

## DRY EYE SYNDROME: A REVIEW ON PREVALENCE AND RISK FACTORS IN THE ARAB WORLD

Mohammed Aljarousha<sup>1,2</sup>, **Noor Ezailina Badarudin<sup>1\*</sup>**, Mohd Zulfaezal Che Azemin<sup>1</sup>, Yousef Aljeesh<sup>3</sup>, Amer Abuimara<sup>2</sup>, Muhammed Afzam Abdul Rahim<sup>1</sup>

<sup>1</sup>Department of Optometry and Visual Science, Kulliyah of Allied Health Sciences, International Islamic University Malaysia.

<sup>2</sup>Department of Optometry, Faculty of Health Science, Islamic University of Gaza.

<sup>3</sup>College of Nursing, Islamic University of Gaza.

\*Corresponding author's email: [ezai@iium.edu.my](mailto:ezai@iium.edu.my)

### ABSTRACT

**Background:** Previous data have shown that the prevalence of dry eye (DE) ranges from 5% to 50% worldwide. This review discussed the prevalence of DE and its risk factors within the Arab race.

**Methodology:** Keywords such as dry eye (disease or syndrome or pathology), (prevalence or epidemiological data), (major risk or influencing factors), (symptoms or questionnaires) and (signs or clinical tests); and Arab (countries or world or race or population) were searched on Google Scholar and PubMed in this review. Only the English language articles from 2017 to 2021 were selected which led to 53 articles reviewed.

**Results:** The prevalence of DE range from 10% in the United Arab Emirates (Dubai) to 69% in Palestine (West bank). The risk factors of DE in this region include age, gender, contact lenses wear, refractive operation, glaucoma, blepharitis, red eye, meibomian gland dysfunction, sicca syndrome, pterygium, ocular allergy and history of trachoma, topical glaucoma eye drops, biological drugs, arthritis, hypercholesterolemia, hypertension, diabetes mellitus, autoimmune disorders, smoking or passive smoking, computer or smartphone use, watching TV and continuous reading. In addition, the ocular surface disease index (OSDI) is one of the most common tools for diagnosis of DE while tear break up time test (TBUT) is the common clinical test used in the Arab reports.

**Conclusion:** The high prevalence of DE intrigued a systematic dry eye investigation to be conducted in the Arab region to explore methods in resolving the condition.