respondents, 57(59.4%) reported previous eye check while 17(58.6%) of the females had ever utilised the service of an eye care giver.

Table 2:Variables influencing eyecheck

GROUP	SPECIACILIST EYE CHECK YES n(%)	NO n(%)	$\chi 2$	*p* Value
AGE GROUP				
<40YRS	47(52.2)	43(47.8)	6.48	0.011
>40YRS	27(77.1)	8(22.9)		
DURATION OF PRACTICE				
<10YRS	46(51.1)	44(48.9)	8.71	0.003
>10YRS	28(80.0)	7(20.0)		
GLASSES WEAR				
YES	34(91.9)	3(8.1)	23.26	0.001
NO	40(45.5)	48(54.5)		

A little above half 74(59.2%) of the respondents have had their eyes checked by ophthalmologists at one point in time or the other in their life time. Of this category of people, 97% of them claimed they utilized eye care facility in Nigeria.A large proportion of doctors (80%) who have practised medicine for more than 10 years have had their eyes checked by an ophthalmologist compared to about half of those with less than 10years of practice.(Table2)

Among those who wear spectacles, majority (91.9%) had comprehensive eye examination before the commencement of spectacle wear while a small proportion (8.1%) never had such before commencing spectacle wear.Majority of the specialist (75%) had eye check by the professional eye care giver compared with about half (53.8%) of the non-specialist doctors in this study. This was statistically significant ($\chi 2$=4.4, *p*=0.039).

Table 3: Reasons for eye check

REASONS	N	(%)
EYE COMPLAINTS	41	55.4
ROUTINE EYE CHECK	26	35.1
FAMILY HISTORY OF EYE PROBLEM	4	5.4
OTHERS	3	4.1
TOTAL	74	100.0

Table 3 showed more than half (55.4%) of the respondents had eye check because they had eye complaints. Other reasons are also shown.

Discussion

Non ophthalmologists have key roles to play in reducing avoidable blindness especially in Nigeria, where 84% of all causes of blindness were either preventable or treatable [6] Some potentially blinding conditions such as glaucoma[7], Diabetic retinopathy[2], Age related macular degenerations (AMD)[8] amongst others could only be detected early on routine specialist eye check. For instance, Zdravko et al in a study of Diabetes, Cardiovascular Morbidity and Risk of Age-Related Macular Degeneration in a Primary Care Population found out patients receive a diagnosis of AMD following referral to specialist care[8].Such cases would require non ophthalmologists who are more widespread to have the right attitude of having their eyes checked and giving the right counsel to the general populace. Of the 125 consenting non ophthalmic medical practitioners comprising 93 young doctors (house officers and residents) and 32 senior doctors who participated in this study, a little above half (59.2%) have had their eyes checked by Ophthalmologists while the remaining (40.8%) never checked their eyes in their entire life.

Eye check practice was found to be significantly greater among the specialist doctors (75%) than the non-specialist doctors where it was just about half (53.8%) . (*p=.039).* This might be due to the fact that the former belong to the older age group or have greater awareness about the need to know their ocular health status. The observed significant influence of the increasing duration of medical practice on improved eye check pattern could be partly explained by the possible onset of age related eye changes especially presbyopia. Conversely, a total of 8 (22.9%) of doctors who were aged greater than 40years never had their eyes checked by ophthalmologists despite the age related eye changes that have been documented to be more in this age group[5,9]. Achigbu and Chuka-Okosa observed a similar trend among non ophthalmic doctors in two tertiary institutions in south eastern Nigeria where they found out that a substantial proportion of doctors aged less than 40years and non specialists never had their eyes checked by ophthalmologists even though they acknowledged the importance of regular eye checks [10]. This could be a serious call for concern considering the vital roles doctors have to play in reducing the burden of blindness among the populace. If this group of doctors as the custodian of medical knowledge do not have the right attitude to the practice of routine eye check it may be difficult to completely rely on them to disseminate such information. Primary care physicians (non ophthalmologists) have been reported to have great influence on patient behaviour and also play a critical role in maintaining and improving the eye health of their patients[11]. Almost all the non ophthalmic medical doctors (97%) in this study had the specialist eye check within Nigeria suggesting a good utilisation of the eye care facility contrary to an earlier report of poor utilisation of eye care services among staff in the same centre where 11.8% were reported to have accessed ophthalmological eye examination[7]. This may suggest that the subjects of our study who were non ophthalmic doctors are better informed about where to seek eye care. The leading reason for eye check in more than half (55.4%) of the respondents was the presence of eye complaints. One would have expected routine eye check to be the topmost reason for seeking eye care. This group of professionals should not be assumed to have more knowledge than the general populace. They also need awareness campaign and eye health education programme in order to reduce the burden of blindness in the state.In this study, a large proportion (91.9%) of the doctors had their eyes checked before commencing spectacle wear compared with a small proportion 8.1% of the doctors who had never had an eye check prior to the commencement of spectacle wear. Although their reasons were not stated, a previous study in the same centre found financial constraint as the main reason given for not utilising an existing indigenous eye care facility [11]. However, considering the social class of doctors in the healthcare settings, further study may need to look into reasons why some doctors despite their medical knowledge, and financial prowess would commence spectacle wear without first undergoing eye examination.

Conclusion

Routine eye check practice was low among the non ophthalmic doctors especially the younger and less experienced ones. Most eye checks were consequent to eye complaints. We therefore recommend that this group of health professionals should be a target for health education and promotion that will positively influence their attitude towards routine eye check.

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