Psychosocial impact of skin conditions: Interventions for nurses

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This article follows on from the second author’s paper published last year in this journal, entitled ‘Psychosocial impact of skin conditions’ (Thompson, 2009). The first article introduced the area of psychodermatology and summarised the literature on psychosocial adjustment in this area. It presented an explanatory model and made recommendations for a stepped-care model of delivery of psychosocial interventions. The current article builds on this first paper by reviewing the available evidence for a number of ‘level 2’ interventions (including habit reversal and relaxation). It discusses how these can be used, with training and support in the dermatology clinic.

Key words
Psychodermatology
Psychosocial impact
Habit reversal
Relaxation

Introduction
The potential for some individuals with skin conditions to experience psychosocial distress as a result of their condition has been widely acknowledged (Thompson, in press). Thompson (2009) reviewed the psychosocial impact associated with skin conditions, detailed the factors that contribute to individual variations in adjustment, and provided an outline of ‘a stepped-care model of psychosocial interventions’. The present review builds on this model with a focus on integrating existing research on interventions that can be delivered by trained dermatology nurses at level two of the model.

Psychodermatological conditions
The term ‘skin conditions’ refers to the full range of dermatological conditions that can be differentiated into three categories of diagnoses: primary psychological (caused by emotional or ‘functional’ issues), psychophysiological (exacerbated or maintained by stress) and secondary psychological (distress caused by the condition). Thompson (2009) provides a detailed description of these groups. The present review does not relate to psychosocial interventions for ‘primary psychological’ conditions (such as delusions of parasitosis), or for cases of complex ‘secondary psychological distress’ (such as severe body image distress), both of which usually necessitate specialist psychotherapeutic intervention ideally by psychological clinicians.

Stepped psychosocial care
The stepped-care model proposed by Thompson (2009; see Figure 1) identifies three levels of care. Each level is guided by the level of distress experienced by the patients to determine the type of intervention and level of staff training that is needed. Essential to this model is a team approach where staff members receive relevant training and access to supervision and consultation from someone who is an accredited psychological practitioner (such as a Clinical Psychologist or Psychiatrist).

The first level of intervention described in the model should be able to be delivered by all qualified dermatology staff and essentially focuses on psycho-education and support — providing access to self-help, support groups and other resources, as well as guidance on rights. Such interventions may be relevant to all patients. Interventions in the second level include specific interventions requiring understanding of basic psychological principles and training and include stress management, relaxation, problem-solving and habit reversal and require trained specialist nurses or counsellors with access to consultation/supervision from psychologists or psychiatrists. These interventions are relevant to patients who experience mild to moderate psychological distress. At the third level of the model are complex psychological interventions or therapies, such as psychodynamic,
Figure 1. The stepped-care model proposed by Thompson (2009) identifies three levels of care.

specialist cognitive behavioural or cognitive analytic psychotherapies and the use of psychotropic medication. These interventions are targeted to those individuals with severe psychological distress, such as complex social anxiety and depression, as well as the primary psychological diagnoses described above.

The remainder of the article will provide a description of the interventions in the second level of the model that can be delivered by trained nurses who receive consultation/supervision. Furthermore, existing research on the effectiveness of such interventions will be reviewed in order to provide evidence-based recommendations for clinical practice (see also Ersser et al, 2007).

**Level 2 psychosocial interventions and the evidence for their use**

**Habit reversal**

Behavioural techniques refer to interventions that aim to increase an adaptive behaviour or reduce a maladaptive behaviour; eg scratching. Habit reversal is the most commonly used behavioural technique in dermatology, and is used alongside standard medical care. Although first adapted for use with atopic dermatitis (Noren, 1995), habit reversal can be used with any pruritic skin condition. Integral to habit reversal is education about the concept of habit and the itch-scratch cycle (Grillo, Long, Long, 2007) (Figure 2) and/or about the function of emollients and topical steroids (Staughton, 2001). The first step in habit reversal is to make the patient aware of the habitual element of scratching, as clinical experience suggests that most patients are surprised to realise how much of their scratching is habitual rather than arising from an itch (Staughton, 2001). This can be done through diaries and tally counts. It is also important to identify the individual trigger situations and individual scratching ‘profile’ (eg, where, how, when). Scratching is then replaced by an alternative behaviour; such as a competing response eg, a posture that is anatomically opposite to scratching (eg, Grillo et al, 2007) or a safe action eg, clenching fists to a count of 30 and if itch has not subsided pinching the itchy area instead of scratching (eg, Staughton, 2001).

