Mental Health and Well-Being Support for Individuals Living With Skin Conditions: A Global Landscape Analysis of Patient Needs and Current Resources

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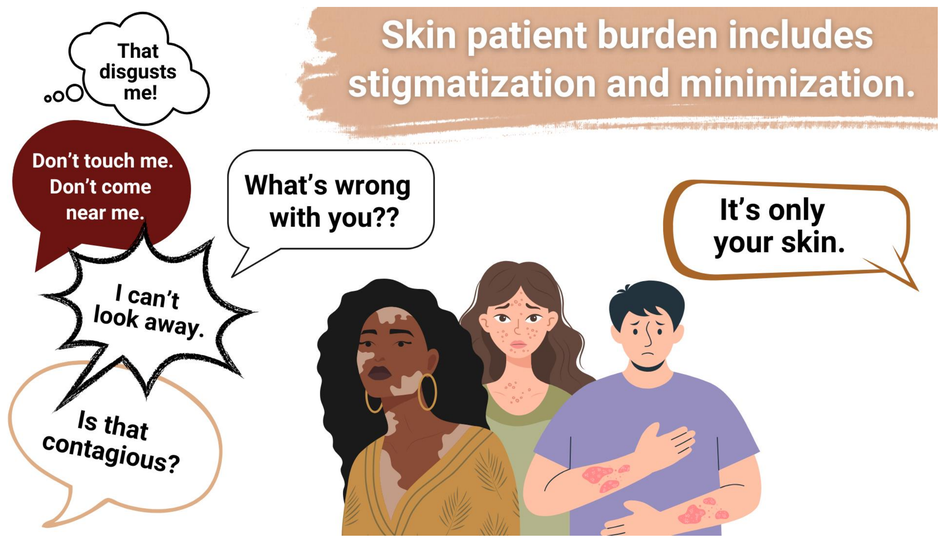
Background & Objectives

The consequences on mental health and well-being for skin disease patients are often detrimental, impacting the ability to conduct routine daily activities and engage socially. Given the prevalence of dermatological conditions, it is critical that resources are available to address these needs.

This study aimed to identify what types of resources exist to support mental health and well-being for individuals with skin conditions, and understand optimal, globally inclusive ways to provide this support.



Materials and Methods

- Academic literature review for articles published within the last 10 years using combinations of relevant medical subject headings/keywords such as dermatology, psychodermatology, mental health, psychological health, skin, depression, etc.
- Grey literature review/environmental scan for websites, reports, documents and presentations regarding the topic
- Connecting with groups and organizations that have contributed to mental health resources

Results

We identified 26 patient advocacy websites featuring mental health and well-being resources. We reviewed the methods of support delivery considering sensitivity to mental health-related stigma and cultural beliefs and lifestyles across six world regions. Many resources originated in the UK where several different groups and organizations have studied the impact of skin conditions on mental health and well-being and advocated for improved supports.

Regional Insights

Africa

- Community-based mental health interventions like **group interpersonal psychotherapy**
- **Integrating local leaders** and **gender-sensitive approaches**

Americas

- **Community-focused, culturally tailored interventions**, such as programs delivered by **trained laypersons**
- Efforts to **increase accessibility and customize** services for diverse populations

Eastern Mediterranean

- The WHO's digital intervention, Step-by-Step, has shown success in reducing depression among displaced populations
- **Local, culturally sensitive initiatives and online** programs offer viable solutions

Europe

- Given the region's cultural diversity, **online mental health interventions and more accessible care**

South-East Asia

- Low-cost interventions, such as **peer support and teletherapy**, are promising solutions, especially with the involvement of **trained laypersons.**
- **Digital health technologies** offer opportunities for scalable mental health care

Western Pacific

- **Digital platforms**, supported by the high smartphone penetration, offer a potential solution for delivering mental health care, though challenges like limited internet access in rural areas and digital literacy gaps need to be overcome.
- **Community-based tools** may also help reach underserved populations.

Conclusion

This study can help us improve care for the mental health and well-being of those with skin conditions. Recommendations for the future include:

- **Resource Evaluation**: Assess the effectiveness of existing resources.
- **Adaptation for Local Needs**: Ensure resources align with regional cultural beliefs and societal norms.
- **Expansion**: Expand resources to underserved regions and tailor them for global applicability.

