Uncovering patient-reported outcome differences between undiagnosed and diagnosed individuals with moderate to severe psoriasis

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Introduction

- Psoriasis is a chronic, immune-mediated inflammatory condition characterized by inflamed, scaly lesions that can affect any area of the skin.[1]
- More than 8 million people in the US have psoriasis.[2]
- Individuals with moderate to severe psoriasis have greater negative impact on their quality of life compared to those without psoriasis.[3]
- Undiagnosed individuals with psoriasis have a greater negative impact on their quality of life when compared to individuals with diagnosed psoriasis in the US.[4]

Objectives

The current study aimed to compare demographics and patient-reported outcomes (health-related quality of life [HRQoL] and work productivity and activity impairment [WPAI]) between diagnosed and treated vs. experiencing but undiagnosed individuals with moderate to severe psoriasis in the US.

Methods

Data Source

A cross-sectional analysis was conducted using data from the 2021 US National Health and Wellness Survey (NHWS). The NHWS is, an online patient-reported outcomes survey administered to adults in United States (N= 75,098) that is age-, sex-, race/ethnicity representative of the general population.

Sample

- Resident of the US
- Aged ≥18 years
- Self-reported experiencing moderate to severe psoriasis
- Stratified as having a physician diagnosis and use prescriptions (Rx) vs. not having a physician diagnosis

Measures

Demographics	Health Characteristics	Patient Reported Outcomes
Age	Obesity (as defined by body mass index)	SF-36v2[5,8]
Gender	Experience of psoriatic arthritis	- Physical Component Summary Scores (PCS)
Race/Ethnicity	Experience of COVID-19	- Mental Component Summary Scores (MCS)
Employment Status	Charlson Comorbidity Index (CCI)[5]	- SF-6D Health Utilities Index
		Work Productivity and Activity Impairment Questionnaire (WPAI)[7]

Statistical Analyses

Unadjusted comparisons of patient demographic and patient reported outcomes between groups were conducted using chi-square tests and ANOVA tests for categorical and continuous variables, respectively. Two-sided p-values <0.05 were considered statistically significant.

Results

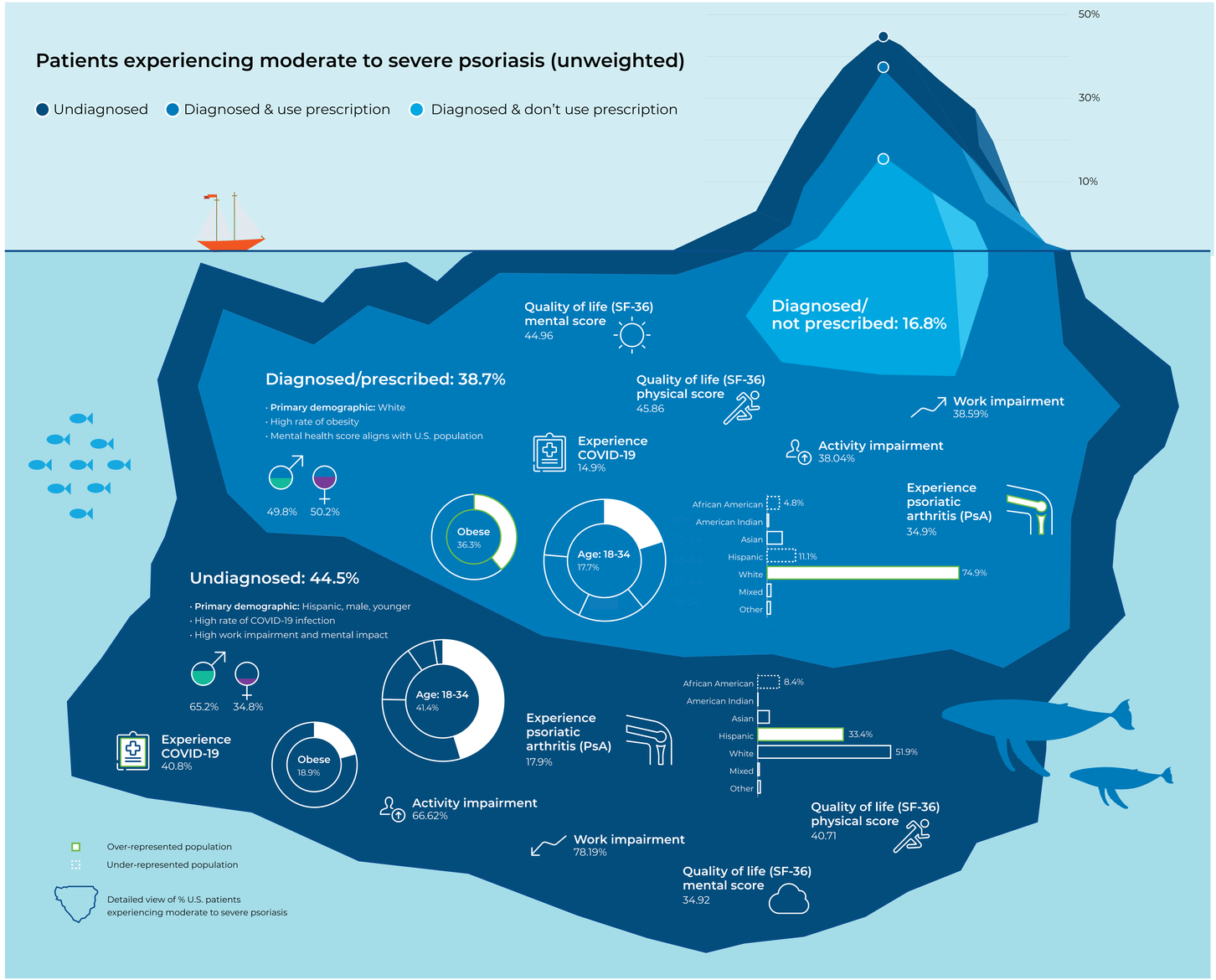
Patient Demographics and Health Characteristics

