

DEVELOPMENT OF AN INDIGENOUS EMOTIONAL STATE SCALE FOR DERMATOLOGICAL PATIENTS[#]

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The present article describes the process of development of an indigenous Emotional State Scale for Dermatological Patients (ESS-D) which measures the intensity of emotional disturbance among patients with psychosomatic skin diseases. Development of ESS-D has been carried out in four phases by using independent samples. The 40 items of ESS-D are arranged in a 5-point scale. The items have been ramified into five dimensions or subscales such as Anxiety, Depression, Body Image, Well-being, and Social Withdrawal. The psychometric evaluation of ESS-D reveals that it possesses high reliability and sufficient content and construct validities. The development of an indigenous Emotional State Scale for Dermatological Patient (ESS-D) has been made for clinical use in dermatologic clinics, in Pakistan.

Various studies have reported that emotional state plays an important role not only in determining the drive level of essentially 'normal' individuals and exert a direct influence on their performance, but also in the genesis of psychosomatic diseases (Cameron, 1975; Sharma & Rao, 1974; Wolff & Wolff, 1947).

Whatever is going on "mentally" inside a person is also going on physically and vice versa. As Graham (1967) explained "words psychological and physical refer not to different phenomena but to different ways of talking about the same phenomenon" (p. 52). This more holistic, or unified concept of body and mind has led to the development of a new research discipline of health psychology also called psychosomatic and behavioral medicine (American Psychiatric Association, 1994). This approach fits contributing factors such as biological, psychological, and socio-cultural into the total picture. Its emphasis, however, is essentially on the role of psychological factors in the occurrence and maintenance of physical illness, and on the psychological treatment that can help to relieve stress-related physical

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ailments. According to Holray and Coyne (1987) physical illness can no longer be studied apart from psychological factors. Now evidence suggests that almost any physical disorder from cancer to the common cold, can be to some extent "psychophysiological" (Emmons, 1992; Maddi, Bartone, & Puccetti, 1987).

Ashford (1990) conducted an intensive investigations on duodenal ulcer, ulcerative colitis, asthma, essential hypertension, rheumatoid arthritis, thyrotoxicosis, and neurodermatitis. From these he evolved a specific hypothesis, by which he held that in each dysfunction a specific psychodynamic core conflict could be held responsible (see also Costa & McCrae, 1987).

According to Herschback, Henrich, and Von (1999), it has been estimated that at least one out of every two persons who seek medical aid suffers from an illness related to emotional stress or its negative affect (depression, anxiety, pessimism, and low self-esteem), though a mild form of anxiety is beneficial for the patients as it motivates them to seek good medical care. The relationship between psychological factors and good health has also been well documented (e.g., Taylor, 1990). The patient who believes the treatment is going to be effective has a much better chance of showing improvement than does the patient who is pessimistic. The prevalence of emotional state of pessimism and helplessness is frequently seen in the patients with chronic skin diseases due to which they show aversion to life (Gupta & Gupta, 1998).

In order to understand emotional state, one should be clear about how emotion is defined. According to Ledoux (1986) the emotional expressions are involuntary and reflexive. They involve changes in the skeletal musculature, glands, and smooth muscles, and are regulated by neural mechanism that include processes within the autonomic nervous system. Clinically viewed, an emotion is a persisting dynamic disturbance (e.g., conflict, anxiety, frustration, depression, thwarted tension, guilt, and stress) within the individual that may influence his health, happiness, and well being. The physiological side of what we call emotion has its primary control centers in the hypothalamus of the brain. During emotion the hypothalamus coordinates and modulates the function of various organs in keeping with the emotion. So long as emotional reactions are normal, that is, so long as they are appropriate to the actual life situation and are not prolonged, the functioning and balance of the multiple organs systems remain normal and healthy. When, however, these emotional reactions continue beyond what is required to cope with the situation it becomes difficult for the body to maintain a psychological equilibrium. The prolonged

emotional states can reverberate means of the autonomic nervous system throughout the various organ systems of the body.

