

Attitudes and Beliefs among Young Adults towards Purchasing Spectacle and Visiting Optometry Practices in India

Bikasha Dutta¹, M.Optom; Monica Chaudhry¹, HOD; Gaurav Kr. Bhardwaj¹, Associate Professor ; Zeeshan Akhtar¹, Assistant Professor,
¹Department of Optometry, Amity University, Gurugram.

ABSTRACT

Purpose of the study: In Optometry practices; very little information are there to explain clients attitudes and beliefs towards purchasing spectacle, visiting optometry practices, barriers they face while visiting an optometry practice or importance of maintaining healthy eyesight. In India, however, no such studies have been done which can prove the same. This study identified different types of attitudes and beliefs among young adults of India towards purchasing spectacle and visiting optometry practices and will help the eye care practitioners to understand individual traits of the clients' in this field which in turn will increase clients' satisfaction.

Method: A total of 101 Participants aged between 18-35 years are recruited on the basis of convenient sampling from different optometry practices of Hardev Optical Pvt. Ltd. situated in Gurugram, India. Participants included on this study were from different parts of India. A questionnaire was developed for the purpose of this study. Questionnaires were accompanied by a cover letter explaining the purpose of the study. Attitudes and beliefs were assessed with a series of 21 questions regarding: Attitudes and beliefs towards visiting opticians/optometrist; attitudes towards purchasing spectacles and maintaining healthy vision; beliefs and attitudes towards technical details of the lens and attitudes and beliefs towards communication and clinical skills of the optician/optometrist. The responses were analyzed using Statistical Package for the Social Sciences (SPSS) software.

Result: We have identified five factors in this study and have categorized them as 'Style oriented', 'Vision and eye health', 'Perceived difficulties', 'Information seeking' and 'Other expectations'. The term 'style oriented' has described the importance of appearing fashionable and aesthetically pleasing. Out of the total participants, 42.48% participants responded positively in the factor 'style oriented'. The term 'Vision and eye health' explain client's attitudes towards obtaining clear vision, maintaining healthy eyesight and visiting eye care practices regularly and 36.63% participants responded in this factor. Difficulties associated with visiting opticians and purchasing new spectacles were categorized under the term 'perceived difficulties' and 31.33% of the participants has reported some barriers in visiting optometry practices and purchasing spectacle. 'Information seeking' is the desire for information on the technical details of lenses(for e.g, 'Does their lens has ARC or SRC?', 'Can their lenses limit glare problems?' etc.) and majority of the participants(81.2%) were mostly concerned about this factor.45.94% scored in the factor 'Other expectations' which described consumer's expectations towards clinical and communication skills of the optometrist/optician and how they wanted the information to be presented in front of them.

Conclusion: Practitioners could use this information to gain knowledge and gather information to meet the needs and address the expectations of individual clients. This will help the practitioners to understand the different individual characteristics of young adults and can make the information provided more useful according to the individual traits of different clients, and could enhance client satisfaction in day to day Optometry practice.

Keywords: Attitudes, beliefs, client/consumer, Expectation, satisfaction, spectacle

Declaration: The author has no financial or proprietary interest in any material or method mentioned.

INTRODUCTION

Little to no information are known in the optometry practices about the expectations and health values that consumers in optometry practices hold about having an eye examination and purchasing spectacles.¹ One of the major cause of clients' dissatisfaction is not knowing their mind-set about purchasing spectacle, visiting optometry practices, their likes and dislikes.

In optometric environment identifying the attitudes and beliefs of the individual clients is of particular importance for the young adults. Refractive error, fashion are the most common cause for spectacle wearing in young adults and therefore purchasing spectacle and visiting optician is an important field of concern.