Among individuals with moderate/severe psoriasis individuals in the US, a total of 673 were diagnosed and treated ("diagnosed Rx") whereas 775 were experiencing psoriasis but not diagnosed ("undiagnosed"). Those who were undiagnosed tended to be younger with 41.4% falling into the 18-34 age bracket compared with 17.7% 'diagnosed Rx' patients (p<0.001). The undiagnosed group compared with the diagnosed group had an overrepresentation of Hispanics (33.4%, p<0.001) and leaned towards male (65.2%, p<0.001). In comparison to the undiagnosed, the diagnosed Rx group had an overrepresentation of White patients (74.9%, p<0.001). 78.8% of undiagnosed individuals reported some form of employment compared with 59.8% of diagnosed patients (p<0.001).

'Diagnosed Rx' patients were more likely to be obese (36.3% vs 18.9%, p<0.0001) and experience psoriatic arthritis (34.9% vs 17.9%, p<0.001) than those who were undiagnosed. However, undiagnosed individuals experienced COVID-19 at a higher rate than diagnosed Rx patients (40.8% vs 14.9%, p<0.001). Mean CCI scores were higher among undiagnosed than diagnosed Rx patients (1.31 vs. 1.0; p=0.004).

Patient Reported Outcomes

Undiagnosed individuals had worse mental component summary scores (34.92 vs 44.96, p<0.001) and physical component scores (40.71 vs 45.86, p<0.001); differences exceeded minimally important difference for these measures. SF-6D health utilities index scores were also lower among undiagnosed vs. diagnosed Rx patients (0.53 vs. 0.66; p<0.001). There was also greater overall work impairment (78.19% vs 38.59%, p<0.001) compared with diagnosed Rx patients. Activity impairment was also significantly higher (66.62% vs 38.04%, p<0.001).



Conclusions

Undiagnosed psoriasis individuals had higher work impairment and lower HRQoL (both mental and physical) compared with diagnosed and prescription treated psoriasis patients in the US. Improvements in diagnosis rates and treatment rates may help alleviate some of the burdens experienced by patients with psoriasis.

Limitations

All data in this study come from a self-reported patient survey. Therefore, the responses are subject to recall bias and cannot be validated using claims or medical chart data. Great care is taken to ensure that the NHWS is nationally representative, in terms of respondent age, gender, and race. However, this psoriasis population may not be representative of all; this online psoriasis patient sample may not generalize to all psoriasis populations patients. (i.e., ex-US populations or populations with infrequent internet access).

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