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Patient-Reported Impact of Dermatological Diseases and Mental Health

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INTRODUCTION

While the prevalences for depression and anxiety disorders are estimated at 3.8% and 4% of the global population, these can ascend to 30% in the dermatology population.

Variables related to disease and treatment play a proven, yet minor, role in explaining the high rates of psychiatric comorbidity, and, thus, additional psychological and social risk factors need to be identified.

Using a newly developed and validated tool – *Patient-Reported Impact of Dermatological Diseases (PRIDD)* – this study examined the associations between clinical characteristics, disease burden, and patient-reported outcomes (PROs) of mental health.

METHODS

Study design: Cross-sectional data from Survey 1 from the Global Research on the Impact of Dermatological Diseases (GRIDD) study was analyzed. The online survey was available in 17 different languages and conducted between June 2023 and January 2024.

Participants: Eligible participants were adults (≥ 18 years) with self-reported dermatological conditions, recruited through patient organizations and social media platforms.

Variables and measures:

- Socio-demographic and clinical questionnaire

Disease impact

PRIDD Patient-Reported Impact of Dermatological Diseases — total score range from 0 (no impact) to 64 (max. impact)

Depression

Patient Health Questionnaire (PHQ-9): score range from 0 to 27; higher scores indicate higher severity of depression

Anxiety

General Anxiety Disorder (GAD-7): score range from 0 to 21; higher scores indicate higher severity of anxiety

CONCLUSION

These results emphasize the importance of **capturing the multidimensional burden of skin conditions** on patients' lives, as it is a significant risk factor for psychiatric comorbidity.

The psychological and social impact of dermatological diseases should be assessed and managed in **multidisciplinary primary and secondary care** of dermatology patients.

RESULTS

Participants: In total, 4138 participants completed the GRIDD survey and 3680 were retained for analyses, after excluding those who did not meet the inclusion criteria or had missing data in core variables. Participants were 76.4% female, mean age of 48.7 ± 15.7 years (range 18-98), from 87 different countries, and across 114 dermatological conditions (e.g., 12.8% Lichen Sclerosus, 12.3% Psoriasis, 8.2% Hidradenitis Suppurativa, 7.5% Atopic Dermatitis, 6.9% Vitiligo).

Prevalence of psychiatric comorbidities:

Using the cut-off point PHQ-9 score ≥ 10 (sensitivity = 88%; specificity = 85%), 1349 (36.7%) patients presented clinically significant symptoms of depression (Table 1).

Using the cut-off point GAD-7 score ≥ 10 (sensitivity = 89%; specificity = 82%), 956 (26.0%) patients presented clinically significant symptoms of anxiety (Table 2).

Table 1 | N. of participants by depression severity categories

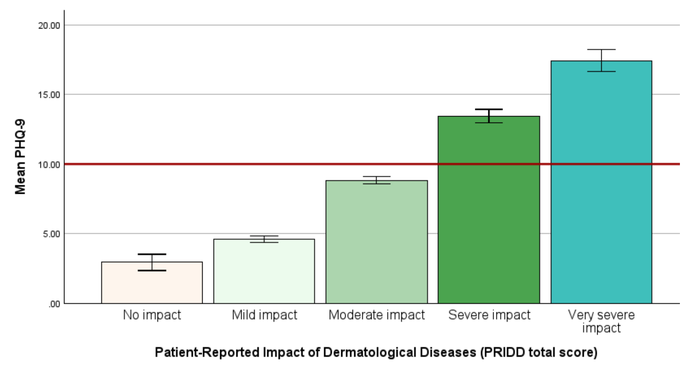
PHQ-9 scores	n	%
Minimal depression (0-4)	1115	30.3
Mild depression (5-9)	1216	33.0
Moderate depression (10-14)	681	18.5
Moderately severe depression (15-19)	418	11.4
Severe depression (20-27)	250	6.8
Total	3680	100.0

Table 2 | N. of participants by anxiety severity categories

GAD-7 scores	n	%
Minimal anxiety (0-4)	1446	39.3
Mild anxiety (5-9)	1278	34.7
Moderate anxiety (10-14)	545	14.8
Severe anxiety (15-21)	411	11.2
Total	3680	100.0