Previous researches according to the patient's expectations and satisfaction, in optometry practices are very limited. Researches done in UK has indicated clients report that they do not receive sufficient information about eye care, or about the different types of options according to their requirements that are available to them.⁴ Most of the practitioners often overestimate the importance of reducing the price of their clients eyewear⁵, and therefore may not discuss the full range of lens and frame options available according to their requirements with them. This reduces client satisfaction. In North America and parts of Europe, optometric services are organized differently to that in the UK where routine eye examinations are provided by ophthalmologists and the prescription obtained from them is then taken to a separate dispensing practice. While the results from studies in these countries are not directly comparable, they nevertheless provide an indication of clients' requirements and expectations regarding their eye care to our country. Good communication and interpersonal skills of practitioners have been reported to be the most frequent expectations held by clients.⁶ Communication includes concepts such as honesty, the ability to use clear easy language, providing information on different options, and addressing clients' concerns. Interpersonal skills include empathy, and building a personal connection between practitioner himself and the consumer/patient (i.e. considering the clients overall needs rather than simply concentrating on treating their eyes), professionalism and providing encouragement and reassurance. The previous research, considered in the context of time-pressured optometric practice, further emphasizes the importance of identifying the beliefs and values of individual clients by the practitioners and supplying appropriate information and recommendations.⁷

Practitioners should also consider the decision of the consumers if they want to take their own decision and make appropriate advice regarding lens type and frames. While shared medical decision-making is becoming more widely used in the medical environment, there is also an increasing recognition that clients prefer themselves or their clinicians to make major decisions.⁸ There is evidences within primary care ophthalmology clinic that patients may not have the knowledge required to make decisions regarding their eye care.⁹ Within UK optometry practice, clients have an eye examination with an optometrist, who may also recommend or mention different types of lenses. The major lens decision-making process usually takes place with the dispensing optician. Despite the increased focus on satisfaction as an outcome measure and a growing body of research, satisfaction has remained difficult to compartmentalize. Satisfaction may also be influenced by the patient's mental state, status or amount of refractive error, economic status of the person, environmental factors etc.¹⁰

It is important to provide advice and information that clients perceive to be meaningful. As the choice of eyewear involves decisions both about the quality of the lenses (and therefore the quality of eyesight obtained) and also the aesthetics of the frames, practitioners must identify how much clients value these different aspects. Despite the increasing popularity of contact lenses and refractive surgeries, the use of eyeglasses still remains the most popular method of correcting refractive errors. In order to correct refractive errors, patients need to have their eyes examined by eye care professionals who will prescribe appropriate corrections for them. These corrections should be worn appropriately. Patients' understanding of refractive errors and their attitude toward spectacles, and eye health would be expected to influence compliance with wearing.¹³

Therefore, the aim of this study was to identify different types of client attitudes, expectations and beliefs towards spectacle purchase and visiting optometry practices to help the practitioners to better understand the needs and expectations of their clients and therefore to provide more appropriate information and clients' satisfaction.

METHODOLOGY

Sample

A total of 101 Participants aged between 18-35 years are recruited on the basis of convenient sampling from different optometry practices of Hardev Optical Pvt. Ltd. situated in Gurugram, India. Participants included on this study were from different parts of India. Clients were given to fill up a consent form and when they agreed to take participation in the study, questionnaires were given to them in the presence of the principle investigator. The clients must have been able to understand English and they should have been spectacle wearers at least for 2 years. Only those with dioptric powers up to $\pm 4D$ has been included in this study as people with higher power would have a different perspective towards each of the traits than the people with low to moderate amount of dioptric power. Questionnaires were accompanied by a cover letter explaining the purpose of the study. Potential participants were assured that taking part was voluntary, and their eye care would not be affected by their decision of whether or not to participate.

Questionnaire:

A questionnaire was developed for the purpose of this study. Questionnaire items were highly influenced by the questionnaire items attached in the reference study 'Four different types of client attitudes towards purchasing spectacles in optometry practices' by F Fylan et al², although a lot of changes had been made as the age of the participants in both the studies were different. The questionnaire was validated from three experts who were specialized in this field. The questionnaire was piloted with 20 clients before validation. The questionnaire was understood by all the participants and there were no items that needed to be eliminated on the basis of poor understandability or suitability. The final questionnaire contained 21 questions and took around 10 minutes to complete. All questions comprised a statement and required an answer. All answers were in closed ended form. The Questionnaire responses are shown in Table 1.

