

Perceived Stress, Optimism and Social Appearance Anxiety in Patients with Skin Diseases: A Comparative Study

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ABSTRACT

Background: Skin disease is often considered to be 'only cosmetic' by many medical professionals and lay-people alike but unlike most internal illnesses, skin disease is often immediately visible to others and therefore people suffering from dermatological conditions may suffer serious social and emotional consequences.

Aim: The purpose of this research was to compare patients suffering from acne, alopecia areata (AA) and melanosis on perceived stress, optimism and social appearance anxiety.

Materials and Methods: The study included 120 patients (acne = 40, AA = 40, melanosis = 40) ages ranging from 15 to 25 years. Perceived Stress Scale (PSS), Life Orientation Test-Revised (LOT-R) and Social Appearance Anxiety Scale (SAAS) were administered to the patients. Analytical evaluation was done by Kruskal Wallis and ANOVA-tests.

Analyses: The results of the present study clearly revealed that perceived stress and social appearance anxiety were found highest in patients with AA followed by acne patients and found least in patients with melanosis. However, no significant difference was found in patients with melanosis, acne and AA in regard to optimism. This study is an attempt to

stimulate professionals working in the field of dermatology and mental health to explore their supportive communication and increase awareness regarding the difficulties that patients with skin diseases can face.

Keywords: perceived stress, optimism, social appearance anxiety, skin disease

Perceived Stress, Optimism and Social Appearance Anxiety in Patients with Skin Diseases:

A Comparative Study

People face wide spectrum of diseases and problems in their lives but ones which are visible to the world can be particularly traumatic. Many people fail to realize the importance of psychological aspects when considering the impact of skin disease. Skin disease is often considered to be 'only cosmetic', but unlike most internal illnesses, skin disease is often immediately evident to others. It is for this reason that traditional views do not account for the often profound psychological impact that it can exert on those affected.

Furthermore, the considerable growth on "appearance" in current times due to fashion industry and media increases the problem multifold for those who suffer from skin diseases. In the current world, people are subjected to the same message constantly: 'Attractive people are popular, happy, successful, exciting and are often loved, respected and worshipped' (Papadopoulos & Walker 2003). As a result, people with dermatological illnesses are left feeling minimised as individuals, tend to be very sensitive to the social significance of their actions and appearance, to anticipate rejection by others, and to experience humiliation and/or shame (Kellett & Gawkrödger 1999).

Therefore, it is not surprising that due to their visibility and appearance-altering quality, skin disorders have important emotional, psychological and social implications for the sufferer, making the long-established link between psychological factors and dermatology even stronger. Yet, little attention has been paid to them or to the ways in which to address them.

The potential for some individuals with skin conditions to experience psychosocial distress as a result of their condition has been widely acknowledged. 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'.

Given the potential social and physical consequences, raised levels of psychological distress have been reported, with some studies indicating as many as 30% of patients having clinically significant levels of distress (Gupta & Gupta 2003). Psychological difficulties most commonly found have included: anxiety, particularly social anxiety; depression, including risk of suicide; lowered self-esteem; feelings of shame; and concerns with body image (Benrud-Larson et al. 2003; Salzer & Schallreuter 1995).

Several studies hypothesized that optimism can affect how people deal with skin diseases. According to Grahame, Dick, Morton, Watkins and Power (2002) significant improvement was seen over treatment time on how patients self-rated their self-esteem and positive affectivity, and a significant decrease on how patients self-rated their anxiety, depression, negative affectivity and Skindex scores.

Previous literature has also identified social appearance anxiety in patients with cosmetically disfiguring skin disorders (Kent & Keohane 2001), especially those who were teased or ridiculed about their skin disorder at some time earlier in their lives. Some patients with chronic acne whose acne had interfered with their socialisation during their adolescence continued to experience social anxiety in later life when they no longer had acne, because of the long-term impact of having to live with acne during developmentally critical periods of life such as adolescence (Kellett & Gawkrödger 1999).

Thus, it is high time when a patient-centered approach is particularly needed. In fact, it has been shown that clinical evaluation alone is not sufficient for a comprehensive assessment of the burden of skin diseases on patients. Psychosocial components are increasingly regarded as important elements of the burden of skin disease suffered by

individual patients, and therefore as relevant aspects of a comprehensive clinical assessment.

This research aims at focusing on the psychosocial aspects of skin diseases (in this case, acne, AA and melanosis), by comparing them on perceived stress, optimism and social appearance anxiety

Method

Participants

A total of 120 skin outpatients suffering from acne, AA and melanosis (acne = 40 AA = 40 melanosis = 40) ranging from 15-25 years of age who were undergoing treatment in a private skin clinic of Jaipur, Rajasthan participated in this study (Table I). The study included 40 patients in each of the three skin diseases with equal number of males and females. The data were collected from participants who were undergoing medical treatment and suffered from the disease since six months or more.

