

## Optimizing literature search in systematic reviews: is MEDLINE sufficient for identifying effect studies on corneal properties and glaucoma?

*Otimizando a busca da literatura em revisões sistemáticas: MEDLINE é suficiente para identificar estudos de efeitos nas propriedades corneanas e no glaucoma?*

To the Editor:

We read with interest the article by Gaspar et al<sup>(1)</sup>, in which they provided evidence of the importance of corneal biomechanical properties in intraocular pressure interpretation, and we support further studies on the influence of corneal hysteresis and central corneal thickness in glaucoma screening and diagnosis. However, we would like to provide some cautionary remarks.

According to the authors, a review of the literature and meta-analysis of observational studies (2006-2016) were performed by searching MEDLINE. However, MEDLINE alone may not be sufficient for literature searches<sup>(2)</sup>. When conducting systematic reviews, it is essential to perform a comprehensive literature search to identify all the published studies relevant to the specific research question or topic<sup>(3)</sup>. According to the Cochrane Collaboration's Methodological Expectations of Cochrane Intervention Reviews, three main databases (MEDLINE, EMBASE, and CENTRAL) are mandatory electronic databases to search when performing a Cochrane Review<sup>(4)</sup>. Meta-analysis, as a method of producing evidence in the medical field since the 1990s, is gaining acceptance in more parts of the world. A high-quality system evaluation is an effort to search for all published

and unpublished studies to avoid deviation. From our experience, although major medical databases such as MEDLINE and EMBASE produce a high proportion of relevant research, we usually perform hand searches, scan reference lists, and communicate personally with experts as supplements.

In conclusion, we believe that MEDLINE alone is not sufficient for identifying all effect studies on corneal properties and glaucoma. In order to produce effective evidence for clinical research, we should make every effort to ensure that the literature is comprehensive. Therefore, we should increase the number of retrieval methods, including the addition of other databases for computer and manual retrievals.

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