



SDI Review Form 1.6

Journal Name:	<u>British Journal of Medicine and Medical Research</u>
Manuscript Number:	2013_BJMMR_7518
Title of the Manuscript:	The association between near work and ametropia in a population-based study
Type of the Article	Original Research Article

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound.

To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

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PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Compulsory REVISION comments	<p>ABSTRACT Line 12: Cross River State. Line 13 – 14: 83 fifth year clinical medical students. Methodology: Author(s) should clarify what made the study a prospective one. Was the refractive error measurement taken for each subject once or repeatedly during the four months study period? This should be clarified and thus the study design employed. Are there 83 med students in the group or was any sampling done. If the former, the author(s) should state “all 83 Med students undertaking ophthalmology rotation were examined”.</p> <p>Line 24 – 26: “eight (9.6%) this statement needs to be rephrased to reflect what the author(s) intend(s) to communicate. Line 38: prolonged accommodation. Line 44: what does the author(s) mean by the phrase “...in our environment”? the author(s) should specify if this refers to a geographic location. Introduction: while the author(s) report that little is known about the relationship between reading and ametropia (more</p>	<p>Corrected Corrected It was prospective because the study was designed ahead of data collection.</p> <p>As each student reported for posting, 3 readings were taken at a sitting and an average was found. The averages for all students were then analysed. The entire class was made up of 83 students. They rotated through our department in 4 groups of about 20 students each. All 83 medical students undertaking ophthalmology rotation were examined.</p> <p>Corrected</p> <p>We meant African settings</p> <p>The topic has changed so was the introduction and as such your kind observation may not be applicable any more.</p>



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	<p>precisely myopia) in Africa, they should give a review of the vast body of evidence that abounds linking prolonged near work with myopia. This is reported to be the reason for the almost epidemic proportions of myopia in SE Asia countries of China, Singapore etc.</p> <p>PAGE 2</p> <p>METHODOLOGY:</p> <p>For the study design, see comments on methodology under the abstract. The relative small sample size (83) does not be sufficient power to measure what the author(s) set out to measure.</p> <p>The title stated that the study is population based. From the methodology, it is clear that the subjects were unselected "hospital patients". Except the author(s) is taken the fact that the medical students constitute a population. Even at that to so designate the study is population based is flawed.</p> <p>Line 54: Study involved fifth year clinical medical students ...</p> <p>Line 56: participants assented to ... or gave informed consent to participate in the study. Since the author(s) are presumed to be lecturers of these medical students, the ethical statement in the study should also indicate that participants were not coerced to be involved and that they could decline to participate without being penalized for doing so.</p> <p>Lines 69 – 70: What diagnostic label will be assigned if the RE had SE < +/- 0.50DS and the left eye had values > +/- 0.50D? Author(s)</p>	<p>The topic has changed based on the kind suggestions and observations of other reviewers. The tag "Population based" has been expunged.</p> <p>Corrected</p> <p>Corrected</p> <p>Based on study's definition, with SE < +/- 0.5, RE</p>
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	<p>should also designate the diagnostic label when there other forms of astigmatisms besides simple astigmatism. Consult the RESC protocol for guidance.</p> <p>Author(s) should indicate the unit of measurement of refractive errors and state values to the nearest quarter diopters to two decimal places.</p> <p>Lines 71 – 72: myopia < - 6.00D considered as low myopia is inconsistent with literature. Author(s) are advised to consult relevant texts for a uniform categorization of refractive errors in terms of magnitude of the error.</p> <p>RESULTS: The results as presented did show that the study investigated any association between near work and ametropia which is the subject matter of the study as the title suggests. Additionally, the inference that medical students are believed to do extensive near work are conjectural. This could have been cleared up if the study had inquired from study participants how much time they spend reading say per day or other such measure. The literature cited to give credence for the assertion are not sufficient basis for the author(s) to rely on in making their conclusion as per the title of the study. At best, the results presented reported the distribution of ametropia among 83 medical students.</p> <p>LINE 88: Male and female in lieu of boys and girls.</p> <p>Line 96: (difference of 2.00D between the two eyes).</p>	<p>is emmetropic. However, from +/- 0.50diopters and above and -0.50 diopter cylinder and above, it fulfills another criterion and so it is considered as mixed or compound astigmatism depending on the spherical correction. In the left eye, with SE > +/- 0.5, it fulfills a criterion and thus the eye is ametropic..</p> <p>Compound myopic or mixed astigmatism was diagnosed if cylindrical errors were associated with minus or plus spherical errors respectively. Units of refractive errors were in diopter spheres or diopter cylinders</p> <p>We meant -5.00D or less</p> <p>The topic has been changed to reflect the analysed parameters.</p> <p>The aim was to give an idea of the severity of</p>
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	<p>Lines 99 – 100: How was mean spherical equivalent for the two eyes computed? What significance does this measure portend? What does the author(s) mean by saying “this was statistically significant ...? What is significant statistically? This should be clarified.</p> <p>Lines 101 – 102: this needs more clarification to communicate what the author(s) intend to communicate. Linear regression cannot tell the difference between the ametropia present in each eye.</p> <p>Line 106: The proportion of use of correcting lenses should based on the total needing glasses i.e those with refractive errors rather than the total study sample.</p> <p>Figure 1: Author(s) should indicate the unit of the age of study participants.</p> <p>PAGE 8</p> <p>DISCUSSION: Sections of the discussion on the relationship between near work and ametropia relies so much on published literature. There is nowhere in the manuscript where the author(s) investigated this in his study. Not in the methodology nor the results. The discussion section should situate the results of the study in the light of published literature.</p> <p>Line 185 – 188: The position here is not supported by the literature cited.</p> <p>Astigmatism is thought to be relatively stable until in the elderly when it changes from WTR to ATR apparently due to the effect of the eyelids. This is the position supported by Gudmundsdottir et al. cited by the author(s).</p>	<p>refractive errors among these students. P value <0.05 was considered statistically significant as already mentioned under methodology.</p> <p>Multivariate linear regression was used with a age and sex covariates.</p> <p>Corrected</p> <p>Corrected</p> <p>The topic has changed to reflect the analysed parameters</p> <p>The cited publications were to establish that ATR astigmatism increases with age and WTR astigmatism decreases with age. This foundation was necessary in order to compare with the current study. All four authors: Liang-Hong et al,</p>
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		Gudmundottir, Fan et al and Attebo et al reported on the various parts of astigmatism lumped up as a sentence. Liang-Hong et al was mentioned for emphasis. The sentence has been rephrased to remove ambiguity.
<u>Minor</u> REVISION comments		
<u>Optional/General</u> comments	If the participants in this study are students of the author(s), they author(s) need to indicate in the ethical statement the fact participants were not coerced to participate and that declining to participate will not be counted against the students.	This has been addressed in the manuscript as you have graciously suggested.