Habit reversal can be delivered by trained nurses in three to four sessions. One model for training nurses is described by Grillo et al (2007) and involves the nurse and psychological practitioner acting as co-therapists. This first gives the nurse the opportunity to observe the delivery of the technique before taking over the responsibility of delivering the intervention.

Anecdotal evidence suggests that habit reversal is effective in reducing skin trauma in conditions such as atopic dermatitis and prurigo nodularis (Grillo et al, 2007) and dermatology nurses have been shown to be particularly adept in its use (Staughton, 2001). Evidence for habit reversal also comes from formal evaluation in randomised controlled trials (RCT). In a study by Melin, Frederiksen, Noren and Swebilius (1986), two groups of patients received corticosteroid treatment for atopic dermatitis, while one of the groups also received habit reversal. Results indicated that both groups improved but the habit reversal group improved significantly more. Specifically, in comparison to the control group, the habit reversal group reduced by 30% more in skin irritation and scratching measures and by 35% more in annoyance. However, whereas both groups reduced significantly in ‘scratch in worst situation’, the difference between the groups was not significant and no change was found in itching for either group. Results also showed that 55% of the improvement in skin status was accounted for by reduction in scratching.

In a similar study by Noren and Melin (1989), two groups receiving different medical treatments (hydrocortisone with betamethasone and hydrocortisone alone) were compared with respective groups also receiving habit reversal. All groups improved in scratching but the habit reversal groups improved significantly more by 16% and 23% respectively. In measures of skin status, the habit reversal groups showed significantly higher improvements in dryness and infiltration, but not in scaling and erythema.
Figure 2. Habit reversal has been shown to be an effective intervention of the itch-scratch cycle.

both these studies show improvements in scratching and some aspects of skin status above and beyond medical treatment, it is not known whether the effects are maintained long-term as no follow-up treatment or assessment was undertaken. Grillo et al (2007) have incorporated a follow-up period of 1-2 months in their model of habit reversal delivery. They stress the importance of follow-up due to the heavy reliance habit reversal has on patient motivation and commitment — and interest of the nurse in patient progress has the potential to greatly enhance compliance with such interventions.

Habit reversal has been shown to be an effective intervention of the itch-scratch cycle with anecdotal and empirical evidence. Long, Long, Grillo and Marshman (2006) describe the development of a service that utilises habit reversal, and Grillo et al (2007) describe the process of habit reversal training. A manual (Bridgett, Noren, Stauthon, 1996) is also available for ‘the combined approach’, which refers to education with regards to medical treatment combined with habit reversal.

**Itch coping nursing programme**

A programme called ‘Coping with Itch’ specifically designed to be delivered by dermatology nurses has been developed at the University Medical Centre Utrecht (Van Os-Medendorp, Ros, Eiland-deKok et al, 2007). This programme incorporates a follow-up period of 1-2 months in their model of habit reversal delivery. They stress the importance of follow-up due to the heavy reliance habit reversal has on patient motivation and commitment — and interest of the nurse in patient progress has the potential to greatly enhance compliance with such interventions.

