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The potential role of mindfulness in psychosocial support for dermatology patients

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Abstract

Whilst it is widely acknowledged that people living with skin conditions can experience higher levels of psychosocial distress than the general population, access to psychological support in dermatology is limited. Given the physical and psychosocial consequences of living with skin conditions, interventions used within physical and mental health may be beneficial. Mindfulness, defined as '"paying attention in a particular way: on purpose in the present moment and non-judgmentally,", has shown promise in improving outcomes in both mental and physical health populations, and studies have implicated a role for mindfulness in improving distress associated with skin conditions.

The current review explores the theoretical underpinnings of mindfulness, in particular, the role it may play in reducing physiologic arousal and managing maladaptive thought processes. Whilst mindfulness interventions offer promise in reducing distress associated with skin conditions, further research is required to fully understand the underlying mechanisms of mindfulness and the active ingredient responsible for improving outcomes in dermatology patients. Mindfulness is one potential psychological intervention and practitioners should be aware of the range of psychological support options available. The current review also draws attention to the urgent need for further research into the effectiveness of psychological interventions for dermatology patients.

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Psychosocial distress in dermatology patients

Research with patients living with skin conditions has found that objective severity of the condition is not an accurate predictor of psychological distress.[1-4] This suggests that psychosocial factors play a particularly important role in the impact of skin conditions. Evidence from physiological studies examining the psychosocial impact of stress on the skin suggests that an individual's perception of stress as overwhelming, can trigger responses by central and peripheral pathways leading to impaired immune function. [5] Indeed stress has been acknowledged to play a role in flare-ups in a number of skin conditions.[6-7]

Living with a skin condition can have a range of physical and psychosocial consequences, and it is widely acknowledged that people with skin conditions consistently report higher levels of depression and anxiety in comparison to healthy controls.[8-11] Suicidal ideation has also been reported as being present in a number of studies[10, 12] highlighting the significant impact that skin conditions can have on psychological wellbeing.

Given the potential for others to see skin disease, social anxiety is not surprisingly a common problem reported by people living with skin conditions. [13] Psychological factors and processes contributing to 'social anxiety' in people living with skin conditions are likely to slightly differ from those typically found in social anxiety in general, in so far as they are likely to be associated with the potential for actual stigmatisation and discrimination.[13-17] For example, in some surveys of people with psoriasis, a third of respondents have reported that psoriasis was the predominant reason why they were out of work.[18] Given the high levels of distress

reported by patients living with skin conditions it is important to carry out screening for psychological distress in routine clinical practice using brief screening tools commonly used within primary care to identify symptoms of stress, anxiety, and depression.[19] Psychological screening is important given that objective severity is not an accurate indicator of distress with disparity between clinician rated and patient rated severity posing a potential barrier within the doctor-patient relationship.[20] Following screening, patients can then be referred for appropriate psychological intervention.

Psychological interventions for skin conditions

Psychological interventions, including habit reversal and cognitive behavioural therapy (CBT), have shown promise in reducing psychological distress in patients living with skin conditions.[21] It was reported[21] that relaxation techniques, including mindfulness meditation, were one of the most common types of psychosocial techniques that had been evaluated within the literature and seemed to have a moderate effect in reducing psychological distress. Whilst mindfulness meditation has been shown to lead to a relaxation response, studies suggest that relaxation is not the only mechanism by which meditation exerts its effects.[22] Mindfulness interventions typically strive to teach an alternative way of managing thoughts and feelings, and are growing in popularity in the treatment of psychological and physical health conditions. Therefore, it is important to examine the theoretical underpinnings of this approach, and how it might benefit dermatology patients.

Definition of mindfulness

Mindfulness, defined as “paying attention in a particular way: on purpose in the present moment and non-judgmentally”[23] is a form of mental training, which can facilitate more adaptive responses to negative mood states.[24] Mindfulness

encourages a move away from conceptual modes of thinking, in which we seek to make interpretations and judgements of experiences, in a habitual way, and cultivates a move towards a 'being mode' in which attention is paid to experience and reactions to experience.[25] Mindfulness involves paying attention to all aspects of experiences, positive and negative, without making attempts to change or evaluate what is happening; therefore, reducing experiential avoidance of unpleasant mood and physical states. In doing so, it is possible to see how over-identifying with experiences can lead to negative thoughts and behaviors. [26]

