Psychodermatological research priorities identified by Priority Setting Partnerships

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There is growing evidence that skin disease can have a profound psychological and psychiatric impact. A wide variety of skin conditions are associated with appearance-related distress, social anxiety, depression and embarrassment, to name just a few of the behavioural, emotional and cognitive impacts. Psychological interventions, either alone or as an adjunctive treatment, can improve skin disease and patient quality of life.\textsuperscript{1}

There have also been recent announcements from policymakers, including commitments in the National Health Service (NHS) Long Term Plan, to grow investment in mental health services faster than the NHS budget, and this indicates an increased willingness of policymakers to improve psychological services in the UK.\textsuperscript{2}

The All-Party Parliamentary Group on Skin (APPS) is currently advocating improved research, education and service provision for psychodermatology, as highlighted in its evidence session for the Group’s forthcoming report on ‘Mental Health and Skin Disease’,\textsuperscript{3} the official report of which will be published in 2020. In addition, recent evidence during the COVID-19 pandemic has highlighted the need for psychological and psychiatric research into cutaneous conditions.\textsuperscript{4}

The James Lind Alliance (JLA) was formed in 2004 and seeks to support Priority Setting Partnerships (PSPs) that aim to identify evidence uncertainties or issues that are not currently addressed by the extant knowledge base. They have an established methodology and bring together patient, carer, and clinician experts to produce lists of jointly agreed research priorities that have the potential to influence funding.

We identified eight dermatology-related PSPs using JLA methodology on the JLA website (http://www.jla.nihr.ac.uk/priority-setting-partnerships/) for the following conditions: vitiligo (2010), eczema (2012), hidradenitis suppurativa (2013), acne (2014), hair loss (2015), lichen sclerosus (2018), psoriasis (2018), and hyperhidrosis (2019)\textsuperscript{5} (Table 1).

The PSPs for vitiligo, eczema, hidradenitis suppurativa, hyperhidrosis, hair loss, lichen sclerosus and psoriasis identify numerous priority research questions relating to psychological factors. The priorities can be divided into two categories: (i) psychological interventions that could improve symptoms and quality of life, and (ii) how the skin condition affects psychosocial wellbeing.

The PSP for acne contains little psychological focus despite several acne studies, including a recent UK study with over 2000 participants,\textsuperscript{6} indicating the importance of psychological issues for patients with acne. The results of the survey, which ran from 2012 to 2019, showed that people with acne vulgaris often
experience significant psychosocial burden, including suicidal ideation and self-harm. The lack of psychological focus in the acne PSP may be related to the idiosyncrasies of the PSP process, but it is important to point out that, for patients and many healthcare professionals, psychological and psychiatric factors are key research questions which need addressing.

The seven conditions that do have psychological PSPs have some commonalities including a potentially significant impact on appearance and presence of symptoms that tend to be somewhat unpredictable. Some of the psychological research needs that are associated with specific conditions are also linked to secondary symptoms and impact on functioning e.g. itch. Several of the working group reports for these PSPs indicate that further research is needed to establish how psychological therapies can effectively reduce the itch–scratch cycle and improve the management of flares. Thus, research could establish the role of psychological support in combination with other dermatological treatments.

Despite some PSPs highlighting a need for reliable up-to-date research on how stress is linked to physical symptoms of inflammatory skin conditions, there is little emphasis on the need to investigate the role played by specific psychosocial variables on the physical manifestation of skin disease. This is surprising, as a range of psychological variables (e.g. levels of self-compassion) are emerging as being possible candidates for targets within psychological interventions.

Overall, the research priorities of the PSPs indicate that there is currently an insufficient number of studies that have formally developed and evaluated interventions to address psychological difficulties experienced by people with a variety of skin conditions. We would add that there is also a need to conduct further research to identify the role played by some psychological variables in the underlying biological mechanisms associated with onset and exacerbation of some skin conditions. The PSPs show that research should focus not only on answering how skin conditions psychologically affect people, but importantly, also look to develop and test psychological interventions capable of reducing distress. Indeed, there is evidence that some existing PSPs have driven research activity in this direction. For example, the PSP for vitiligo led to two early studies looking at important stages in the development of psychological interventions. Nevertheless, the availability of evidence-based interventions remains poor and there is a need for programmatic research to build and test sustainable psychological interventions.

