Author’s response to reviews

Title: Eye diseases: The neglected health condition among urban slum population of Dhaka, Bangladesh

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Eye diseases: The neglected health condition among urban slum population of Dhaka, Bangladesh

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Reviewer reports:

Sandra Franco, PhD (Reviewer 1): The authors have submitted a revised version of their work. However, there are some issues that are not yet well clarified.

Previous Comment1: The authors evaluated the refractive error of all the subjects. However, in the methods section they said that the examination included the assessment of visual acuity,
pupils, extra ocular motility and alignment, intraocular pressure, external examination, slit-lamp examination and fundoscopy. How the refractive error was assessed?

Response to reviewer: Thanks for your comment! In this study, qualified medical professionals (ophthalmologists) assessed refractive error of 432 study participants who attended tertiary hospital after performing comprehensive eye examination and reported the diagnosis in a form prepared by research team. Data entry and analysis was performed based on this diagnosis.

Response to authors: Thank you for your answer. However, even if the exams have been made by other professionals, the methods of exam should be known. Can the authors asked about the methods used to evaluate the refractive error? It was done by retinoscopy, subjective exam, auto refractor?

The definition of the refractive errors is correct but it is more important to know the value from which they have considered the existence of the refractive error. What values that were considered as emetropia?

Response to reviewer: Thanks for your comment! For this study, refractive error was assessed using ‘Autorefractor’. The value considered as emetropia was 6/6 vision. We have included this information in the latest revised version of manuscript as well.

Previous Comment 1.1: The visual acuity was measured with the subjects' best refraction?

Response to reviewer: Thanks for your comment! The visual acuity reported in this study was the presenting visual acuity, which was measured with the subjects’ best correction.

Response to authors: What the meaning of presenting Visual Acuity? It means that that is the VA presented by the participants with their habitual refraction? If so, it cannot be considered as the best corrected visual acuity.

Response to reviewer: Thanks! Visual acuity presented in this study was the presenting visual acuity obtained through presenting correction. But it is not best corrected visual acuity that is obtained by testing with pinhole.

Previous Comment 2.4: Why there several subjects that did not have a specific diagnosis about the refractive error?
Response to reviewer: Thanks! In this study, qualified medical professionals (ophthalmologists) diagnosed the cases of refractive error among our study participants and reported the name of diseases in a form prepared by research team. However, in some cases ophthalmologists made a general diagnosis, instead of more specific one. As data entry and analysis was done based on the diagnosis the ophthalmologists made, authors did not have scope to categorize refractive error further.

Response to reviewer: For this study, refractive error was assessed using autorefractor and 6/6 vision was considered as emetropia. Participants were considered as having myopia or hypermetropia when spherical equivalent refractive error was less than −0.50 dioptres or more than +0.50 dioptres respectively. However, in some cases ophthalmologists made a general diagnosis, instead of more specific one. As data entry and analysis was done based on the diagnosis the ophthalmologists made, authors did not have scope to categorize refractive error further.

Previous Comment 2.5: Without clarifying how the refractive error were diagnosed, the results about risk factors can be compromised.

Response to reviewer: Thanks for your comment! As the qualified medical professionals (ophthalmologists) assessed refractive error of our study participants after performing comprehensive eye examination in tertiary level hospitals, it is assured that the diagnosis was made following standard procedure and instruments. Refractive error data presented in this study is based on the diagnosis the ophthalmologists made.

Response to authors: In my opinion it is important to know how the refractive errors were evaluated. I do not question the work done by the ophthalmologist but, in my opinion, the way they have done it should be in the article.

For instance, the authors styed that "This prevalence was also higher than the prevalence that found in the National Blindness and Low Vision Survey of Bangladesh (42.7%) (1999-2000). It is possible that prevalence of refractive error has increased in Bangladesh during this 14-years period of time as a result of possible cohort effect documented in other studies." If the methods to diagnose refractive error were not the same, these can explain the difference between the two studies.

Response to reviewer: Thanks for your comment! For this study, refractive error was assessed using ‘Autorefractor’. Refractive error was also assessed using autorefractor in the National Blindness and Low Vision Survey of Bangladesh [Bourne, R. R., Dineen, B., Modasser Ali, S., Mohammed Noorul Huq, D., & Johnson, G. J. (2002). The National Blindness and Low Vision Prevalence Survey of Bangladesh: research design, eye examination methodology and results of the pilot study. Ophthalmic epidemiology, 9(2), 119-132.].