Table I

Distribution of the sample

Name of skin disease	Number of respondents		Total
	Female	Male	
Acne	20	20	40
AA	20	20	40
Melanosis	20	20	40

Measures

1. Demographic questionnaire

A self-made demographic questionnaire was administered to obtain demographic information from the participants. The demographic variables assessed were age, sex,

religion, domicile, family type and background, types of alternative treatment taken (if any) and nature of skin disease of the participants.

2. Perceived stress scale

The perceived stress scale (Cohen et al. 1983) measures the degree to which situations in one's life are deemed to be stressful. Specifically, items tap unpredictability, uncontrollability, and feelings of being overloaded. The scale also includes queries about current levels of experienced stress. The current 10-item scale is a shortened version of the original 14-item index and has been found to maintain the same psychometric properties. The PSS items are scaled from 0-4, with a continuum ranging from '0' indicating the person 'never' felt or thought a certain way over the past month to '4' indicating that the person felt or thought certain way 'very often'. Thus, the possible range of PSS scores is from 0-40. A lower score indicates lower levels of perceived stress. Internal reliability of the PSS as measured by Cronbach's alpha was found to be .78.

3. Life Orientation Test- Revised

The Life Orientation Test – Revised (LOT-R; Scheier et al. 1994) is a 10-item scale, with four filler items and six scale items which determines an individual's level of optimism. Respondents are asked to indicate their level of agreement with each of the items on a 4-point scale, in the form of 0 = strongly disagree, 1 = disagree, 2 = neutral, 3 = agree, and 4 = strongly agree. This gives a possible range of 6-24, with higher scores indicating more optimism. The reliability of the LOT-R is satisfactory (Cronbach's alpha = .78), and test-retest correlations range from .56 to .79 for periods from 4 months to two years (Scheier et al. 1994). Scores on the LOT-R have been shown to correlate positively with internal control beliefs and self-esteem, and negatively with depression, hopelessness, and perceived stress (Scheier&Carver 1985).

4. Social Appearance Anxiety Scale (SAAS)

The Social Appearance Anxiety Scale (SAAS) is a 16-item self-report inventory which assesses anxiety of situations regarding one's overall appearance (Hart et al. 2008). It was basically developed to assess fear of situations in which one's appearance may be

evaluated. SAAS assesses people on a five point Likert scale which ranges from extremely to not at all.

The scale provides a good internal consistency ($\alpha = .94$), high reliability (test-retest reliability $r = .84$) and good construct validity (Hart et al. 2008). The rate is the level of agreement on a 5-point Likert scale ranging from 1 (not at all) to 5 (extremely).

Higher scores on the SAAS relate to a greater disparity between self-reported actual and ideal physical attributes, dysfunctional schemes about the importance and meaning of appearance, feelings of unattractiveness, and emphasis on appearance and its maintenance (Hart et al. 2008).

Procedure

A cross-sectional study was carried out. The research protocol was approved by the SwasthyaKalyan ethics committee, Jaipur. All the participants received oral and written communication about the purpose of the study. The participation of patients was voluntary, without any financial compensation and all participants provided written informed consent. The subjects were appropriately instructed and assured for the anonymity and confidentiality of the results.

Results

The participants had a mean age of 21.15 years (SD= 3.354; range 15-25), with 60 (50%) being females and 60 (50%) males. Majority of participants were Hindus (65%), followed by Muslims (26.66%), Sikhs (4.26%) and Christians (4.08%). The patients were mostly of urban origin (75.90%) in which some belonged to nuclear (55.23%) families while others came from joint families (44.77%). Most sought after alternative treatment was Homeopathy (46.80%) followed by Ayurvedic (35.55%), Naturopathy (15%) and other alternative methods (2.65%).

Table II

Disease-wise Comparison of Mean and Standard Deviation for Perceived Stress

Variable	Category	Mean	Standard Deviation	F Value (P Value)
Perceived Stress	Melanosis	22.08	8.56	0.000(0.001)*
	Acne	25.28	8.86	
	AA	31.48	3.17	

*Note.**Statistically significant $p < 0.001$

F value = Analysis of variance

Higher scores indicate high level of perceived stress

Table II indicates disease-wise comparison of mean, Standard Deviation (SD) and significance level for perceived stress. The results reveal that mean and SD of melanosis are found to be 22.08 and 8.56, mean and SD of acne are found to be 25.28 and 8.86, whereas mean and SD of AA are found to be 31.48 and 3.17 respectively which is found to be significant at .001 level. The results suggest that there exists a significant difference between melanosis, acne and AA in which perceived stress was found highest in patients with AA followed by acne patients and found least in patients with melanosis.

