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Original articles

Changes in mood predict disease activity and quality of life in patients with psoriasis following emotional disclosure

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Abstract

Objective: The present study examined the effects of emotional disclosure (ED) intervention on both disease severity and quality of life in patients with psoriasis. **Methods:** Fifty-nine patients were recruited (mean age, 50 years; 32 men and 27 women; mean length of diagnosis, 22 years). Individuals were randomly assigned to receive ED intervention or standard control writing intervention. Disease severity, quality of life, and mood were assessed at baseline and at 2, 8, and 12 weeks postintervention. **Results:** Disease severity and quality of life improved in both groups over the follow-up period. Preliminary analysis suggested no differences in the magnitude of improvement between the groups. However, predictors of improvement were found to differ. Disease severity on Week 12 was predicted by changes in mood in intervention patients and seasonal variation in control patients. In contrast, quality of life on Week 12 was predicted by baseline quality of life in intervention patients, while seasonal variation approached significance for control patients. **Conclusions:** Changes in mood following ED predicted improvements in disease severity in patients with psoriasis. However, the degree of improvement did not differ between intervention and control patients.

Keywords: Distress; Emotional disclosure; Mood; PASI; Psoriasis; Quality of life

Introduction

Psoriasis is a chronic debilitating disease in which psychological distress is a common part of the illness experience [1–3]. This distress has been shown to adversely effect quality of life [4], disease severity [5,6], and treatment efficacy [7], and has led to the suggestion that a biopsychosocial framework should be adopted for the management of patients with psoriasis (i.e., a framework that addresses the psychological aspects of the condition) [8]. As a result, there has been interest in the use of psychological interventions in this patient group and in their effects on patients' physical and emotional well-being. The present article describes results from a randomized controlled trial examining the effects of such an intervention, emotional disclosure (ED), on disease activity and quality of life in patients with psoriasis.

Psychological interventions in psoriasis

To our knowledge, there have been no published studies on the effects of ED on patients with psoriasis. However, a

Abbreviations: CBT, cognitive–behavioral therapy; PASI, Psoriasis Area and Severity Index; DLQI, Dermatology Life Quality Index; POMS, Profile of Mood States; HADS, Hospital Anxiety and Depression Scale.

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number of other psychological interventions have been investigated. For example, stress management techniques, such as biofeedback, relaxation, and meditation, have been found to result in improvements in both self-reported and clinically verified symptoms. Keinan et al. [9] observed that patients receiving biofeedback and relaxation training reported greater improvements in their condition compared with the same period in the previous year. Similarly, Kabat-Zinn et al. [10] explored the effects of mindfulness meditation as an adjuvant to conventional therapy. They observed that clearance of skin lesions, as determined by clinical examination, was more rapid in intervention patients. Interventions based on cognitive–behavioral therapy (CBT) have also been examined. Fortune et al. [11] evaluated the effects of a 6-week CBT-based psoriasis symptom management program on disease severity, distress, and disability. Compared with standard treatment, intervention patients exhibited significant reduction in disease severity, distress, and disability at 6 weeks and 6 months postintervention.

The effects of hypnosis have also been examined. Highly hypnotizable patients [12] were randomized to receive either active hypnosis, which included hypnotic suggestion of improvement in their disease, or neutral hypnosis, which included no mention of their disease. Following a 3-month treatment period, patients in the active-hypnosis condition displayed improvements greater than those in the neutral-hypnosis condition.

The case for ED

This study indicates that outcomes ranging from emotional well-being to disease severity, perceived disability, and treatment efficacy are all amenable to improvements through psychological interventions. However, psychological interventions have not yet been implemented widely in this patient group. This may be due, in part, to practical limitations. For example, the "treatment period" for several of the interventions is necessarily intensive, spanning several weeks or months [11,12]. Some of the interventions require the involvement of highly skilled professionals (e.g., clinical psychologists delivering CBT-based interventions). Furthermore, interventions such as hypnosis are potentially of limited applicability as their effectiveness may be restricted to a subgroup of individuals (e.g., highly hypnotizable individuals [12]).

There would appear, therefore, to be a case for examining whether less intense time-limited interventions, which are more widely applicable and do not rely on specialists for their delivery, could be effective in patients with psoriasis. ED is such an intervention. ED refers to the process of writing or talking about stressful and traumatic events. A typical paradigm involves participants writing about "the most emotionally traumatic and stressful event(s)" that has occurred to them. This disclosure is conducted for periods of 20 min over four consecutive days. Control participants follow the same protocol. However, their task is neutral; thus, participants typically provide a factual descriptive (i.e., nonemotional) account of their activities in a specified time period (e.g., yesterday). The potential applicability of ED in psoriasis is further underscored by a recent study, which revealed that the incidence of psoriasis is significantly higher in individuals who have a diagnosis of current or comorbid posttraumatic stress disorder [13]. These results suggest that the experience of traumatic/stressful events may not only be common in patients with psoriasis but may be related to the onset of the condition. Thus, the focus of ED on traumatic/stressful events may have a particular salience for individuals with psoriasis.

Despite the apparent simplicity of ED, it has been associated with remarkable outcomes. Observed effects in nonclinical groups have included improvements in emotional well-being, reductions in self-reported illness and physician visits [14–17], and a catalogue of beneficial changes in immunity, including increased cell numbers, enhanced T-cell proliferation, greater antibody control of latent viruses, and enhanced antibody responses to vaccination [18–21]. Evidence from clinical groups has revealed beneficial effects on measures of physical and emotional well-being in patients with rheumatoid arthritis and asthma [22–24]—an observation confirmed by a recent systematic review of the effects of ED on clinical populations [25].

In addition to the obvious practical advantages of ED and the widespread evidence of its efficacy, one further consideration encourages inquiry into its effectiveness in psoriasis. This concerns the role of the immune system in the disease. Psoriasis is a chronic recurrent inflammatory disorder of the skin, in which increased activity of the immune system's inflammatory response is associated with greater disease severity [26–28]. For example, changes in subsets of circulating lymphocytes and the presence of Th1 cytokine-secreting cells in psoriatic lesions are related to disease activity [29,30]. This evidence, when combined with data suggesting that ED can modulate immune response [18,19], suggests that ED may influence disease severity and emotional well-being.

The present study sought to explore the effects of ED on both disease severity and quality of life in patients with psoriasis. Unlike some earlier studies [9–12], assessments of disease severity and quality of life were prospective, and disease severity was determined by objective clinical examination by an investigator blind to group allocation. Furthermore, in view of the well-established effects of seasonal factors on psoriasis [6,31], seasonal effects were controlled for in the analyses.

Methods

Participants

Participants were recruited through dermatology clinics, psoriasis patient groups, and an advertisement in a local