

The Perceptions Regarding Refractive Errors and Their Psychosocial Impact on Youth in Dakshina Kannada

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ABSTRACT

The prevalence of refractive errors especially amongst children has been commonly studied. The psychosocial impact of spectacle use in youth has seldom been studied. Our purpose was to study the perceptions of refractive errors and to investigate their psychosocial effect on youth. A descriptive questionnaire based study was conducted on unmarried youth in the age group of 18-25 years over a period of two months. The questionnaire elicited details like demography, various other modalities which were used by the respondents for the correction of the refractive

errors, their perception about wearing spectacles and the psychosocial problems which they faced. Despite a high level of education, the perceptions regarding the refractive errors varied, with a large number of people having wrong perceptions and attitudes towards refractive errors especially towards spectacle use, which resulted in psychological distress. The dissemination of information about the refractive errors through the right medium will help in dispelling the misconceptions and distorted facts.

Key Words: Refractive errors, Spectacles, Perceptions, Psychosocial

AIM

To study the perceptions and the psychosocial aspects of refractive errors and spectacle usage in a young adult population of Dakshina Kannada.

INTRODUCTION

Refractive errors can affect social life and the economic prospects of an individual by restricting the educational and employment opportunities of otherwise healthy individuals. Most of the studies have been conducted on the prevalence of refractive errors, especially amongst children and on various other logistic issues which are related to the refractive errors. Their psychosocial impact, especially on youth has been underestimated and seldom has been studied. This study was conducted in order to investigate the psychosocial impact of refractive errors and its various modes of correction in a young adult population.

MATERIAL AND METHOD

The study is a descriptive, questionnaire based study which was conducted over a 2 month period in Dakshina Kannada. The study was conducted in full accordance with the ethical principles, including the provisions of the World Medical Association Declaration of Helsinki. 458 study subjects were administered the semi structured questionnaire after obtaining informed consent from them. The questionnaire elicited the demographic profile, the perceptions about refractive errors and the various modalities of treatment which were used for their correction. Questions pertaining to the psychosocial aspects were also included. The questionnaire was pretested among a group of 10 respondents and was revised to enhance its clarity and comprehension. The criteria for inclusion in this study were unmarried youths in the age group of 18-25 years. We did not encounter any substantial refusals from the subjects regarding participation in the study. The data was analyzed.

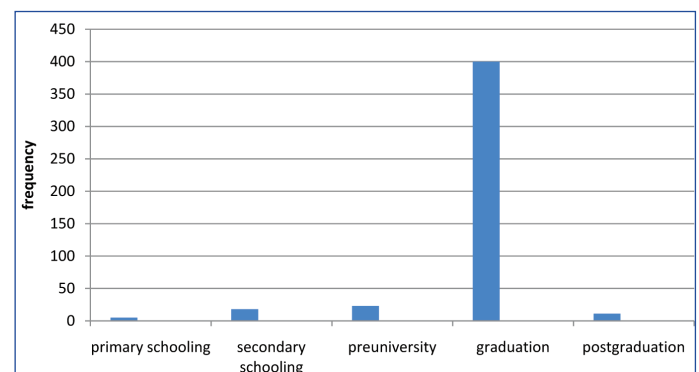
RESULTS

460 questionnaires were distributed among the respondents over a period of two months. 458 subjects responded satisfactorily. 246 females and 212 males participated in the study. The mean age of the respondents was 20 years. The level of education is depicted in [Table/Fig-1] below, with most of the respondents (87%) being graduates.

