6. Pithon MM. Importance of the control group in scientific research. *Dental Press J Orthod*. 2013;18:13–14. https://doi.org/10.1590/s2176-94512013000600003.

Navneet Sharma[a], Mahendra Singh[b], Suraj Kumar Chaurasiya[b,*]

[a] *Department of Optometry, Chandigarh Group of Colleges, Jhanjeri, Mohali, Punjab 160047, India,*
[b] *Department of Optometry and Vision Science, CL Gupta Eye Institute, Moradabad, UP 244001, India,*

[*] Corresponding author at: C L Gupta Eye Institute, Ram Ganga Vihar Phase II (Extn.) Moradabad, Uttar Pradesh 244001, India.
*E-mail address:* csurajk414@gmail.com (S.K. Chaurasiya).

https://doi.org/10.1016/j.optom.2023.100509
1888-4296/


## Reply to Comment from Kumar et al. on: Prevalence of refractive error within a Portuguese sample of optometric records

We have read the Letter sent to the Editor about our previously published article entitled *Prevalence of refractive error within a Portuguese sample of optometric records*[1] written by *Kumar* and co-authors and we appreciate the time took to critically appraise the article.

However, we note that almost all the points raised had been previously acknowledged as limitations in our publication, and, in this way, we refer to the publication itself as an answer. Bellow we self-quote ("*italic*") our own writing on selection bias:

*"There are important limitations in this approach, and it is not intended to be considered as a source of epidemiological data comparable to population studies. The main limitation of this study is the fact that the selection of individuals (records) was conducted using non-probability sampling. The study is based on data obtained in clinical settings and may not reflect the population distribution. Likewise, by including individuals who attended the clinic, that is searching for eye care, one could have a selection bias. However, it allows to obtain results comparable to other approaches that are much more costly and time-consuming. Although it provides useful findings, this study design, as well as the non-probability sampling approach, limits extrapolation of those findings to the general population".*

Furthermore, we acknowledged that data collected in 2021 have limited comparability with previous studies published back in 2015 from previously collected data, as stated:

*"The temporal distance between the studies (2015 to 2021) is also an effect to consider, assuming that an increase in the prevalence of myopia for younger generations is expected over the years".*

The work provides the basic information in gender and age, in line with the previously defined goals of the study. Other aspects mentioned by *Kumar* such as socio-economic status, educational level, or ethnicity are known to influence refractive error but were out of the scope of the study as many other factors susceptible to influence the outcome.

In the beginning of the publication, we acknowledge that:

*"Although substantial variations in the estimates can compromise their interpretability and utility, clinical records and health care databases are important sources of information for estimating prevalence and incidence of eye care conditions and enable extensive study of its characteristics".*

Considering the scope of the study, the methodology and the inherent acknowledged limitations, we adopted a conservative approach in discussing the clinical implications of the findings or their implications for public health and eye care services.

### Conflicts of interest

The authors have no conflicts of interest to declare.

### Reference

1. Carneiro VLA, González-Méijome JM. Prevalence of refractive error within a Portuguese sample of optometric records. *J Optom*. 2023;16:245–251. https://doi.org/10.1016/j.optom.2023.04.001.

Vera L. Alves-Carneiro*, José M. González-Méijome

*Clinical and Experimental Optometry Research Lab, Center of Physics, University of Minho, Portugal*

[*] Corresponding author.
*E-mail address:* vera0carneiro@gmail.com
(V.L. Alves-Carneiro).

https://doi.org/10.1016/j.optom.2024.100513
1888-4296/