Socio-demographic factors do not have a large influence on psoriasis patients’ adherence to topical treatment

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Dear Editor, Topical drugs containing corticosteroids are the most frequently used treatments for mild-to-moderate psoriasis, but adherence rates to topical drugs are low and up to 80% of psoriasis patients are classified as non-adherent, which present a barrier to treatment success.

Barriers to treatment adherence can be divided into socio-demographic, healthcare, disease, treatment, and patient-related factors. In a prospective study by Zaghloul et al., adherence to unspecified topical and systemic antipsoriatic drugs was investigated by counting pills or weighing medication bottles; lower adherence was associated with being single, male, or unemployed.

We investigated how socio-demographic factors influenced adherence to a topical antipsoriatic drug, by applying a post hoc analysis of a dataset obtained from a randomized controlled trial including 134 Danish patients with mild-to-moderate psoriasis. The primary objective of the trial was to investigate whether the use of an adherence-supporting smartphone application (app) could improve adherence to once-daily use of topical calcipotriol/...
Betamethasone dipropionate (Cal/BD) cutaneous foam for 4 weeks. Adherence measurements were obtained by objective electronic monitors in medication container, the weight of medication used, and self-reported adherence.

The associations between the adherence measurements and socio-demographic factors were investigated using multivariate linear regressions, which we adjusted for the intervention (use of the app in the trial). Furthermore, we investigated the dichotomized adherence measures (with patients considered adherent according to an adherence rate cut-off of 80%), with respect to the same socio-demographic factors using multivariate logistic regression, and analyses were repeated with missing outcomes imputed 100 times by multiple imputation on the logarithms of the three adherence measures.

There was no significant association between socio-demographic factors and objectively assessed adherence to topical treatment (Fig. 1). There were weak positive associations between age >50 years and adherence only when assessed by weight (b = 0.421 [0.122, 0.720], p=0.006) or by self-report (b = 0.099 [0.016, 0.182], p=0.02). The imputed analyses were consistent with the main analyses.

The marginal positive statistically significant correlations between age and adherence to treatment were only found for adherence measured by weight or reported by patient, which could be due to statistical chance. Another explanation could be older patients might want to provide a better appearance for their physician and exaggerate their adherence rates and also apply a thicker layer of the topical treatment product.

Poor adherence to topical treatment is ubiquitous and a potential barrier to treatment effect in all groups of patients. Socio-demographic factors do not have a large influence on psoriasis patients’ adherence to treatment with topical Cal/BD cutaneous foam. Viewing nonadherence to medication as an outcome of patient belief and understanding of the treatment, 

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limited personal coping resources and a need for physicians adequately addressing poor adherence\(^8\) may help to explain medication nonadherence.

Measures to improve adherence may be the best way to improve patients’ treatment outcomes, and research is needed on new approaches to enhance adherence, irrespective of our patients’ socio-demographic status.

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References


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