136. THE WORLDWIDE EPIDEMIOLOGY OF ROSACEA

Author: **Daniel Bolocan**
Co-author: Tatiana Caisîm
Scientific adviser: Vladislav Gogu MD, PhD, Associate Professor, Mircea Bețiu MD, PhD, Associate Professor, Department of Dermatovenerology *Nicolae Testemitanu* State University of Medicine and Pharmacy, Chisinau, Republic of Moldova

Introduction. Rosacea is a common, chronic disorder that can present with a variety of cutaneous or ocular manifestations. Skin involvement primarily affects the central face, with findings such as persistent centrofacial redness, papules, pustules, flushing, telangiectasia, and phymatous skin changes. Ocular involvement may also occur, manifesting with lid margin telangiectases, conjunctival injection, ocular irritation, or other signs and symptoms. The worldwide epidemiology of rosacea remains unknown, although it is a common condition associated with other diseases outside the skin.

Aim of the study. To perform a review of the published literature to examine the global epidemiology of rosacea.

Materials and methods. A systematic review of population-based and dermatological outpatient studies reporting frequency of rosacea was performed using three electronic medical databases: PubMed (7), Embase (5) and Web of Science (4)

Results. Rosacea affects mainly adults around the age of 30 years and classically predominates in females. Recent Estonian and Irish studies suggest that the female predominance may not be as high as previously believed. However, prevalence does increase with age. The prevalence statistics published in Europe and the United States are highly variable, ranging from less than 1% to more than 20% of the adult population. Rosacea has been reported in countries whose populations have significant proportions of people with skin of color throughout Africa, Asia, and South America, with rates up to 10%.Although only 15 cases of rosacea were observed in a South African dermatology clinic over an 8-year period, during which 6700 patients were examined, all of these cases occurred in patients with Fitzpatrick skin phototype V(Dlova, N.C. and Mosam, Clin Exp Dermatol. 2017) Likewise, an epidemiologic study in Colombia reported a rosacea prevalence of <3%, but ~12% of the 291 patients with rosacea had Fitzpatrick skin phototype IV or V (Rueda, L.J., Motta, A., Pabon, Int J Dermatol. 2017) . An even greater percentage was revealed in a study of 168 Korean patients with rosacea; nearly 40% of these patients had Fitzpatrick skin phototype IV or V (Bae, Y.I., Yun, S.J., Lee, J.B., Kim, S.J., Won, Y.H., and Lee, S.C. Ann Dermatol. 2009). Rosacea diagnosis in patients with darker skin has also been reported in European countries. An analysis of 348 workers in Estonia showed a 20% prevalence of rosacea, with 55% of cases occurring in patients with Fitzpatrick skin phototypes I and II, as would be expected.Also, the Estonian study also showed that ~38% of the patients had Fitzpatrick skin phototype III and 7% had phototype IV.

Conclusions. Estimated worldwide epidemiology of rosacea based on published data and found that 5-46% of the adult population is affected. However, the prevalence of rosacea depended on the diagnostic method, with higher estimates in questionnaire studies of rosacea symptoms and lower estimates in health registries with International Classification of Diseases codes.

Key words: Rosacea; worldwide epidemiology.