Attitudes and beliefs were assessed with a series of 21 questions regarding: Attitudes and beliefs towards visiting opticians/optometrist, attitudes towards buying spectacles; attitudes towards lens details and attitudes and beliefs towards communication skills of the optician/optometrist. Few questions like 'Is it difficult for you to visit an optician?' or 'Is it difficult for you to purchase high quality lenses?' had been included to understand the barriers for not visiting an optometrist or an optician, or to understand why a patient did not want to change a lens even though it was very much needed. The questions were not segregated into different categories while the questionnaire was distributed and the participant could choose more than one response given in a particular question. The positive responses were collected (for ex, 'I like to buy expensive glasses to look fashionable', 'I like to buy fashionable glasses even though they are not expensive') to observe the different types of attitudes, beliefs and characteristics of the participants although some responses contradict each other.

Statistical Analysis

The responses were entered in Microsoft Excel spreadsheet and analyzed using SPSS. Five factors were understood which explained attitudes and beliefs displayed by the clients. The statistical analysis also calculated the mean age and gender along with standard deviations.

Shapiro-wilk test was done to check the normal distributions of the data and p value was taken less than 0.05 as significant. Frequencies were calculated for each response and a total of 33 items with yes responses were tabulated under the different five factors as shown in Table number 1,2,3,4 and 5. Each response was important to realize the different attitudes and beliefs hold by the young participants. The factors are described in more details below.

Factor 1: Style oriented

Items that were listed under this factor were related to style and cosmetic appearance. This factor explained what a young adult thinks about wearing spectacle and their cosmetic appearance. This factor also explained different types of criteria based on which they preferred to choose a spectacle. This factor answers some questions like 'Do you prefer to get your frames chosen by a friend or family member?' 'Or do you want to choose a glass on your own?' 'Did you prefer expensive glasses over cheap glasses to look fashionable?' Or 'Do you like fashionable glasses although they are not expensive?' 'How many spectacles do you keep to change your appearance?' All the questions had multiple of answers (responses) from where only the positive responses were collected for listing.

Factor 2: Vision and eye health

This factor was related to the importance of regular eye examinations. This factor was mostly concerned about finding out the importance of vision and the desire to maintain healthy eyesight among the young generation. How often they change their lenses, how often they visit an optometrist, optician or an ophthalmologist to get their eyes checked were the few examples of questions that has been asked.

Factor 3: Information Seeking

Items that included highly on this factor were related to the technical details of lenses (for eg,ARC ,anti-fogging coat). To find out how much information a patient needed and what type of information was necessary to explain in front of the patient while they visited an optometry practice were the few main concerns based on which the questions has been generated under this category. It also explained the mindset of young adults towards maintaining quality of vision and healthy eyesight through information seeking. More they focus on technical details of the frames and lenses; the more it is helpful for maintaining healthy eyesight.

Factor 4: Perceived difficulties

This factor related to the barriers concerning visiting the optician and purchasing new spectacles. Respondents reported concerns regarding adjustment to new spectacles, resistance to frequent changing of spectacle frames and lenses and reported difficulty in affording high-quality spectacles. Such respondents believed that optometrist/opticians increase the power of their glasses every time they visit them and some of them even believed that they give more importance to the cost than to proper recommendations. Some responders believe they look old with spectacle. Some of the respondents showed a desire to buy glasses online as they believe that online purchasing give them varieties of good options in affordable price. In addition, these respondents would delay visiting the optician until they experienced visual difficulties.

Factor 5: Other expectations

Items on this factor were related to expectation of the clients towards interpersonal and communicational skills of the opticians/optometrist. Requirements of importance of clinical experiences possessed by optometrists or the opticians, clinical skills, technical knowledge were also some of the items that were highly discussed through this factor. Moreover this factor also explained how the participants wanted the optometrist or optician to share the information in front of them; verbally, written or through diagrams.

RESULTS

Participants

A total of 101 participants, recruited from different optometry practices of Hardev Optical Pvt.Ltd. situated in Gurugram completed the questionnaire with 100% response rate. Forty six (45.55%) of these were male and fifty five (54.45%) were female. The age of the participants was 31.38 ± 8.45 (mean \pm SD) and they had worn spectacles for a duration of 9.34 ± 5.75 years (mean \pm SD). All participants wore spectacles following their most recent consultation.

