Abstract

Using a Digital Approach to Improving Mental Health in Adults With Self-reported Psoriasis: An Analysis of Real-world User Data

Eliane Boucher, PhD; Ryan Honomicl, PhD; Murray Zucker, MD
Happify Health, New York, NY, United States

Corresponding Author:
Eliane Boucher, PhD
Happify Health
114 Fifth Avenue
10th Floor
New York, NY, 10011
United States
Phone: 1 432 258 5233
Email: eliane@happify.com

Abstract

Background: Visible scales and perceived stigma often lead to feelings of embarrassment, shame, low self-esteem, and self-consciousness among people with psoriasis. Beyond the negative effects of this distress on mental health, some researchers also argue that the inflammatory response caused by psoriasis predisposes patients with psoriasis to mental health conditions like depression. Given that anxiety and depression are linked to higher disease activity and pain in patients with psoriasis, researchers have argued that an important component of any psoriasis management plan should include addressing mental health. However, a shortage of mental health professionals, particularly in low income and rural areas, makes access to mental health care more challenging than many other common referrals—a problem that has been exacerbated in light of the COVID-19 pandemic.

Objective: This study aims to explore the feasibility of using a digital mental health intervention to help improve subjective well-being and anxiety among adults with self-reported psoriasis.

Methods: Real-world users who signed up for the digital wellness program, Happify, between January 1, 2017, and June 10, 2021, and who reported having psoriasis during onboarding were included in this analysis. To qualify, users had to complete at least two in-app assessments (which include a proprietary measure of subjective well-being, the Happify Scale, and the Generalized Anxiety Disorder 2 scale to measure anxiety), complete at least 1 Happify activity, complete no more than 3 activities before taking their first assessment, and had to have at least 42 days between their first and last assessment. We examined changes in well-being and anxiety among these participants based on Happify use (recommended vs less than recommended).

Results: Users who engaged with the program at the recommended level experienced significantly greater improvements in both well-being ($P<.001$) and anxiety ($P=.01$). More specifically, users who completed the recommended number of activities improved their well-being scores by 26.8%, whereas users who completed fewer activities improved their well-being scores by only 4.11%. Similarly, users who completed the recommended number of activities improved their anxiety scores by 26.64%, compared to 8.15% among those who engaged below the recommended level.

Conclusions: These data suggest that a digital mental health intervention can effectively improve both subjective well-being and anxiety among patients with psoriasis when used at the recommended level. Although future research is required to better understand whether this subsequently impacts disease-specific outcomes, such as disease activity and pain, our data suggest that a digital approach may be one method of providing greater access to mental health support for patients with psoriasis, increasing the likelihood that it can be incorporated into their treatment plan.

Conflicts of Interest: None declared.

 doi: 10.2196/39399

KEYWORDS
psoriasis; mental health; digital mental health interventions