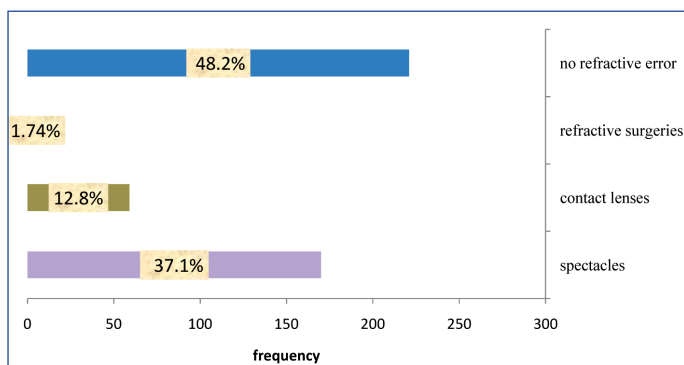
Out of the 458 respondents, 221 (48.2%) had difficulty in seeing and the various modalities which were used in the correction of the refractive errors are as shown in [Table/Fig-2].

Out of the 59 respondents who used contact lenses for the correction of the refractive errors, the number of females 71% (42) were more than the males 29% (16).

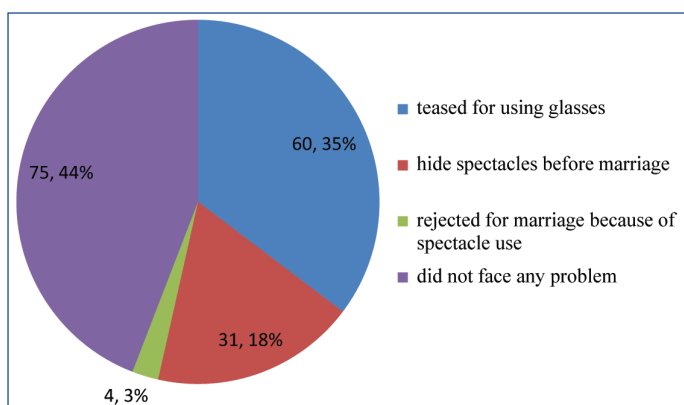
23.3% respondents felt that using spectacles for a long time would harm the eyes or lead to early blindness. 30.5% felt that yoga, diet and traditional medicines could reduce the power of the eye. 30.1% felt that the continuous use of glasses would increase the power of the glasses.



[Table/Fig-1]: Educational status of the respondents



[Table/Fig-2]: Various modalities used to correct refractive errors



[Table/Fig-3]: Psychosocial effects of spectacle wear

51% respondents felt that spectacles were a cosmetic blemish. Of these, 46% were males and 54% were females. 10.6% felt ashamed or embarrassed in using spectacles. 26.8% felt that spectacles were a sign of intelligence.

31.2% felt that 2 individuals with refractive errors should not marry. 21.1% felt that even if one parent had a refractive error, there was a high chance that the children would have it too. 6.1% respondents said they would refuse to marry a person who used glasses. However, 3.9% said that they would reconsider their decision if the form of correction was cosmetically acceptable i.e. change to contact lenses or refractive surgery. The refusal was lesser [19(4.1%)] if contact lenses were used and it was the least for surgical correction [15(3.2%)].

The problems faced by the spectacle users in our study are listed in [Table/Fig-3] above.

DISCUSSION

Refractive error is a remediable cause of visual impairment, with the correction of the significant refractive error being a priority of Vision 2020. The Right to Sight, the World Health Organization's (WHO) Global Initiative for the Elimination of Avoidable Blindness [1]. The earlier onset of refractive error as compared to cataract can account for twice as many blind-person years [2]. According to a study which was conducted in south India [3], 13.8% had a refractive error of a spherical equivalent of ± 3.00 diopter or worse. The prevalence of the current use of spectacles in people with a spherical equivalent of ± 3.00 diopter or more, were likely to be visually impaired without refractive correction, was 34.2% [3].

Spectacles or eyeglasses are frames which bear lenses are worn in front of the eyes usually to enhance vision [3-7]. Other reasons for spectacle wear include eye protection, to conceal eye defects and

as a fashion accessory. In our study, spectacles were used only to improve vision. Despite the increasing popularity of contact lenses (CL) and refractive surgery, the use of spectacles still remains the most popular method of correcting refractive errors [3-7], and this fact was demonstrated in our study too.