Table III

Disease-Wise Comparison of Mean and Standard Deviation for Optimism

Variable	Category	Mean	Standard Deviation	F Value (P Value)
Optimism	Melanosis	14.72	3.20	0.182(NS)
	Acne	14.07	3.38	
	AA	15.58	3.19	

*Note.*NS = Not statistically significant, F value = Analysis of variance

Higher scores indicate high level of optimism

Table III indicates disease-wise comparison of mean, standard deviation (SD) and significance level for perceived stress. The results reveal that mean and SD of melanosis are found to be 14.72 and 3.20, mean and SD of acne are found to be 14.07 and 3.38, whereas mean and SD of AA are found to be 15.58 and 3.19 respectively which is found to be not statistically significant. The results suggest that there exists no significant difference between patients with melanosis, acne and AA in regard to optimism.

Table IV

Disease-Wise Comparison of Mean and Standard Deviation for Social Appearance Anxiety

Variable	Category	Mean	Standard Deviation	F Value (P Value)
Social Appearance Anxiety	Melanosis	38.68	9.42	0.000(0.001)*
	Acne	47.48	13.80	
	AA	49.98	12.63	

*Note.**Statistically significant $p < 0.001$

F value = Analysis of variance

Higher scores indicate high level of social appearance anxiety

Table IV shows disease-wise comparison of mean, SD and significance level for social appearance anxiety. Statistical analysis indicated that mean and SD of melanosis are found to be 38.68 and 9.42, mean and SD of acne are found to be 47.48 and 13.80, whereas mean and SD of AA are found to be 49.98 and 12.63 respectively, significant at .001 level indicating significant difference between melanosis, acne and AA in which social appearance anxiety was highest in patients with AA followed by acne patients and found least in patients with melanosis.

Discussion

The results of the present study yielded significant differences in perceived stress between patients with acne, AA and melanosis in which stress was found to be highest in

patients with AA followed by acne patients and found least in patients with melanos. There is little or no research indicating comparison of these three skin diseases, thus a wider horizon involving other skin diseases would be worth mentioning thereby also help broaden the perspective.

While AA is not a life-threatening disorder, it has been associated with a wide variety of negative psychosocial impact in sufferers (Hunt & McHale 2007). The findings are further supported by several other studies which have indicated an increased prevalence of psychological distress among people with AA (Ataseven et al 2011; Koo et al 1994). Koo et al (1994) suggested that people with AA may be at a higher risk of developing depression, anxiety or other disorders such as social phobia or paranoid disorder.

However, numerous studies have supported the profound impact of acne but a common misconception by the medical and lay community is that acne is a self-limited teenage disease and, thus, does not warrant attention as a chronic disease. Nevertheless, the chronicity of many cases of acne as well as the well-documented psychological effects of chronic acne contributes to the burden of the disease (Gollnick et al 2008).

The results further suggest no significant difference between patients with melanos, acne and AA in regard to optimism. However, contrary to the findings several studies hypothesized that optimism can affect how people deal with skin diseases. Grahame et al (2002) investigated the psychological and emotional impact of acne in which the results indicated that there was a significant improvement over treatment time on how patients self-rated their self-esteem and positive affectivity, and a significant decrease on how patients self-rated their anxiety, depression, negative affectivity and Skindex scores.

On similar lines, Zalewska et al (2007) suggested that personal resources play an important role in acceptance of chronic illness. Enhancement of optimism, and minimizing one's conviction that one's health depends on others could lead to higher acceptance of skin disease.

The skin is undoubtedly the most visible organ determining appearance, and plays a major role in social and sexual communication. Appearance is important in social situations, and it influences social perceptions (Porter 2000). In relation to social appearance anxiety, the results in the present study demonstrated significant differences between acne, AA and melanosis, in which social appearance anxiety was highest in patients with AA, followed by acne patients and found least in patients with melanosis.

There are no studies replicating the comparison of AA, acne and melanosis in regard to social appearance anxiety, but few come closer to the present findings associating AA with high avoidance in attachment relationships, high alexithymic characteristics, and poor social support (Picardi et al. 2003). Likewise, acne patients have been shown to limit exposure through social avoidance and to conceal skin lesions (Kellett & Gilbert 2001). Psoriasis patients have also been found to engage in anticipatory and avoidance coping behaviours, which are unrelated to the severity of their condition and thus enduring stigmatisation and rejection (Griffiths & Richards 2001).

In conclusion, this study provides empirical evidence with regard to psychosocial implications of skin disease. However, one of the main limitations of this study was the small sample size for each of the three skin diseases, which limited the generalizability of conclusions. Another limitation was that the samples were selected from patients attending the dermatology clinic implying that they were probably evaluated during the chronic stage of their condition; therefore, the results cannot be generalized at all stages of the skin condition. The inclusion of control group as well as clinical group in future studies would assist with the comparison of groups and may provide a better indication of the impact of a diagnosis of skin diseases in terms of various psychological factors. However, this study aims at a more holistic approach towards the treatment of skin disorders with the inclusion of psychotherapy along with medical treatment thereby reducing the probability of relapse in skin patients and thereby reflects the seriousness of the problem which needs to be attended to in a more comprehensive manner.

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