Responses:

Test was done to check the normal distribution of the data and P value was taken less than 0.05 as significant. Responses were calculated using SPSS and all the positive responses were taken for tabulation which is shown below in the tables given below. From the responses of the clients, a total of five factors were understood which were labeled as **Style oriented, Vision and eye health, Information seeking, Perceived difficulties** and **Other expectations** and a total of 33 responses were included under these factors. Independent sample T test showed no statistically significant difference in attitudes according to the gender.

Distribution of 33 different responses collected from the questionnaire and total scores found against each of the responses are shown in tables (1,2,3,4,5) below :-

Table 1: Distribution of positive responses listed for the factor 'style oriented'

Responses	Scores (in %)
1. It is important that I look fashionable	48.5
2. I like to choose my glasses by my own	75.2
3. Sometimes I like to have a friend or relative with me when I am choosing new glasses	57.4

4. Buying fashionable glasses means that I will look good	52.5
5. Buying expensive glasses means that I will look good even though they are not fashionable	29.7
6. I would like to choose and keep one best possible spectacle to change my image	56.4
7. I like to keep several pairs of glasses to change my image	19.8
8. I preferably buy frames with every changing Lenses	30.7
9. I buy my frames when there is a new style	13.9

42.68% scored under the factor **Style oriented**. 48.5% of the respondents said that looking fashionable is important for them and 52.5% respondents believed buying fashionable glasses was the only way to fulfill the criteria. On the contrary, 29.7% of the respondents reported that buying expensive glasses is what they think make them look more presentable, even though sometimes they are not fashionable. Although majority of the participants (56.4%) have reported that they kept only one best pair of spectacle to change their image; some of them (19.8%) said that they would like to keep several pairs of glasses to change their image. Changing frames with every changing of lenses was a major fashion goal for 30.7% of the participants and almost a half of them bought glasses whenever there was a new style in the market. Majority of the participants (about 76%) reported that they like to choose their glasses on their own even though some of them has reported they like to get their glasses chosen by family members and friends.

Table 2: Distribution of positive responses listed for the factor ‘Vision and eye health’

Responses	Scores (in %)
1. I believe that getting my eyesight checked regularly keep my eyesight healthy	61.4
2. I like to visit the optician in every 1 year	31.7
3. I visit my optician in every 6 months	27.7
4. I visit my optician when my eyesight becomes weak	25.7

An average 36.63% responded under the factor **Vision and eye health**. 61.4% of them believed that getting their eyes checked regularly keep their eyesight healthy. 31.7% visited the optometrists/opticians in every 1 year while 27.7 % of them visited every 6 months. However, 25.7% of the participants visit the opticians only when their eyesight becomes weak.

Table 3: Distribution of positive responses listed for the factor ‘Information seeking’

Responses	Scores (in %)
1. I like to follow optician’s recommendation while buying a frame	89.1
2. It is important that my lenses reduce glare	89.1
3. It is important that my lenses make it easier for me to drive at night	83.2
4. I like my lenses to be scratch resistant	93.1
5. I want my optician to send me details of the latest frames and lenses.	51.5

Five items were listed under the factor **Information seeking**. An average of 81.2% was responded in this factor. 89.1% participants liked to follow optician's/optometrist's recommendations while buying a frame and it was important for them that their lenses reduce glare. Majority of the participants (93.1%) wanted lenses that are scratch-resistant and 83.20% showed interests in buying glasses that make it easier to drive at night. More than half of the participants that responded to this factor wanted their opticians/optometrists to send them the details of the latest frames and lenses available.

