

This is an Open Access document downloaded from ORCA, Cardiff University's institutional repository: <https://orca.cardiff.ac.uk/id/eprint/161414/>

This is the author's version of a work that was submitted to / accepted for publication.

Citation for final published version:

Eleftheriadou, Viktoria and Thompson, Andrew 2023. Skin is a window to one's inner world. *British Journal of Dermatology* 189 (5) , pp. 501-502. 10.1093/bjd/ljad300

Publishers page: <https://doi.org/10.1093/bjd/ljad300>

Please note:

Changes made as a result of publishing processes such as copy-editing, formatting and page numbers may not be reflected in this version. For the definitive version of this publication, please refer to the published source. You are advised to consult the publisher's version if you wish to cite this paper.

This version is being made available in accordance with publisher policies. See <http://orca.cf.ac.uk/policies.html> for usage policies. Copyright and moral rights for publications made available in ORCA are retained by the copyright holders.



Skin is a window to one's inner world

Editorial

V. Eleftheriadou and A. R. Thomspon

The skin is significantly implicated in many aspects of human relational functioning, including playing a role in communication, bonding, and intimacy. Consequently, disruption to the skin's appearance and functioning can understandably have substantial impact on psychological wellbeing and be a major source of stress and disruption to quality of life. Indeed, the complex relationship between stress and skin conditions has been documented since ancient times. Hippocrates mentioned the relationship between stress and its effects on skin, citing cases of trichotillomania, where people pulled their hair out in response to emotional stress.¹

Over recent decades the emerging understanding of the relationship between the skin, the mind, and immune functioning has begun to shine a light on the need for skin conditions to be treated holistically.² Recent advances in scientific understanding indicate that the skin is not only a target of psychological stress signalling modulation, but it also actively participates in the stress response via the hypothalamic-pituitary-adrenal (HPA) axis, peripheral nerve endings, and local skin cells including keratinocytes, mast cells, and immune cells.^{2,3} As such the relationship between the skin and the mind is not only complex but bi-directional. Indeed, over decades, clinical observations and patient perspectives have also linked psychological stress to the onset or aggravation of multiple skin diseases.⁴ Nevertheless, the precise mechanism by which psychological factors such as stress impact on skin conditions is still the subject of active research and is likely to involve a range of physiological, psychological and social variables.⁵

Psychodermatology is an emerging inter-disciplinary area of science with a specific focus on the complex interaction between dermatological, psychological, and social factors, and this has been the topic of a number of recent journal article collections.^{6,7} There are four major overlapping areas of interest within this field of study: 1) a primary psychological or psychiatric condition which present to dermatologists (e.g. dermatitis artefacta and delusional presentations); 2) primary dermatological disorder with secondary psychosocial comorbidities (e.g. minor acne scarring with body dysmorphic disorder); 3) those who require psychosocial support with adjusting to their skin disease or in managing the adverse reactions of others (e.g. vitiligo and low self-esteem); and finally 4) a very small group where the skin condition is secondary to psychiatric treatment (e.g. psoriasis associated with lithium therapy).⁸

In reality, these groups can overlap and by far the commonest presentation is the third grouping. For example, a large cross-sectional multicentre study among dermatology out-patients in 13 European countries found a significantly higher prevalence of symptoms of depression (10.1% vs. 4.3%), anxiety disorder (17.2% vs. 11.1%), and suicidal ideation (12.7% vs. 8.3%) among patients with common skin diseases (such as eczema, psoriasis and leg ulcers) compared to controls.⁹ A more recent study by the same European collective also demonstrated that skin conditions are commonly experienced as stigmatising, reflecting the importance of understanding the social factors associated with skin diseases.¹⁰ Further, a

retrospective observational study, using UK general practice data (2004-2020) with an aim to determine the risk and impact of psychological comorbidity in people with new-onset vitiligo, showed that incidence of recurrent depressive and anxiety disorders was more common in people with vitiligo and the risk was highest in Black and Ethnic minority individuals. Subsequently, people with vitiligo and psychological comorbidity had more primary care encounters, more time off work and higher unemployment.¹¹ This later study also points to the emerging evidence that whilst secondary distress is frequently associated with a number of skin conditions, sociocultural factors are also likely to play a role in both the severity and nature of the actual impact.

The *British Journal of Dermatology (BJD)* has for many years encouraged interdisciplinary research and recently there has been a substantive increase in submitted manuscripts of relevance to the field of psychodermatology. Examples of recent *BJD* publications include common dermatoses, as well as neglected and understudied dermatological conditions, such as alopecia areata¹² and vitiligo.¹³ Further, the *BJD* is publishing studies in this area that use a range of methodologies and which are driven by a diversity of clinical need. For example, the journal has published studies on novel outcome measures (or tools) to capture psychosocial impacts beyond those assessed in existing health-related quality of life measures, a recent example being the development of the Scale of Alopecia Areata Distress (SAAD).¹²

The *BJD* is also keen to publish high quality qualitative research that brings nuanced patient needs to the fore and which can help in understanding the detailed associations between psychological factors and skin conditions. For example, one recent study investigated parent and child experiences of psychological support received for skin conditions to guide service improvement.¹⁴ The *BJD* has also increasingly welcomed research letters describing novel findings from cross-sectional or small descriptive qualitative studies that highlight psychological burden, with recent correspondence items focussing on topics such as unmet need associated with post-acne hyperpigmentation.¹⁵

Last year, skin and mental health was the subject of a debate within the UK Parliament, where the alarming lack of psychological support available to people living with a skin condition was highlighted as requiring urgent attention. Encouragingly, research in the field is increasing and this is beginning to have an impact on service delivery, although ongoing monitoring is needed.

