Barriers to Seeking Regular Vision Exams in New York City’s Harlem Community

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Introduction

There is an increasing prevalence of visual impairment in the United States in all ethnic groups, especially given the increasing age of the population. Therefore, vision screenings are an important tool in allowing earlier intervention, leading to possible diagnoses and treatment. It is currently recommended for adults between the ages of 18 and 64 to have vision exams every 2 years, and annually for those with corrected vision or older. Based on our data from previous vision screenings within New York City’s Harlem community, 60% warranted referral to an ophthalmologist. There are many possible contributing factors as to why patients given referrals may not follow up, including cost, lack of insurance, lack of medical knowledge and overall comfort levels with going to the ophthalmologist. As delayed vision screening could potentially leave a time-sensitive condition undiagnosed for many years, the objective of this study was to assess lack of knowledge regarding ophthalmologists as barriers to seeking regular vision exams.

Methods

Screenings were provided in both English and Spanish around the Harlem community at 6 different locations (Figure 1). No-cost vision screenings were open to the public at large on a first come first served basis. The study included 108 people who were surveyed about their comfort level and knowledge associated with going to an ophthalmologist for a regular check-up. Figure 2 displays questions asked and recorded by volunteers including: demographics, health care access, comfort and knowledge associated with going to an ophthalmologist. A scoring system was developed to evaluate knowledge associated with going to an ophthalmologist for a regular check-up. Supplement 1 displays the possible points that participants could obtain with a maximum scoring of 8 points which indicated “optimal knowledge.” After estimating participants’ knowledge, we provided education about the various aspects of a vision exam emphasizing missed points, and explaining the importance of a regular comprehensive vision examination. Lastly, a post-comfort level associated with going to see an ophthalmologist was recorded.

Results

108 participants were surveyed with 8 exclusive due to being incomplete resulting in 100 surveys included in the study. Of the participants (n=100), 97% were minorities, 41% did not have optimal knowledge regarding vision exam, 15% had a positive increase in comfort after education, and 39% had a post due vision exam based on their respective situations. Figures 3-5 indicate show relevant data and relationships.

Figure 3: Relationship between knowledge and change in comfort after education. 32% of participants with suboptimal knowledge (n=41) had a positive change in comfort compared to 3% who had optimal knowledge (n=59). All values displayed as percentages.

Figure 4: Knowledge and change in comfort after education in relation with the timing of last vision exam. 23% and 54% of participants with a past due vision exam (n=38) had a positive change in comfort and suboptimal knowledge, respectively. 10% and 33% of participants with a non-past due vision exam (n=61) had a positive change in comfort and suboptimal knowledge, respectively. All values displayed as percentages.

Figure 5: Timing of previous vision exam and suboptimal knowledge in relation with medical insurance status. 34% and 38% of participants with medical insurance (n=85) had a past due vision exam and suboptimal knowledge, respectively. 67% and 60% of participants without medical insurance (n=15). All values displayed as percentages.

Conclusions

Participants with suboptimal knowledge with regards to what goes on at a vision exam were found more likely to leave an ophthalmologist appointment past due and become more comfortable after education and assurance that those with optimal knowledge. Conversely, participants with a past due vision exam were found to be more likely to have suboptimal knowledge about the vision exam thus having a decreased comfort and potential aversion. In addition, another potential barrier, medical insurance, was also confirmed. In this case, medical insurance was found to be associated with a lower likelihood of past due vision exams and suboptimal knowledge. New York City’s Harlem community is a minority-majority community which has some major public health issues. While this study was unable to attribute the high aversion rate towards ophthalmology visits to a single cause, it does prove lack of knowledge is a barrier that can easily be fixed via education and reassurance. Regardless of the presence of multiple other barriers including medical insurance, public and patient health education is a barrier that is easy to overcome by empowering people with knowledge.

References

1. AAO. US Eye Disease Statistics. [https://www.aoa.org/eye-disease-statistics]

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Acknowledgements:

The authors would like to thank our wonderful volunteers from the COTPIC group for gathering data at various health fairs.

The authors note that there are no conflicts of interest pertaining to this research.

Figure 1: Location of the 6 health fairs where this study was carried out.

Figure 2: Questionnaire. Both English and Spanish versions were available.