Referral to more specialist professionals, such as psychologists, is seen as the final step for more complex cases (ie, a stepped-care model similar to the approach proposed by Thompson, 2009). Importantly, the nurses in this programme are members of a multidisciplinary team (MDT) and referrals are arranged to other professionals if indicated. Results of an evaluation of this programme showed that the percentage of patients with high frequency of itch/scratch reduced in the intervention group in comparison to an increase in the control group at the first time-point of assessment, however at follow-up the percentage in the control group had also decreased to the same levels as the intervention group. The percentage of patients with high intensity itch/scratch had reduced for both groups similarly. Statistically, no differences were found between the two groups. In terms of itch-related coping, the intervention group decreased significantly in catastrophising and helpless coping, however this was not maintained at follow-up. Neither group decreased in problem-focused coping. The groups also did not differ in measures of skin-related psychosocial morbidity. As pointed out by the authors of the article, patients had a mean of 130.5 minutes’ consultation time, whereas a minimum of 600 minutes has been identified as needed for self-management programmes (Schreurs, Kolland, Kuijer et al, 2003). Another consideration is that patients in the intervention group reduced their number of visits to the dermatologist, possibly due to their additional visits to the itch-coping programme. This study provides additional support to the importance of booster sessions and follow-ups. The authors also suggest that group-based interventions may offer peer support where individually based interventions do not. It is worth considering, therefore, the delivery of nurse-led interventions in a group context. This would also provide a more cost-effective approach to intervention, according to Sims (1997).

**Relaxation**

Relaxation techniques aim to reduce the anxiety associated with the aetiology and maintenance of skin conditions and include such techniques as progressive muscle relaxation, biofeedback, mindfulness meditation and visual imagery (Tsushima, 1988).

Meditation and mindfulness-based meditation aim to increase awareness of feelings, thoughts, images and bodily sensations without actively thinking about them, whereas visual imagery elicits the production of pleasant images and sensations (Fried, Hussain, 2008). This is done through simple instructions. For example, Gaston, Crombez, Lassonde et al (1991) provided the following instructions: “First pay attention to any sensation, perception or thought that comes to your mind; just let them come and go. Then try to attend to your bodily sensations; notice what happens and try to notice any...
new perception” (p. 38). Similarly, simple instructions can be given for the elicitation of visual imagery.

Numerous case studies have reported positive outcomes for meditation techniques, however few controlled studies exist that allow causal conclusions to be made. In their study Gaston et al investigated the effectiveness of a meditation group and a meditation with visual imagery group as compared to a waiting list control group on ratings of skin clarity. They found an overall treatment effect, but no further efficacy of the imagery technique. However, another study compared a group receiving a single relaxation session with an imagery component (experimental group) to a group receiving relaxation only (control group), with greater positive effects found on itch and measures of relaxation and anxiety in the experimental group (de L Horne, Taylor, Varigos, 1999). The relaxation instructions were provided through the use of audiotapes. Mindfulness-based meditation was employed by Kabat-Zinn, Wheeler, Light et al (1998) alongside phototherapy treatment in patients with psoriasis. Again this was administered through audiotapes, which were of increasing length to accommodate the increasing time spent in phototherapy treatment. The authors describe positive findings in terms of accelerated rate of skin clearing, however psychological outcomes showed no statistically significant changes.

Biofeedback

Another technique widely used in dermatology is biofeedback-assisted relaxation, which describes the process by which patients learn to master self-regulatory techniques to manage stress and control physiologic reactivity. This is done through real-time feedback of muscle tension and blood flow (through electromyography and hand temperature) alongside techniques that produce relaxed states (Fried, Hussain, 2008). A multiple baseline design was used to examine biofeedback with progressive muscle relaxation in five patients with atopic dermatitis, with positive outcomes (McMenamy, Katz, Gipson, 1988). In this study, participants were asked to practice progressive relaxation at home at least once a day using a provided audiotape.

A RCT by Hughes, Brown, Lawlis and Fulton (1983) found significant improvement in acne severity in a biofeedback assisted relaxation-imagery group compared to attention-comparison and medical treatment control groups. However, the effects were not maintained long-term, which again indicates the usefulness of follow-up booster sessions.

It is worth noting that biofeedback relaxation requires training in electromyographic techniques and can be a complicated and time-consuming procedure. In contrast, relaxation techniques such as progressive relaxation can be administered using tapes. However, if positive outcomes are reliant on home practice, this requires patient commitment and motivation, which would need regular reviewing.

Concluding comments

This article has focused on some of the techniques available to nurses and dermatology staff to manage psychological distress, and symptoms with a substantial behavioural component such as itching. The evidence for the use of techniques, such as habit reversal and relaxation, has been described and it is clear that such techniques warrant further use in routine dermatological care.

References


