Risk Factors Associated with the Occurrence of Refractive Errors among Secondary School Children in Malamulele Community, Limpopo Province.

By

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ABSTRACT

Objectives: This study was carried out to assess the risk factors associated with the occurrence of refractive errors among secondary school children in Malamulele community.

Methodology: This is a cross sectional study which was carried out in the year 2014 it targeted all school children registered in Malamulele secondary schools in Central Region. Primary sampling units are schools that were selected randomly. Secondary sampling units were the number of children who participated in the study and were enrolled in Grade 8 classes, from selected schools. A total of 290 children were distributed proportionately across the schools depending on the number in each school. The instrument used was a self-administered questionnaire which solicited information on personal information of the child, parental history of vision problems and the child's activity patterns. A Snellen Chart and an auto refractor were also used to obtain refractive errors (RE) of the participants. Data were analyzed using SPSS Version 22, where frequencies and descriptive statistics were computed. To find associations between variables, Chi square ($X^2$) test was performed.

Results: The prevalence of RE among the study population was found to be relatively high (24.9%). The high prevalence of RE among school children in Malamulele could be due to many factors. It may include hereditary characteristics shared within family members, environmental factors such as near work activity, may also explain the high prevalence especially that the studied group comprised school children who are subject to different environmental influences. Lack of awareness among population regarding the importance of vision test and the importance of RE correction could explain the high yield of the detected cases of refractive errors in this study.

Recommendations: Based on the research findings and conclusions of the study, the researcher recommends that parents, Department of Health and Department of Education must work together to ensure that Screening for RE among secondary school learners must be made mandatory and must also be part of the School Health
Promotion Programme. Awareness campaigns regarding the importance of RE, correction and the risk of uncorrected RE must be carried out annually.

Keywords: Risk factors, refractive errors, visual acuity