Mindfulness interventions are most commonly delivered as group-based interventions, often running in community settings, which have the potential to reduce long waiting lists and costs associated with one to one psychotherapy. More recently, mindfulness has been adapted for use within self-help interventions. Self-help interventions can be given to patients during their appointment by the clinician, or patients can be signposted to appropriate resources, providing a timely and cost effective intervention for those reporting distress. Results suggest mindfulness self-help can lead to significant benefits in psychological health in comparison to controls.[27]

Mindfulness interventions for physical health problems

Mindfulness interventions have been found to alleviate distress associated with physical health problems such as fibromyalgia, psoriasis, and cancer.[28] The fear avoidance model of chronic pain[29] suggests the way people respond to the pain sensation is a determinant of future pain experience.[29, 30] Cultivating detached observation of pain, by distinguishing the actual pain sensation as it occurs from accompanying thoughts about pain, can reduce pain intensity[31] and pain catastrophizing during, and in anticipation of pain. [31]

The application of mindfulness to chronic pain is particularly relevant to the discussion of how mindfulness may benefit people living with skin conditions, given that for some, pain is an accompanying symptom. In addition, a number of skin conditions lead to itch, which, like pain, is an unpleasant and often distressing physical symptom. The biopsychosocial model of itch[32] proposes that the interaction between internal (personality factors) and external (stress) factors influence illness cognitions and behaviors which can then increase or decrease itch. AD patients who respond to stress with negative itch-related cognitions have reported higher itch intensity,[33] therefore, reducing stress and negative illness cognitions should benefit the psychological and physical health of AD patients. Mindfulness techniques could be beneficial in identifying the itch sensation and distinguishing this from the habitual scratching behavior, thereby reducing the automatic tendency to scratch; however, this relationship warrants investigation, specifically, the relationship between mindfulness and itch, and whether mindfulness interventions are effective in reducing itch intensity and associated scratching.

Mindfulness interventions may be beneficial for people living with skin conditions by reducing the physiological response to stress. Changing the perception of stress via psychological interventions targeting maladaptive cognitions and behaviors, could then reduce physiological arousal and therefore the impact of stress on the skin. Indeed, mindfulness techniques used in dermatology have led to improved rates of skin clearing suggesting a physiological mechanism of change.[34-35] To date, published studies of mindfulness interventions within dermatology have focused on patients with psoriasis. Studies have demonstrated that mindfulness could potentially enhance relaxation, and a patient's sense of participatory agency in their treatment, which could lead to reductions in stress which may be contributing to

the condition.[34] Brief audio-guided meditation used as an adjunct to UVB and PUVA treatment led to increased skin clearing in patients relative to controls who did not use meditation.[34] Using mindfulness as an adjunct to light therapy could potentially reduce the number of treatment sessions required, thus lowering risks associated with light therapy.

A study using group mindfulness-based cognitive therapy in psoriasis patients found improvements in psoriasis severity and quality of life; however, there were no significant differences in levels of stress (measured by cortisol response), or anxiety and depression.[35] This suggests that reductions in severity and improvements in quality of life were not a result of a reduced physiologic response to stress, in this particular sample. The mindfulness intervention was viewed as acceptable by participants; however, it is unclear whether the intervention affected the physical symptoms of the condition or cognitions regarding the condition. [36]

Given the prevalence of social anxiety in dermatology patients, and the reality of negative reactions people experience, mindfulness interventions aimed at reducing attentional bias towards negative social experiences, could be beneficial. Correlational studies suggest that higher levels of mindfulness are related to lower levels of social anxiety,[37,38] and mindfulness interventions have been found to be effective in reducing levels of clinically significant social anxiety.[39-41] One correlational study has examined the relationship between mindfulness and psychosocial distress in dermatology and, consistent with previous studies in mental health, lower levels of mindfulness were related to higher levels of social anxiety. Mindfulness explained the highest proportion of the variance in social anxiety (41%) when compared with anxiety, depression, feelings of shame about the skin and quality of life. [42] Higher levels of mindfulness were also associated with lower levels

of anxiety and depression and improved dermatological quality of life.[42] These findings suggest that studies investigating the effectiveness of mindfulness interventions, particularly those tailored to target social anxiety in dermatology patients, are warranted.