The classic notion of the psychosomatic disorder, proceeding from the early work of Dunbar (1943) and Alexander (1950), was predicted on the idea that strong emotions in themselves, whether consciously recognized or not, would over time produce pathologic anatomical and physiological changes in certain organ system. These changes such as elevated heart rate, dumping of stored sugar into a blood-stream, and secretion of hormones from the inner core of adrenal gland which are accompanied by the strong emotions are the product of the autonomic nervous system activity. Cannon (1929) proposed an emergency theory that stress results in a massive activation of the entire sympathetic division that leads to an increase in all the visceral functioning. In a series of experiments he showed how the bodily changes in pain, fear, and rage are serviceable and adaptive in a struggle for existence. During an emergency there is a diffuse discharge across the sympathetic nervous network of the autonomic nervous system and increased secretion of the adrenal glands. This neural and glandular discharge produces widespread bodily changes.

Though all of these bodily changes are directly serviceable in making the organism respond more effectively in emergency situations of fear, pain, and rage in which more energy is required, all of these are basically disruptive, disturbing, and disintegrating rather than aid in adaptive behavior.

There is a lot of information in the literature about psychological disturbance in somatic diseases. For dermatology such data are scant. The prevalence of psychological disturbances was found to be a little high among the other somatic diseases (Gupta & Gupta, 1998).

The Psychosomatic Skin Disorder

Effects of psychological factors in many dermatologic diseases has been recognized by practitioners. Some dermatology clinics have reported the incidence of psychological factors in over 75 per cent of their patients (Burrows, Davis, & Brain, 1980). The prevalence of psychological disturbances was found to be little higher in skin patients than that seen in oncological, cardiological, or neurological patients (Windemuth, Stucker, Hoffman, & Altmeyer, 1999).

There are many skin diseases like psoriasis, atopic dermatitis, eczema, urticaria, and acne vulgaris that involve psychological

comorbidity which if left untreated may serve as the possible pathogenesis of relaps and long duration of the disease (Harvima, Viinamaki, Naukkarinen, & Paukkonen, 1993).

Soderberg (1992) observed the coincidence of psychological instability and severity of itching or pruritus in the psoriasis patient which may be one of the disease causing factors. Al'Abadie, Kent, and Gawkrödger (1994) tried to find the relationship between stress and the onset and exacerbation of psoriasis and other skin conditions. The results support the notion that stress is more likely to be associated with the outset of psoriasis than other skin conditions, but also that there may be considerable individual variation in the ability to cope, suggesting that psychological interventions may be helpful for particular patients. Several psychotropic mediations have been observed to affect dermatologic conditions (Folks & Kinney, 1992). According to Hajek, Jakoubek, and Radil (1990) hypnotic suggestions can be useful in treating or reducing the symptoms of disease conditions in the eczema sufferers. Koblenzer (1996) suggested that pruritus or itching in urticaria patients can be controlled by prescribing them some psychotropic drugs. As acne involves depression, the dermatologists must prescribe some anti-depressant agents along with purely dermatologic drugs (Chu & Cunliffe, 1999). Panconesi and Haufmann (1999) hold the view that in the treatment of acne vulgaris patients, the first step should be in psychotherapy, counseling, and then toward other medicines or therapeutic strategies.

Emotional State and the Psychosomatic Skin Disorders

The evidence for psychological causation is neither strong nor convincing, however, psychiatric disorders are common among people with established skin diseases. Attah and Mostaghini (1995) have published data supporting comorbidity between certain psychiatric disorders and skin diseases. According to Pulimood, Rajagopalan, Rajagopalan Jacob, and John (1996) the highest rate of psychiatric morbidity was found among dermatologic patients. The most frequently occurring psychological factors that may aggravate the disease symptoms are: Self-injurious behavior, depression, anxiety and stress, low self-esteem and obsessive compulsive disorder.

Depression is the most common psychiatric disease found in dermatologic patients. Gupta, Gupta, Schork, and Ellis (1994) observed that depression modulates pruritus perception; that the degree of depressive psychopathology is directly correlated with pruritus severity. Cotterill and Cunliffe (1997) studied sixteen cases

of patients, seven men and nine women, who committed suicide after being suffering with dermatological problems. Most of the patients had either a body image disorder (dysmorphobia) or acne. According to Cotterill and Cunliffe (1997), it is important to recognize the emotional disturbance particularly in women with facial complaints, and men with facial scarring who may be are extremely depressed and at risk of suicide and to establish a liaison clinic in which psychological and medical model should be juxtaposed. So that patients thought to be at risk of suicide can be easily managed.