Table 4: Distribution of positive responses listed for the factor 'Perceived difficulties'

Responses	Scores (in %)
1.I preferably buy frames when my frames get older	54.5
2. I would rather like to buy the lenses online as they give varieties of affordable options	19.8
3. I believe if I go to an optician, every time they increase the power of my lenses	23.8
4. It is difficult for me to afford high quality glasses	52.5
5. The opticians/optometrist always give more importance in price than in proper recommendations	46.5
6. When I buy new glasses I worry about whether I will see clearly with them or not	37.6
7. I look old with glasses	11.9
8. when I buy new glasses, I afraid I will get used to them	4.0

Eight items were included under the factor **Perceived difficulties** and an average of 31.33% responded. Of them 54.5% reported that they only bought frames when their frames got older as majority(52.5%) of them reported that it is difficult for them to afford high quality lenses while 46.5 % said optometrists and opticians always paid more importance towards the cost of the product rather than proper recommendations. 23.8% believed, every time they go to an Optometry clinic/optical shop, they increase the power of their lenses. 37.6% worried about whether they will see clearly or not after changing into new glasses.11.9% believed that they looked old with glasses when 4% believed if they start wearing glasses or wear glasses on regular basis, they will get used to them. 19.8% reported and showed interests in buying frames online as they give varieties of affordable options as compared to the retail shops.

Table 5: Distribution of positive responses listed for the factor 'Other expectations'

Responses	Scores (in %)
1.I want easy explanations about the information regarding eyesight and available options when I visit an optician/optometrist	69.3
2. I want a better clinical knowledge when I visit an optometrist/ opticians	20.8
3. I want my optician/optometrist to explain the information regarding eyesight and available options only verbally	35.6
4. I want my information explained verbally, written and with clean diagrams	53.5
5. I always like to visit the same optician shop	50.5

A total of 5 responses were understood and an average of 45.94% scored under the factor **other expectations**. 69.3% respondents wanted easy explanations regarding eyesight and available options when they visit an optometrist/optician. 35.6% of the respondents said they want the information regarding eyesight and available options verbally, written and with clean diagrams whereas 53.5 % said they wanted the information explained verbally only. 50.5% of the respondents showed an interest to visit the same optician shop and 20.8% reported that they always wanted to visit the optometrists who has better clinical knowledge.

DISCUSSION

A total of 101 young adults aged between 18-35 years participated in this study. We found that majority of the participants (82%) responded in the factor 'information seeking' followed by 45.94% and 42.68% has responded in the factors 'other expectations' and 'style oriented' respectively. About 37% of the participants were interested in maintaining healthy eyesight and visited optometry clinics/hospitals regularly while about 31.33% of them reported some difficulties in visiting optometry practices and buying spectacle. Each of these factors explains different individual traits of younger adults of India towards purchasing spectacle and visiting optometry practices. This study has proved that young adults put more importance towards technical details of the lens (for e.g., their lenses should limit glare problem; the lenses should be scratch resistant etc.) more than other factors like style, fashion, cost of the product etc. Most of the participants were educated and were from High-Tech cities like Gurugram, Delhi, Kolkata etc. which we assumed to be one of the reason they have scored mostly in the factor 'information seeking'. Another reason we assumed that the participants were young and are more likely to use internet and digital gadgets more than any other adults aged beyond 35 years and are aware of the importance of using anti-glare coating, UV-protective coating etc. on lenses.

Individuals who responded mostly in 'Vision and eye health' would be more concerned about maintaining the health of their eyesight and obtaining the best possible vision. They would try to visit eye clinics and hospitals regularly as advised to maintain eye health. Those who scored highly in 'perceived difficulties' would have experienced some barriers mentally, physically, or economically in obtaining these goals, might be because of financial constraints, might be due to cosmetic reasons, or resistance to change their frames or lenses. Few of them believed that wearing a spectacle make them look old while some others reported that they cannot afford the lenses and change them frequently as it demands. Some of the participants of this study reported that eye care practitioners increases the power of their glasses every time they visit a clinic whereas some other has reported that some practitioners put more importance towards the cost of the product rather than suggesting good options according to clients' capability. This could be some of the reasons that clients do not want to visit an optometry clinic or an optical shop and most of them who has scored more in the factor 'Perceived difficulties' preferred online shopping as they get varieties of fashionable options at a very reasonable price. Hence, practitioners should pay more attention towards clients' expectations and requirements by asking simple questions and should advice glasses or frames according to their requirements.

Individuals who score highly on 'Style oriented' would put more concern on the appearance of their spectacle frames. They would mostly like to buy expensive designer frames or any other fashionable frames which might or might not be expensive. Most of the clients reported that they like to choose their frames on their own while some of the clients preferred buying the frames with the helps of family members and friends. Hence opticians should not jump into their own conclusion all the time and let their clients' decides on their own. The practitioners should advice only the necessary points unless the clients ask for help.