It is clear that research into psychodermatology, mental health and skin diseases is gaining momentum, and the *BJD* will be in the vanguard of efforts to drive this important area forward. Traditionally, research into psychodermatology and mental health issues associated with skin diseases has been published in a wide variety of dermatological and psychological health journals amongst others. To shine a light on this field with a more integrated approach we are delighted to announce that the *BJD* is launching a dedicated sub-section on '*Psychodermatology and mental health*'. You may find the relevant section of Author's guidelines helpful (**INSERT LINK HERE PLEASE**). We are looking forward to receiving your manuscripts on this highly important and evolving topic.

References:

1. França K, Chacon A, Ledon J, Savas J, Nouri K. Psychodermatology: a trip through history. *An Bras Dermatol*. 2013 Sep-Oct;88(5):842-3.
2. Hall JM, Cruser D, Podawiltz A, Mummert DI, Jones H, Mummert ME. Psychological Stress and the Cutaneous Immune Response: Roles of the HPA Axis and the Sympathetic Nervous System in Atopic Dermatitis and Psoriasis. *Dermatol Res Pract*. 2012;2012:403908.
3. Chen Y, Lyga J. Brain-skin connection: stress, inflammation and skin aging. *Inflamm Allergy Drug Targets*. 2014;13(3):177-90.
4. Snast I, Reiter O, Atzmony L, Leshem YA, Hodak E, Mimouni D, Pavlovsky L. Psychological stress and psoriasis: a systematic review and meta-analysis. *Br J Dermatol*. 2018 May;178(5):1044-1055.
5. Thompson AR, Montgomery K. Stress and more stress: the importance in skin disease of worrying about what others think. *Br J Dermatol*. 2018 Apr;178(4):821-822.
6. Frontiers in Medicine. Psychosocial aspects of skin conditions [internet]. c2023. Available from: <https://www.frontiersin.org/research-topics/38028/psychosocial-aspects-of-skin-conditions-and-diseases#overview>
7. Langan EA, Millington GWM. Psychodermatology-A special edition of Skin Health and Disease. *Skin Health Dis*. 2022 Nov 20;2(4):e192.
8. Bewley A, Taylor RE, Reichenberg JS, Magrid M. Practical Psychodermatology. West Sussex: Wiley Blackwell, 2014.
9. Dalgard FJ, Gieler U, Tomas-Aragones L, Lien L, Poot F, Jemec GBE, Misery L, Szabo C, Linder D, Sampogna F, Evers AWM, Halvorsen JA, Balieva F, Szepletowski J, Romanov D, Marron SE, Altunay IK, Finlay AY, Salek SS, Kupfer J. The psychological burden of skin diseases: a cross-sectional multicenter study among dermatological out-patients in 13 European countries. *J Invest Dermatol*. 2015 Apr;135(4):984-991.
10. van Beugen S, Schut C, Kupfer J, Bewley AP, Finlay AY, Gieler U, Thompson AR, Gracia-Cazaña T, Balieva F, Ferreira BR, Jemec GB, Lien L, Misery L, Marron SE, Ständer S, Zeidler C, Szabó C, Szepletowski JC, Reich A, Elyas A, Altunay IK, Legat FJ, Grivcheva-Panovska V, Romanov DV, Lvov AN, Titeca G, Sampogna F, Vulink NC, Tomás-Aragones L, Evers AW, Dalgard FJ. Perceived Stigmatization among Dermatological Outpatients Compared with Controls: An Observational Multicentre Study in 17 European Countries. *Acta Derm Venereol* 2023;103:adv6485.
11. Thompson AR, Eleftheriadou V, Nesnas J. The mental health associations of vitiligo: UK population-based cohort study. *BJPsych Open*. 2022 Oct 21;8(6):e190.
12. Gorbatenko-Roth K, Wood S, Johnson M, Wallander I, Nugent J, Hordinsky M. Beyond health-related quality of life: initial psychometric validation of a new scale for addressing the gap in assessing the full range of alopecia areata psychosocial burden. *B J Dermatol*. 2023;189:71–79.
13. Barlow R, Ahmed A, Fellows J, Goulding J, Handley K, Petrov G, Schneider A, Thompson A, Valente M, Waters C, Eleftheriadou V. PS04 Assessment and management of patients with vitiligo and psychological distress: clinician survey. *B J Derm* 2023;188:Suppl 4.

14. Hughes O, Shelton KH, Penny H, Thompson AR. Parent and child experience of skin conditions: relevance for the provision of mindfulness-based interventions. *Br J Dermatol*. 2023 Mar 30;188(4):514-523
15. Schuster B, Gallinger J, Philipp-Dormston WG, Vasel M, Layton AM. Less confident, successful and happy: patients with post-acne hyperpigmentation are stigmatized. *Br J Dermatol*. 2023 Apr 20;188(5):682-684.