Given that the existing dermatology PSP recommendations only broadly outline a desire for further psychological research, future consideration should be given to establishing a specific Psychodermatology PSP. This would facilitate more comprehensive research questions on the psychological aspects of skin disease and treatments.

References
<table>
<thead>
<tr>
<th>Skin condition</th>
<th>'Top 10' PSP research areas</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vitiligo</td>
<td>How much do psychological interventions help people with vitiligo?</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>How effective is the addition of psychological interventions to patients using cosmetic camouflage for improving their quality of life?</td>
<td>9</td>
</tr>
<tr>
<td>Eczema</td>
<td>What is the best psychological treatment for itching/scratching in eczema?</td>
<td>NA^a</td>
</tr>
<tr>
<td></td>
<td>What is the best psychological treatment for the relief of stress in the treatment of eczema?</td>
<td>NA^b</td>
</tr>
<tr>
<td>HS</td>
<td>What is the impact of HS and the treatments on people with HS (physical, psychological, financial, social, quality of life)?</td>
<td>3</td>
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<tr>
<td></td>
<td>What is the best psychological support for people with HS?</td>
<td>26^c</td>
</tr>
<tr>
<td></td>
<td>Does stress trigger a flare of HS?</td>
<td>29^c</td>
</tr>
<tr>
<td>Hair loss^d</td>
<td>Are psychological interventions helpful in alopecia areata?</td>
<td>4°</td>
</tr>
<tr>
<td>LS</td>
<td>What is the impact on quality of life?</td>
<td>9</td>
</tr>
<tr>
<td>Psoriasis</td>
<td>How well do psychological and educational interventions work for adults and children with psoriasis?</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Does treating psoriasis help improve other health conditions, such as psoriatic arthritis, cardiovascular disease, metabolic syndrome and stress?</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>To what extent is psoriasis caused by a person's genes or other factors, such as stress, gut health, water quality, or change in the weather or temperature?</td>
<td>8</td>
</tr>
<tr>
<td>Hyperhidrosis</td>
<td>How does hyperhidrosis affect quality of life?</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Are there links between hyperhidrosis and mental health (e.g. anxiety, depression)?</td>
<td>12^c</td>
</tr>
<tr>
<td></td>
<td>Can lifestyle changes (e.g. changes to habits or routines) affect hyperhidrosis?</td>
<td>16^c</td>
</tr>
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HS, hidradenitis suppurativa; LS, lichen sclerosus; NA, not applicable.

^a of 5 patient and carer priorities, alongside 5 health professional priorities and 5 shared priorities; ^b a further research uncertainty listed, but not part of the 'Top 10'; ^c not a 'Top 10', but ranked; ^d includes alopecia areata and hair loss disorders; ^e two sets of Top 10; ^f quality of life includes effects on day-to-day living, psychological health and sexual relationships, and how psychological or social support can be best used to help people with LS.

**CPD questions**

**Learning objective**

Readers should from this paper be able to understand the extent and purpose of Priority Setting Partnerships (PSP) in dermatology. Patients with skin disease very often have psychological co-morbidities, and these important facets of disease burden may be under-estimated by health care professionals. PSPs have indicated that research into the psychosocial aspects of skin disease has not been effectively prioritised in the past, and that psychodermatological research does need to be better prioritised in the future.

**Question 1**

Priority Setting Partnerships (PSPs) are:
(a) Option 1. A well validated mechanism for prioritising important research questions in healthcare
(b) Option 2. Medical models used by clinicians to establish priorities in the management of disease.
(c) Option 3. Commissioned by Clinical Commissioning Groups to establish funding priorities.
(d) Option 4. Used to determine the best treatment for a particular disease via meta-analyses of randomised controlled clinical trials.
(e) Option 5. Solely driven by public and patient experience.

**Question 2**

Research in psychodermatology:
(a) Option 1. is less important than research into the effectiveness and safety of treatments in dermatological disease
(b) Option 2. is seen as a priority by both patients and health care professionals as evidenced by PSPs
(c) Option 3. explores mostly quality of life issues in dermatological disease
(d) Option 4. is always qualitative and observational
(e) Option 5. is usually only relevant to psychologists and psychiatrists
Answer 1
Priority Setting Partnerships are:
(a) Correct
(b) Incorrect.
(c) Incorrect.
(d) Incorrect.
(e) Incorrect

Answer 2
Research in psychodermatology:
(a) Incorrect.
(b) Correct
(c) Incorrect.
(d) Incorrect.
(e) Incorrect