

## Analysis of the Factors Influencing Spectacles Non-adaptation in Optical Stores

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**Received:** November 04, 2022

**Published:** December 22, 2022

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### Abstract

"Giving a customer their eyeglasses are not the end of the matter; it may be the beginning of a problem for both the dispenser and the customer," This statement summarizes the concept of troubleshooting and the significance of a complete quality check prior to dispensing a pair of glasses. This emphasizes the importance of robust after-sales service to provide a patient with a comprehensive eye care experience.

**Aim:** The aim is to investigate potential causes of spectacle non-adaptation and returns in retail optical stores.

**Methods:** Intolerant Patients were requested to provide their concerns, refraction measures, frame type, and any other pertinent information. In addition, retrospective clinical data was collected to assess the quality of the eye exams.

**Result:** The data collected over three months was analyzed using Microsoft Excel. Seven per cent (7%) of customers returned with complaints in total. The ages of the oldest and youngest consumers ranged from 15 to 58, with a mean age of 36.5 years. The bulk of complaints was from individuals who wore progressive single-vision lenses and bifocals.

**Conclusion:** The present study concludes that paying close attention to particulars while dispensing a pair of glasses like lens fitting, anisometropia, aniseikonia, high refractive errors and lens enhancements.

**Keywords:** Non-Adaptation; Spectacles; Vision

### Introduction

Spectacle non-tolerance is the concern of both practitioners and patients. Frequent spectacle returns affects practitioners negatively [1]. The most common complaints made by patients following the dispensing of glasses are blurred vision at arm's length, headaches, short reading distances, ill-fitting frames, a feeling of weight or pulling when wearing spectacles due to decentring and the induced prismatic effect, distorted or tilted

images, awkward head positions for clear vision, diplopia, and cosmetic intolerance (mainly subjective and is best left to the patient to decide [2,3,5]). The primary objective of the study was to identify the most common reasons patients returned their new glasses. In addition, determine the average or customary return rates and compare them to the unacceptable rates of other studies. This study analysed intolerant cases in a large, independent optical outlet.

## Materials and Methods

The study is conducted in Hyderabad, India. All types of refractive error, including presbyopia, bifocals, and progressive addition lenses (PALs), were examined. Included individuals were between the ages of 15 and 60. Patients with any type of pathology were excluded. Among the total 250 pairs of glasses dispensed over three months, 19 patients returned their new spectacles. Initially, salespeople examined subjects with intolerance to determine if the dispensing issue had arisen in terms of production, frame fitting and lens alignment were the concerns that sales person would have addressed (bifocals and PALS) and been resolved. If the eyeglass prescription was determined to be accurate as per order, the patient was referred to an optometrist for a follow-up examination or intolerance test. As the sales team believed that the dispensing was accurate, an optometrist performed the recheck or non-tolerance inspection. On the datasheet, the practitioner was required to provide the patient's description, such as age, adaptation time, previous PAL usage, switching from bifocals to PALs, incorrect IPD measurements, incorrect axis orientation, near add power, adjustment of near reading distance, past and new prescriptions, and reissued prescriptions. The above factors can influence how well a person adapts to a new pair of glasses, whether they are progressive addition lenses, bifocals, or single vision lenses. To analyze the data, Microsoft Excel was utilized.

## Results and Discussion

The data acquired during three months were analyzed using Microsoft Excel. Seven per cent of the returning subjects, totaling 19 individuals, claimed that they had difficulty adjusting to the new eyewear. The ages of the oldest and youngest consumers ranged from 58 to 15, with a mean age of 36.5 years. The bulk of complaints was from individuals who wore progressive single-vision lenses and bifocals. The most common causes of intolerance were poor prescriptions, improper pupillary diameter, fitting, and acclimating to new eyewear.

In Beesley, *et al.* study 38 % of recheck frequency is a due change in cylindrical power in prescription. (4) In our study results similarly prescription errors account for 37%. In our study spectacle type has no effect as reported by Keay L., *et al.* [6]. Dispensing related issues account for 58% in our study contrary to 25% in Ragni Kumari., *et al.* study [7]. Non-tolerance to spectacle dispensed reported in the study account for 7% whereas 2.3% is

reported by Mwanza J.C., *et al.* [8]. The optical setup shows high non tolerance than the ophthalmologist setup in Mwanza J.C., *et al.* study [8]. Gender was not a factor for intolerance in our study similar to Priest, J. M., *et al.* study [9]. Dispensing-related issues wrong pupillary distance, and frame type was a major reason for 58% of in our study but account for only 22% in Ball G., *et al.* study when done in the bigger sample [10]. Various factors, such as age, adaptation time, previous PAL usage, switching from bifocals to PALs, incorrect IPD measurements, incorrect axis orientation, near add power, adjustment of near reading distance, etc., can influence how well a person adapts to a new pair of glasses, whether they are progressive addition lenses, bifocals, or single vision lenses [2].

## Conclusion

According to the present research, it is essential to pay close attention to a few specifics when dispensing glasses. The variables listed below could aid in reducing the prevalence of broad and common problems in eye care clinics. Wrong prescription, improper interpupillary distance, and last but not least poor counselling.

## Conflict of Interest

There is no any financial interest or any conflict of interest that exists.

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