While both boys and girls experienced benefits beyond vision correction, girls experienced a stronger boost in self esteem with a switch to contact lenses from glasses [8-10]. Recent studies have shown the use of CL for refractive error correction to be higher and more common among the younger strata of the population [11-13]. Cosmetic benefits and convenience were the most common reasons which were cited for CL use [11,12]. However, the use of contact lenses was not so common in our study group (24.9%). In a study which was conducted on college goers in coastal Karnataka, the prevalence of CL usage was 94.6% [14]. 79.9% of the CL users were found to be females, which was the same gender predilection for CL use as was found in our study (71% females) and in other studies [11-13]. The awareness regarding refractive surgeries as an option for the treatment of refractive errors was high (96%) among our respondents probably due to their higher educational qualification.

30% of the respondents in our study believed that the continuous use of glasses would progressively increase the refractive error. 23% of the respondents believed that spectacle usage had harmful effects on the eyes. In a study which was conducted in Pakistan [14-15], 69 per cent of the people thought that using spectacles would cause their vision to deteriorate, they therefore tried to avoid it. The reason for the difference in numbers between the above two studies could be the difference in the study setting and in the educational level between the two populations; ours being an urban setting with a higher educational level of the respondents, our findings were contrary to those of the Pakistan study. The fear of spectacles damaging the eyes was also a significant hindrance to spectacle use in a Nigerian study [16]. In studies on Chinese children, a common reason for not wearing spectacles was the belief that spectacles weakened the eyes [17, 18]. In a report among secondary school students in Tanzania, this 'fear' was referred to as 'parental concerns about the safety of spectacle use' and it was listed among the barriers against the use of spectacles by students [19]. It has been suggested that spectacle wear could disrupt normal 'emmetropization' (which depends on the growth of the eye, the refractive state, and the visual stimulation) in infants. Yet, the long term effect of spectacles on normal changes in the refractive error of the human eye is negligible [20].

31% of the subjects in our study felt that diet, yoga and traditional medicine could cure refractive errors, which was contrary to the truth. A misconception like this could result in them refraining from seeking appropriate treatment. The fear of spectacles damaging the eyes should be directly addressed and the concerns should be alleviated during consultations at eye care clinics.

Girls are particularly vulnerable to social and psychological distress. Our study revealed that a large percentage of respondents (35%) were teased for using glasses. It was generally the peers who had a negative attitude and even the victimized children with refractive errors who were using spectacles. 3% even faced extreme rejection in the form of being declined for marriage, only because they wore glasses and 31% respondents were ready to hide their glasses to avoid rejection before marriage. An attitude like this could result in serious problems like psychosocial maladjustment,

anxiety, depressive feelings, loneliness, lowered self-esteem and behavioural problems.

52% of the respondents considered spectacles to be a cosmetic blemish especially the females (56.6%). A study which was conducted in Pakistan [15] too demonstrated this fact. The main reason for the discontinuation of spectacle wear in women was given as community pressure and cosmetic factors. These women reported that they had to face social pressure often, not only in terms of appearance but also because of the perception that their children could inherit their visual impairment [15]. In our study, 10.5% respondents were ashamed or embarrassed by their spectacles. 27% felt that only intelligent people used spectacles. This brought to light the need to change their perspective towards the use of spectacles through the proper dissemination of knowledge and information.

14% of the respondents in our study said that they would refuse to marry a person who had a refractive error. This was despite them having a good educational background and awareness regarding various cosmetically acceptable options. This brings to light the deep rooted stigma which is associated with refractive errors and with spectacles which are used in their correction. This is a paradox considering the high literacy level and also the increased awareness of the option of refractive surgeries in our study.

CONCLUSION

Spectacles are still most commonly the preferred modality for the treatment of refractive error. Refractive errors and especially the use of spectacles for their correction is still a taboo in our society. The psychological repercussions have been understated and understudied. There still exists among the educated population, certain misconceptions regarding the cure of refractive errors, which need to be addressed. It can influence major decisions like the choice of spouses. Counseling, mass media, support groups and the provision of information about refractive errors in schools and college textbooks, will help in dispelling the misconceptions and the distorted facts about these.

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