

[Home](#) > [Japanese Journal of Ophthalmology](#) > Article

Clinical Investigation | [Published: 28 January 2023](#)

Prevalence of dry eye syndrome and risk factors in physical education and sports science graduates

[Shigeki Murakami](#) , [Yoshimitsu Kohmura](#), [Yuki Someya](#), [Koya Suzuki](#), [Kenji Inoue](#), [Shiro Amano](#) & [Kazuhiro Aoki](#)

[Japanese Journal of Ophthalmology](#) **67**, 175–181 (2023)

216 Accesses | [Metrics](#)

Abstract:

Purpose: Worldwide, there have been few epidemiological studies of dry eye disease (DED) in populations with a common academic background. Therefore, the prevalence of DED and associated factors were evaluated in physical education and sports science graduates.

Study Design: Cross-sectional survey of prevalence and associated factors

Methods: A questionnaire about the diagnosis of DED and associated factors was mailed to 9,507 graduates of the Faculty of Health and Sports Science, Juntendo University. The questions covered subjective DED using Schaumberg et al.'s questionnaire and the prevalence of diagnosed DED. As associated factors, age, sex, smoking, alcohol consumption, body mass index, daily screen viewing time, and contact lens (CL) use were analyzed.

Results: A total of 2,048 valid responses were received. The prevalence of diagnosed DED was 2.9% in men and 9.3% in women. For subjective DED, it was 14.8% in men and 39.8% in women. The odds ratio for DED was high in men and women who used CLs and women whose daily screen viewing time was ≥ 4 h.

Conclusion: Both diagnosed and subjective DED were highly prevalent in men and women of all ages with a particularly high prevalence in those in their 20s and 30s. CL use was associated with DED in both men and women, and daily screen viewing time ≥ 4 h was associated in women only. Measures to deal with the factors that can be corrected might have a positive effect on the ocular health and quality of life of physical education and sports science graduates.