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A systematic review on prevalence, risk factors, clinical diagnosis and medical management of dry eye disease in the Arab population

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Abstract

Background: Dry eye (DE) is a multifactorial disorder that can influence tear production, functional visual acuity and ultimately increase the osmolarity of the tear film. The prevalence of DE ranges from 7% to 33% across the world. However, to the best of our knowledge, the prevalence range of DE in Arab countries is not precisely documented in the literature. Aim: The aim of this article was to determine the prevalence range of DE, investigate the major risk factors of DE and identify the clinical diagnosis and medical management of DE. Method: In this study, only English language articles from 2017 to 2020 were selected. There were 52 articles on prevalence, risk factors, clinical diagnosis and medical management of DE in the Arab population. Results: The prevalence of DE in the Arab population varies in reports, from 10% in the United Arab Emirates (Dubai) to 69% in Palestine (West Bank). Gender difference (DE more in women), wearing of contact lenses, diabetes mellitus and glaucoma were all known to intensify the symptoms of DE. Lastly, there are two approaches to reduce DE in the Arab population, namely, pharmacologic and non-pharmacologic methods. Conclusion: The prevalence of DE in the Arab population was relatively high. In addition, the ocular surface disease index is one of the most common tools for the diagnosis of DE, whilst tear break-up time test is the common clinical test used in the Arab reports. Lastly, the most common treatment for DE is artificial tears. © 2021. The Author(s). Licensee: AOSIS. This work is licensed under the Creative Commons Attribution License.

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Arab population; artificial tears; contact lenses; dry eye; glaucoma

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