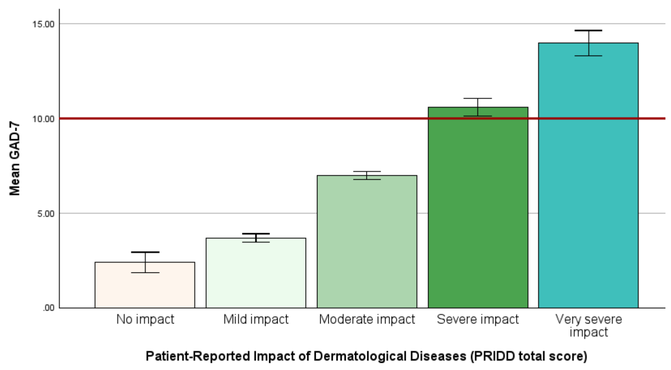
Associations between patient-reported impact of dermatological diseases and mental health: Higher impact of the dermatological condition on patients' lives was moderately associated with higher severity of depression (r = 0.618) and anxiety symptoms (r = 561). Patients who reported severe and very severe disease burden also reported, on average, clinically significant depression and anxiety problems (Figures 1 and 2).

Figure 1. Depression symptoms by disease impact category (PRIDD total score)



Error bars: 95% CI. PRIDD total score banding: 0.00 to 14.01 = no impact; 15.04 to 25.73 = mild impact; 26.14 to 34.26 = moderate impact; 34.89 to 39.69 = severe impact; 40.53 to 63.00 = very severe impact. PHQ-9: Patient Health Questionnaire, range from 0 to 27; the red line represents the cut-off point for clinical depression of PHQ-9 ≥ 10 (sensitivity = 88% and specificity = 85%).

Figure 2. Anxiety symptoms by disease impact category (PRIDD total score)



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Hierarchical regression analyses testing main effects of sociodemographic characteristics, disease variables, and impact dimensions explained a total variance of 46.5% of depression and 42.9% of anxiety scores (Table 3).

Table 3 | Associations between sociodemographic and disease characteristics, PRIDD dimensions and mental health outcomes

	Depression (PHQ-9)	Anxiety (GAD-7)
	ß	ß
Sociodemographic characteristics	$\Delta R^2 = .039$; $\Delta F_{(3, 3115)} = 41.80^{***}$	$\Delta R^2 = .052$; $\Delta F_{(3, 3115)} = 56.39^{***}$
Age	**-.181*****	**-.214*****
Biologic sex (1 = male vs. 0 = female)	**-.059*****	**-.057****
Fitzpatrick skin type (0-6)	.031	.028
Disease characteristics	$\Delta R^2 = .201$; $\Delta F_{(8, 3107)} = 102.42^{***}$	$\Delta R^2 = .150$; $\Delta F_{(8, 3107)} = 72.92^{***}$
Rare disease (1 = yes vs. 0 = no)	**.066*****	**.038***
Years lived with the condition	-.028	-.027
Disease severity (PGA 0-4)	**.331*****	**.299*****
Visible areas affected (1 = yes vs. 0 = no)	-.009	-.006
Dermatological comorbidities (1 = yes vs. 0 = no)	**.043****	.020
Physical or mental comorbidities (1 = yes vs. 0 = no)	**.194*****	**.142*****
Patient organisation membership (1 = yes vs. 0 = no)	-.026	**-.043****
Satisfaction with the current healthcare (0-4)	**-.120*****	**-.103*****
PRIDD dimensions	$\Delta R^2 = .226$; $\Delta F_{(4, 3103)} = 327.14^{***}$	$\Delta R^2 = .228$; $\Delta F_{(4, 3103)} = 309.41^{***}$
Physical impact	**.223*****	**.101*****
Life responsibilities impact	**-.072****	**-.122*****
Psychological impact	**.263*****	**.450*****
Social impact	**.212*****	**.148*****
Model Summary	$R^2 = .465$; $F_{(15, 3103)} = 179.76^{***}$	$R^2 = .429$; $F_{(15, 3103)} = 155.51^{***}$

ß – Standardized Coefficients; * p < 0.05, ** p < 0.01, *** p < 0.001.

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