RESEARCH LETTER

Forget About Social Determinants when Addressing Adherence to Topical Antipsoriatic Drugs

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To the Editor,

Recently, Christensen et al. (1) conducted a literature search and found that only 0.058% of research in dermatology addresses social determinants of health (SDoH). Furthermore, dermatology was ranked 30th out of 35 medical specialties in addressing SDoH. The authors called for more research on how SDoH influences dermatological conditions (1), supported by the World Health Organization, which estimates that social factors are the single most influential factor impacting mortality (2).

Psoriasis is one of the most common inflammatory dermatoses, affecting 125 million people worldwide (3). For decades, topical antipsoriatic drugs containing corticosteroids and/or calcipotriol have been the recommended first-line treatment and are also used as adjunct therapy for patients with severe psoriasis who are candidates for systemic treatments or biologics (4, 5). However, low adherence to these treatments limits their success (6). Therefore, we found it essential to investigate whether SDoH influence adherence to topical drugs in patients with psoriasis, to determine whether adherence-improving interventions should be targeted towards specific groups at risk of non-adherence.

Our research group has conducted 2 subgroup analyses from randomized controlled trials to investigate the influence of SDoH on adherence to topical drugs. We analysed data from 214 complete cases involving patients with psoriasis who used topical medications containing various formulations of moderate-to-potent corticosteroids and/or calcipotriol for up to 48 weeks. Adherence was measured using the weight of medication, patient reports, chip monitors, and filled prescriptions (7, 8). We examined dichotomized adherence measures (with patients considered adherent if their adherence rate was 80% or higher) in relation to sociodemographic factors.

Overall, we found no clear associations between SDoH and adherence to topical drugs. In a study measuring adherence over a 48-week treatment period (7), there was a modest negative association between having further education and adherence, but only when assessed by primary adherence. Conversely, there was a positive association between being a woman and adherence, but only when assessed by weight. Additionally, being a smoker was positively associated with reporting good adherence. In another study measuring adherence over a 4-week treatment period (8), there were only weak positive associations between being over 50 years old and adherence, but only when assessed by weight or self-report.

The few statistically significant correlations found by weight or filled prescriptions may be attributed to more educated individuals questioning the use of corticosteroids, while older patients might find it more bothersome to take medications (7). Additionally, the discrete positive statistically significant correlations between age and adherence to treatment found by weight or self-report could be explained by older patients wanting to present a better appearance to their physician, potentially exaggerating their adherence rates and applying a thicker layer of the topical treatment product (8).

Low adherence to topical drugs is a universal issue that hinders their efficacy across all groups of patients with psoriasis. SDoH do not clearly influence adherence to topical treatment in these patients. If healthcare professionals assume that certain groups, such as women or well-educated individuals, are more adherent, it may result in less focus on ensuring adherence in these groups, potentially leading to poorer outcomes.

Christensen et al. (1) highlight a knowledge gap in dermatology research regarding the impact of SDoH on dermatological conditions. Further research in SDoH has great potential for disease prevention and addressing disparities among different social groups. However, researchers should focus on areas where further insight is needed.

Adherence to topical treatment remains a significant challenge for most patients with psoriasis. Instead of focusing on how SDoH impacts adherence, we encourage dermatologists, healthcare personnel, and the healthcare system to improve adherence in all topically treated patients. This can be achieved by providing regular, long-term support to patients, regardless of their sociodemographic status.

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