The findings from mindfulness intervention studies in dermatology are promising, and correlational studies suggest that increasing mindfulness could reduce distress in dermatology patients. It is important that dermatology patients have access to psychological interventions; however, research into the effectiveness of interventions and access to psychological support remains limited. Mindfulness interventions may offer one beneficial, cost effective intervention to support dermatology patients.

Whilst mindfulness interventions have been the focus of the current review, there are a number of psychological interventions available to dermatology patients. Mindfulness interventions are not appropriate for all patients, for example those reporting symptoms of psychiatric disorders (e.g. body dysmorphic disorder) which require psychological assessment and individual psychotherapy. Mindfulness meditation involves focusing on all sensations that arise, pleasant or unpleasant, for example pain or itch. The benefits of mindfulness depend on the patients' ability to observe unpleasant sensations and cultivate an attitude of detached observation, when the pain or itch becomes the focal point of awareness.[31] Cultivating present moment awareness and moving away from ruminative patterns of thinking is challenging and for some patients' mindfulness interventions may not be appropriate. It is imperative clinicians are aware of a range psychological interventions available to patients.

Cognitive behavioral therapy delivered via group, individual sessions and self-help has shown promise for people living with skin conditions,[21, 43] and is the recommended treatment for people experiencing anxiety and depression. [44] In patients living with atopic dermatitis, habit reversal, a technique used to reduce habitual scratching, could be beneficial, where itch is the patients' primary concern.[45] Reducing habitual scratching has both physical and psychosocial benefits for patients. Physically, the skin is less prone to infection, and psychologically, the appearance of the skin will improve, reducing the likelihood of negative comments from others and leading to potential improvements in self-esteem and body image. In several habit reversal studies relaxation has been incorporated[46, 47] with beneficial results. The findings suggest techniques such as mindfulness meditation may be a useful adjunct to habit reversal.

Conclusions

The effectiveness of mindfulness interventions in people living with long term health conditions, and psychological distress, suggest that these interventions could be beneficial for dermatology patients. To date, studies of mindfulness interventions in dermatology have shown promising results,[34-36] with benefits reported in both physical health and quality of life. That said, there is now an urgent need to conduct randomized controlled trials to fully investigate the effectiveness of mindfulness in relation to differing skin diseases. In addition, further research is needed to ascertain the mechanism by which mindfulness might exert its beneficial effects.

It is crucial that psychological support is offered to dermatology patients, given high levels of distress reported; therefore, clinicians need to be aware of what is available for patients and how this might be integrated within clinical practice. Self-help, integrating mindfulness and/or CBT techniques may offer a cost effective and

beneficial alternative to one to one psychological therapy for dermatology patients (see figure 1).[48] Low intensity, accessible interventions provide psychoeducation and strategies to manage symptoms of psychological distress, which can be easily integrated into clinical practice.[48]

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Figure 1 Psychodermatology and mindfulness resources for clinicians

Psychodermatology and mindfulness resources

Below are a number of online resources for further information on mindfulness, including resources for patients to access and research centres.

Skin support was developed by the British Association of Dermatologists in collaboration with professionals from Dermatology and Psychology. The website has a range of skin-specific self-help resources, including mindfulness based self-help e.g. http://bit.ly/207pNYB	www.skinsupport.org.uk
Get self-help is an online resource with a variety of CBT and mindfulness resources available. Resources include meditations to download, and mindfulness worksheets.	www.getselfhelp.co.uk
Franticworld.com is a website associated with the book, '*Finding peace in a frantic world*' by Professor Mark Williams and Dr Danny Penman.	www.franticworld.com
National Health Service UK Information on mindfulness for improving wellbeing.	www.nhs.uk/conditions/stress-anxiety-depression/pages/mindfulness
Information on how mindfulness has been used to improve distress in patients with psoriasis along with information on current research in the USA.	www.psoriasis.org

The following Mindfulness Centres have a range of resources available, including online/face to face mindfulness courses, online resources, access to meditations and information on mindfulness research.

The University of Oxford Mindfulness Centre	www.oxfordmindfulness.org/learn/resources/
The University of Bangor	www.bangor.ac.uk/mindfulness/
The University of California Mindful Awareness Research centre	www.marc.ucla.edu/
The University of Massachusetts Centre for Mindfulness	www.umassmed.edu/cfm