Some of the participants who has responded in the factor 'other expectations' wanted clinically experienced professionals to show them frames and lenses and most of them wanted the information to be presented verbally in front of them. Whereas some of the participants wanted the explanation to be presented using diagrams. Many of them wanted the opticians to share them messages if any new style comes out in market. Therefore, when a client visit any optometry practices or optical shops, it will be helpful if the practitioners ask some basic questions to the client like 'how do you want your information to be presented in front of you?' or like 'do you want us to text you the details of latest frames and lenses whenever something new comes out in market?'-it will make the client comfortable to open up and ask what they seek for. It will help to create a comfortable relationship between both the optician and the client and clients will more likely to visit the same optical shop or the same optometry practice.

By identifying the aspects of the eye examination and purchasing spectacles for which clients hold the highest value¹⁵ practitioners can give special importance in speaking or writing information that will be perceived by clients as being meaningful and personally relevant. This is likely to enhance client satisfaction.¹⁰ Clinician's communication skills and interpersonal manner feature prominently in clients' expectations for eyecare.⁵ Discussing lenses and frames with the consumers is likely to enhance satisfaction. Furthermore, practitioners with an awareness of clients' expectations are better able to meet the consumers' needs and undertake discussions regarding unrealistic expectations.¹⁷ With awareness of the five factors, clients can increase their knowledge for relevant discussions according to the consumers' needs and expectations, and that way practitioners can decrease clients' misunderstandings¹⁸ and there are no more chances of client's dissatisfaction with their new spectacles. In addition, this study highlighted the consumers' expectations towards clinical skills and interpersonal skills of the optometrists or opticians, regarding how they want the information about their eyesight and available options explained which will help the opticians to improve their skills of explanations and discussions with the consumers and will create more consumers' satisfaction. The study identified perceived barriers that make it difficult for some clients to purchase new spectacles. These included the expense of spectacles, not wishing to change of spectacle frames or lenses, concern about not seeing clearly with new spectacles, concerns about what the new glasses will look like and how their family or relatives would react. It may be possible to overcome some of these barriers by giving time in consultation or dispensing to identify clients perceived difficulties and providing appropriate information and reassurance. Clients who have avoiding characteristics may delay in visiting the optician. So practitioners could inform such clients the role of regular eye examinations in maintaining eye health and of the potential health risks which could harm their eyes to severe extents in some cases.

Limitations: This study included the people attending an optician/optometry practices. People who do not visit opticians are likely to have different attitudes and behavior, for example, they are likely to have greater avoiding characteristics. A further limitation of the study is that the results were obtained at a specific single time point and therefore it is not clear whether these attitudes and beliefs are stable or they change over time progress. Moreover, this study has only included 101 participants. Another study with a large number of sample sizes might be needed to evaluate whether these responses will be consistent even with large amount of sample size or will change with it.

CONCLUSION

This study is the first report of individual differences in attitudes and beliefs towards spectacle purchasing and visiting opticians held among young adults of India. The results could be helpful for the practitioners practicing in individual clinics, optical shop or in hospitals, in their selection of information for individual clients. To enhance clients' satisfaction, it is very necessary to find out the information about the clients' expectations and requirements. There are very little information known in Optometry practices about different attitudes of younger adults towards buying spectacle, and visiting optometry practices. This study has identified five factors which were labeled as style oriented, vision and eye health, perceived difficulties, information seeking and other expectations. The factor 'Style Oriented' reveals the importance of appearing fashionable or stylish, looking aesthetically pleasing in front of others, and seeking approval from others on this matter. 'Vision and eye health' relates to client's attitudes and opinion towards obtaining clear vision, maintaining healthy eyesight, regular visit to the optometry clinics etc. 'Perceived difficulties' describe the barriers associated with visiting an optician, optometrist and purchasing new spectacles. 'Information seeking' is concerned for the information on the technical details of lenses (for e.g. anti-glare coating, scratch resistant coating). The factor 'other expectations' are concerned about client's expectations towards clinical, communicational and interpersonal skills of the optician/optometrists. Practitioners could use this information to gain knowledge to meet the needs and address the expectations of individual clients. This could enhance clients' as well as practitioners' satisfaction in day to day optometry practices.

