



## Letter to the Editor

# Epidemiological situation of psoriasis in Colombia

## Situación epidemiológica de la psoriasis en Colombia



Mr. Editor:

Psoriasis is a chronic, immune-mediated disease that seriously affects quality of life, and there are no formal data on its prevalence, incidence, and demographics in Colombia. The objective of this letter is to review the available literature related to the epidemiology of this disease in the country, as well as to propose perspectives for future research.

### Epidemiology

Estimates from classic studies refer that 2–4% of the population in Western countries are affected by this disease, with variation according to the gender, age, ethnicity, geographical location, genetic susceptibility and environmental factors, in such a way that the prevalence can range between 0.5 and 11.4%.<sup>1–3</sup> The data in Latin America are scarce, however, it is known that the estimated average regional prevalence for 2009 was 2.1%.<sup>4,5</sup>

Recently, a systematic review, which consisted of a meta-analysis and the application of a Bayesian inference model, conducted by the Global Psoriasis Atlas group, estimated that for Colombia, the prevalence of the disease in the general population with a medical-dermatological diagnosis was 0.54% (95% CI 0.13–2.37), while the prevalence in the general population with a self-reported diagnosis ranged from 1.03% (95% CI 0.25–4.33); however, it is possible that these data reflect an underestimation of the true prevalence, given that only 19% of the countries had epidemiological information on the disease.<sup>6</sup>

Other studies have reported for Colombia an estimate similar to that of Latin America, corresponding to 2% in the periods 2012 ( $n=959,971$ ) and 2005–2014 ( $n=960,000$ ).<sup>7,8</sup>

Hernández et al., based on a national database, estimated for the period 2010–2015 ( $n=19,735$ ) an average prevalence of 4.2 per 10,000 persons-year; in addition, it was found that the

department of Antioquia accounted for the highest prevalence of psoriasis, with 7.4 cases per 10,000 persons-year.<sup>9</sup>

In addition, patients with psoriasis have a high burden of cardiovascular, metabolic, articular and psychosocial comorbidities.<sup>10</sup> Comorbid conditions directly impact quality of life and some of them become more important because they represent a higher risk of disability and mortality.<sup>11</sup> Of special interest to this journal, the prevalence of psoriatic arthritis in patients with psoriasis usually varies between 20 and 30%, manifesting itself after the skin lesions.<sup>12</sup> However, the few studies in Colombia have reported an affection of 19.2% for psoriatic arthritis<sup>13</sup> and of 1% for rheumatoid arthritis in these patients.<sup>14</sup>

### Research perspectives for the future

In Colombia, it has been possible to carry out research in the field of psoriasis; however, despite the important advances, there is a deficit in understanding the disease and its impact on the population, which requires research in many areas. Research priorities include understanding the genetic susceptibility in the population, which is why it is important to identify the molecular pathways and biomarkers of inflammation in order to target the therapies. Furthermore, large-scale prospective epidemiological studies that contribute to strengthening prevalence, incidence and demographic data are necessary, as well as the creation of a national-scale patient database. Although the studies on quality of life are becoming more and more visible, it is important to evaluate the psychological interventions on the impact of the disease and the social affectation. It is important to conduct an early study of the risk factors—*infectious agents, smoking, alcohol consumption, diet, obesity and consumption of some medications*—in relation to the onset of the disease, as well as to investigate on cardiovascular, metabolic, articular and psychosocial comorbidities. Studies that evaluate the cost

**Table 1 – Studies of epidemiological characterization of psoriasis in Colombia.**

Author, year	Period	n	Mean age (years)	Sex, n (%)	
				Female	Male
González et al., 2009 <sup>15</sup>	2007–2008	86	54.5	33 (38.4)	53 (61.6)
Vélez et al., 2011 <sup>16</sup>	2006–2009	93	45	40 (43)	53 (57)
Castro-Ayarza et al., 2017 <sup>14</sup>	2011–2013	793	46	365 (46)	428 (54)
Palmezano Diaz et al., 2018 <sup>17</sup>	2012–2016	158	52 <sup>a</sup>	80 (50.6)	78 (49.4)
Ortega-Hernández et al., 2018 <sup>18</sup>	1976–2016	1473	38.3	909 (61.7)	564 (38.3)

<sup>a</sup> Median.

and burden of the disease, education of the patient, access to treatment, evaluations of the cost-effectiveness of therapies, as well as the economic burden for the patient and the health system are also required.

## Discussion and conclusions

Despite the existing under-registration, the incidence and prevalence of psoriasis worldwide have increased in recent years, which implies a serious global health problem; it is possible that Colombia is in that situation. The information available in the country comes from studies of clinical or epidemiological characterization, many of them based on the practice of care. More research on the understanding of the epidemiology of psoriasis on a global scale, especially in Colombia, is required. The lack of epidemiological studies and on the burden of the disease for the society constitutes one of the limitations for the creation of public policies and political decision-making; therefore, conducting studies on the prevalence, comorbidities and impact of psoriasis could improve the perspective of timely care, access to appropriate treatment and increased awareness of the disease. Table 1 summarizes some studies of epidemiological characterization conducted in the country.

## Funding

This research did not require any funding.

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2444-4405/

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<https://doi.org/10.1016/j.rcreue.2021.09.002>