

BELIEFS AND ATTITUDE TOWARDS SPECTACLES

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ABSTRACT

Objective: The study was conducted in order to discover the beliefs and attitude of the people towards wearing glasses in order to improve acceptance of glasses when prescribed thus reducing blindness and visual impairment due to uncorrected refractive errors.

Method: A cross sectional study of 198 participants using a pretested structured questionnaire was conducted during the parent-teacher association (PTA) meeting of three public secondary schools chosen at random from a list of schools in Osogbo. Information obtained included the age, sex, history of using glasses, experience if using glasses, whether or not they will allow their wards to use glasses if prescribed and if no, why they will not. The data obtained was analyzed using Statistical Package for Social Sciences (SPSS 11.0 version) Computer Software. Association between variables was examined using chi-square and T-test accordingly. Level of significance was drawn at $P < 0.05$.

Results : The male to female ratio was 1: 1.5. Their ages ranged between 15 and 80 years with a mean of 36.20 years ($SD \pm 13.44$). Majority, 141(71.21%) were between 21 and 50 years. All but 4(3.70%) of those that use glasses had good experiences. A significant percentage (38.38%) of the participants will not use glasses if prescribed. One hundred and two (51.52%) participants will not allow their children to use prescribed glasses.

Conclusion: Acceptance of glasses for the correction of refractive errors is not encouraging. This is particularly serious when children are concerned. A health education to enlighten the populace about the benefits of wearing prescribed glasses and the dangers of not using them when needed is necessary.

Key Words: Refractive errors, spectacles, beliefs, attitudes, glasses.

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INTRODUCTION

Refractive error is a common cause of visual impairment and blindness. It is estimated that 2.3 billion people world wide have refractive errors.¹ Infact, in many parts of the world, refractive error would become the second largest cause of blindness after cataract if blindness were defined on the basis of presenting visual acuity.^{2, 3} The prevalence varies from one place to the other ranging from 20%- 80.5 %^{4, 5}. In Australia, refractive error was found to be the 4th most important cause of blindness and 33% of those with low vision had refractive error⁶. These findings are particularly very interesting in a country that has a universal health care system and provision of subsidized spectacles to the poor. What prevented the people from taking the spectacles and using them? In a young child with myopia, poor vision can have serious impact on participation and learning in class and this can adversely affect his education, occupation and socioeconomic status. Also, the eye of a child less than 7 years old, with uncorrected refractive error may become amblyopic if not treated early. There are a number of options for the correction of refractive errors such as contact lenses, refractive surgeries, spectacles and so on. In developing countries, spectacles are still the simplest, convenient and most readily available

Option. Spectacles can be defined as lenses which a person wears for a number of reasons. These include reading, sight, fashion, protection and achievement of confidence. Some people however, will not use glasses even when prescribed by a specialist. Several factors determine compliance with prescribed glasses. These include, belief and attitude of user, parent (if children) and the community as a whole. It may also depend on level of income, education and social status. Some authors working on school children noted low socio economic status^{7, 8}, taboos, customs and cultural beliefs of parents⁹ as barriers to uptake of spectacles by children following school eye health programmes. Belief is the faith or trust of the person in something while attitude can be defined as our disposition, perspective, viewpoint or outlook. Routine outpatient clinic experience has shown that the belief and attitude of users and their acquaintances affect acceptance of glasses when recommended. For instance, the fact that the patient's or the child's eye sight is not perfect and so will need spectacles can be a blow to their self esteem and this may cause a serious emotional disturbance to the parents or acquaintances. Also, children usually have problems with their mates who call them all sorts of names in school such as 'four eyes'. The parents may not want their children to start using glasses early. In adults,

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Some people believe that those who use glasses have terrible eye defects that may be passed to their offspring. This may hinder acceptance in marriage of such people. Some believe that glasses make eyes deteriorate or blind. However, the American psychologist, William James proposed that whatever is our belief; human beings can alter their lives by altering their attitudes of mind by simply behaving the way they want to become.¹⁰ When the beliefs and attitude are known, efforts can be geared towards altering them or strengthening them. To my knowledge, there has been no specific study on beliefs and attitude towards glasses in the general population in this environment.

MATERIALS AND METHOD

A cross-sectional study of 198 participants was carried out during the parent-teacher association (PTA) meeting of three secondary schools chosen at random from a list of schools in Osogbo Local Government Area (LGA), Osun state, Nigeria. This LGA has a total of 12 public secondary schools. Osun State is situated in the Southwest region of Nigeria. It is bordered in the West and North West by Oyo state, in the east by Ondo State and in the South by Ogun State. All the parents, guardians and teachers that attended the parent teacher association (PTA) meeting of the schools on one occasion each were included in the study. Also included were some older students of the schools who were present at the venue of the meeting. The questionnaire was pretested on patients seen in the eye clinic by the author. This structured questionnaire was then administered to participants after a thorough explanation by the author. Two secretarial staff from the teaching hospital also assisted in data collection. Information obtained included the age, sex, history of using glasses, experience if using glasses, whether or not they will allow their wards to use glasses if prescribed and if no, why they will not. The data obtained was analyzed using Statistical Package for Social Sciences (SPSS 11.0 version) Computer Software and was presented in tables. Association between variables was examined using chi-square and T-test accordingly. Level of significance was drawn at $P < 0.05$.