REFERENCES

1. Coulter A. Paternalism or partnership. *BMJ*, 1999; 319: 719–720.
2. Fiona Fylan et.al. Four different types of client attitudes towards purchasing spectacles in optometric practice, 2005 *Health Expectations*, 8, pp.18–25
3. Fylan F, Grunfeld EA. Information within optometric practice: comprehension, preferences and implications. *Ophthalmic and Physiological Optics*, 2002; 22: 333–340.
4. Fylan F, Grunfeld EA. Visual illusions? Beliefs and behaviours of presbyope clients in optometric practice. *Patient Education and Counseling*, in press.
5. Dawn AG, Santiago-Turla C, Lee PP. Patient expectations regarding eye care – focus group results. *Archives of Ophthalmology*, 2003; 121: 762–768.
6. Jeffrey L. Jackson et. al. Predictors of patient satisfaction. *Social Science and Medicine* 52 (2001) 609–620
7. Degner LF, Kristjanson LJ, Bowman D et al. Information needs and decisional preferences in women with breast cancer. *JAMA*, 1997; 277: 1485–1492.
8. Mojon-Azzi SM, Wagner U, Mojon DS. How wellinformed is the ophthalmology patient? *Klinische*
9. J. A. EBEIGBE, F. KIO and L. I. OKAFOR. ATTITUDE AND BELIEFS OF NIGERIAN UNDERGRADUATES TO SPECTACLE WEAR, *GHANA MEDICAL JOURNAL*, June 2013, Volume 47, Number 2
10. Jackson JL, Chamberlin J, Kronke K. Predictors of patient satisfaction. *Social Science and Medicine*, 2001; 52: 609–620.
11. Ajzen I, Madden TJ. Prediction of goal-directed behavior: attitudes, intentions and perceived behavioral control. *Journal of Experimental and Social Psychology*, 1986; 22: 453–474.
12. Cook AJ, Kerr GN, Moore K. Attitudes and intention towards purchasing GM food. *Journal of Economic Psychology*, 2002; 23: 557–572
13. Castanon Holguin A M, Congdon N, Patel N. Factors associated with spectacle wear compliance in school aged Mexican children. *Invest Ophthalmol Vis Sci*. 2006; 47 (3): 925-928
14. Fylan F, Grunfeld EA. Information within optometric practice: Comprehensions, preferences, and implications, *Ophthalmic Physiol Opt*. July'2002
15. Norman P. Health locus of control and health behaviour: an investigation into the role of health valued and behaviour-specific efficacy beliefs. *Personality and Individual Differences*, 1995; 18: 213–218
16. Edwards AGK, Elwyn GJ. How should effectiveness of risk communication to aid patients' decisions be judged? A review of the literature. *Medical Decision Making*, 1999; 19: 428–434.
17. Kravitz RL. Patients expectations for medical care: an expanded formulation based on review of the literature. *Medical Care Research Review*, 1996; 53: 3–27.
18. Britten N, Ukoumunne OC, Boulton MG. Patients' attitudes to medicines and expectations for prescriptions. *Health Expectations*, 2002; 5: 256–269.
19. Bell RA, Kravitz RL, Thom D, Krupat E, Azari R. Unmet expectations for care and the patient-physician relationship. *Journal of General Internal Medicine*, 2002; 17: 817–824.
20. Reinstein DZ, Dorward NL, Wormald RP et al. Correctable undetected visual acuity deficit in patients aged 65 and over attending an accident and emergency department. *British Journal of Ophthalmology*, 1993; 77: 293–296
21. Smeeth L, Fletcher AE, Hanciles S, Evans J, Wormald R. Screening older people for impaired vision in primary care: cluster randomised trial. *BMJ*, 2004; 327: 1027–1030.
22. Evans BJW, Rowlands G. Correctable visual impairment in older people: a major unmet need. *Ophthalmic and Physiological Optics*, 2004; 34: 161–180.