RESULTS

A total of 198 participants were included in the study. There were 118(59.60%) females and 80(40.40%) males giving a male to female ratio of 1:1.5. The age and sex distribution is as shown in table 1. Their ages ranged between 15 and 80 years with a mean of 36.20 (standard deviation 13.44). Majority, 141(71.21%) were between 21 and 50 years. Out of the 198 participants, 108(54.55%) use glasses majority of whom were females (74(68.52%)). Their reasons for using glasses included reading (63(58.33%), fashion (24(22.22%), seeing the distance (9(8.33%), protection from the sun (9(8.33%) and (3(2.78%) had more than one of the

aforsaid reasons for using spectacles. The experiences of those who used spectacles were good sight 57(52.78%), nice looks 21(19.44%), just like it 9(8.33%), protection from the sun 9(8.33%), young looks 4(3.70%), bad 4(3.70%) and 4(3.70%) could not express their experience. The bad experiences included headache and eye ache which disappear after removing the glasses for some time. There were 122(61.62%) people who would use glasses if prescribed. These include those who were already using glasses and who claimed that they will use it over and over again if prescribed. Seventy six (38.38%) people will not use it. The reasons for not using prescribed glasses included, not like it 46(60.53%), sunken eyes 18(23.68%), what people will say 9(11.84%). Three (3.95%) participants gave other reasons such as taboo and deterioration of sight. One hundred and two (51.52%) participants will not allow their children to use prescribed glasses. The reasons being that it will adversely affect the eyes by making it sunken or worsening existing problem (54(52.94%), too young to use glasses 44(43.14%) and 4 (3.92%) would not say why but will just not accept glasses for their children. Sex was significantly associated with use of glasses for various reasons ($P = 0.006$) as 62.7% of females use glasses while only 42.5% of males use glasses but when they were asked whether they will use glasses if prescribed, the association disappeared ($P = 0.137$). Using T-test, age was found to be significantly ($P = 0.03$) associated with use of glasses or its use if prescribed ($P = 0.02$). Older people tend to support the use of glasses than younger ones.

However there was no significant association between age and allowing children to use prescribed glasses ($P = 0.71$).

Table 1: Age and Sex Distribution of 198 Participants.

Age Categories (Years)	Sex No (%)		Total
	Males	Females	
< 20	11(40.74%)	16(59.26%)	27(100.0%)
21-30	24(45.28%)	29(54.72%)	53(100.0%)
31-40	21(44.68%)	26(55.32%)	47(100.0%)
41-50	18(43.90%)	23(56.10%)	41(100.0%)
51-60	2(10.00%)	18(90.00%)	20(100.0%)
>60	4(40.00%)	6(60.00%)	10(100.0%)
Total	80(40.40%)	118(59.60%)	198(100.0%)

DISCUSSION

Refractive error is one of the most common causes of visual impairment and blindness². It is estimated that 2.3 billion people world wide have refractive errors.¹ Infact, in many parts of the world, refractive error would become the second largest cause of treatable blindness after cataract if blindness were defined on the basis of presenting visual acuity.^{2, 3} In Australia, despite a universal health care system and provision of subsidized spectacles to the poor, refractive error was found to be the 4th most important cause of blindness and 33% of those with low vision had refractive error.⁶ What prevented the people from taking the spectacles and using them?

The general opinion that people like glasses needs to be scientifically verified. It is therefore necessary to examine the belief and attitude of the populace towards the use of glasses. This will determine the success of efforts geared towards correcting impaired vision or blindness resulting from refractive errors with spectacles. The effectiveness of these programmes even if prescribed spectacles were provided free to reduce blindness and visual impairment cannot be guaranteed until we have examined the beliefs and attitude of the populace towards it and efforts geared towards altering them or strengthening them. There have been very few studies on the barriers to wearing glasses in the literature. Only one study has been done in Nigeria to my knowledge and this was on primary school children in Nigeria⁷. In my study, 76 (38.38%) will not use glasses for various reasons which bordered on their beliefs and attitude. This is similar to findings of some authors who noted taboos, customs, cultural beliefs^{9,11} and parental reasons as barriers to uptake of glasses⁸. One hundred and two (51.52%) participants will not allow their children to use prescribed glasses for various reasons. It has also been noted that 33% of parents who were willing to wear glasses and 31% of those who were already wearing glasses will not allow their children to wear glasses⁷. This is particularly very serious as the eyes of their other children less than 7 years may become amblyopic if their refractive error is not treated early. Amblyopia is a condition in which its development requires an immature visual system and the presence of one or more amblyogenic factor such as high refractive error, anisometropia, astigmatism and strabismus.¹² It almost always develops before the age of 7 years. This is the critical or sensitive period of visual development.^{13, 14} This study however did not assess their knowledge of amblyopia. The finding of good reports on experiences of those who use spectacles in 100(92.59%) participants in this study is a good tool for health education of the populace in order to improve uptake of glasses.

CONCLUSION

This study has shown that the populace still needs to be educated on the usefulness of spectacles in the correction of refractive errors and the dangers of not using it when necessary especially in children. There is also the need to disabuse their mind on the assumed deleterious effects of spectacles. A health education on the mass media and community gatherings such as churches, mosques, schools and so on will go a long way in reducing these beliefs and attitudes.

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