Ekelund (1995) explains the psyche of skin in the way that bodily contact promotes peace of mind and it is only possible with a healthy and good skin. Persons with ugly and affected skin are usually deprived of maintaining a profound bodily contact and therefore, suffer from mental or emotional disturbance. The patients with facial acne, hand eczemas and psoriasis usually develop low body image which leads them toward social withdrawal and ends at severe depression or may be at active suicidal attempts (Koblenzer, 1996).

Klein and Fritsch (1996) identified stress as a leading factor in the etiology and aggravation of the dermatological diseases. King and Wilson (1991) documented that both interpersonal stress, anxiety, and depression were significantly related to changes in skin condition.

The availability of psychiatric consultation at dermatology clinics and regular liaison between psychiatrists, psychologists, and dermatologists are essential for appropriate management (Folks & Kinney, 1992). It has been estimated by Gupta and Gupta (1996) that in at least one third of the dermatology patients effective management of the skin disorders involves consideration of associated emotional factors and the relevant psychological therapies. They also pay emphasis on the use of psychotropic drugs (i.e., the antianxiety, antidepressant, and antipsychotic agents) for the treatment of emotional disturbance that occur in conjunction with cutaneous conditions.

To determine which psychotherapy and pharmaco agent is the most appropriate, the nature of underlying psychopathologic condition such as anxiety, depression, and other emotional problems should be identified (Koo & Pham, 1992). Many psychologists used different psychological techniques and provided a large evidence for the efficacy of psychotherapy in managing the dermatologic patients. For example, Chu and Cunliffe (1999), and Preston (1999), documented that an appreciative cooperation among dermatology, clinical psychology and psychiatry is necessary and useful. The liaison

between dermatology and psychiatry proved a valuable adjunct to normal dermatological treatment and was followed by improvement in the majority of patients.

In Pakistan, the dermatologists also realize the disease chronifying psychological factors, but unfortunately no tangible effort has been seen in the field of psychosomatic dermatitis. The present study is the first of this kind in the country. The special contribution of this study is that an Emotional State Scale for Dermatological Patients (ESS-D) has been constructed in Urdu for wider clinical use in Pakistan and its psychometric properties have also been determined.

METHOD

Development of Emotional State Scale for Dermatological Patients (ESS-D)

Development of ESS-D has been carried out in four phases by using independent samples.

Phase 1: Generation of Item Pool

In order to generate an item pool, 50 dermatological patients including both women ($n = 27$) and men ($n = 23$) with age range of 16 to 60 years were contacted in dermatological clinics of Pakistan Institute of Medical Sciences (PIMS), Islamabad and Rawalpindi General Hospital (RGH), Rawalpindi. All the patients were diagnosed by the dermatologists for different skin diseases such as eczema ($n = 13$), atopic dermatitis ($n = 11$), psoriasis ($n = 9$), acne vulgaris ($n = 10$) and urticaria ($n = 7$).

An open ended questionnaire was administered individually to the participants, who were supposed to give at least five positive and five negative statements about their disease, physical and psychological complaints along with their body image statements. The statements with high frequency were selected for making an item pool. Initially collected item pool of 50 items related to both physical and psychological complaints was arranged in a 5-point Likert type scaling. Score 1 was assigned to the response category "not at all", 2 to "very little", 3 to "to some extent", 4 to "more often" and 5 to "very much". The range of score was between 50-250. The high score indicates highly disturbed emotional state.

Phase II: Categorization of Items

The 50 items in the item pool were categorized into five-subcales namely: anxiety, depression, body image, well-being, and social withdrawal by taking a consensus among board of judges consisting of eight psychologist (Ph.D and M.Phil degree holders). Judges were provided the following definitions of subscale:

1. **Anxiety.** "A state of increased physical arousal (e.g., increased blood pressure, accelerated pulse, and sweating) and generalized feelings of fear and apprehension (e.g., nervousness, irritability, anger, fear, discomfort, resentment crying)" (Bootzin, Acocella, & Alloy, 1993, p. 158).

2. **Depression.** "Depression is a pathological mood disturbance characterized by a wide variety of feelings, attitudes, and beliefs that a person has about self and the world (e.g., pessimism, despair, helplessness, hopelessness, low self esteem, guilt, negative expectancy and dread of impending disaster)" (Rawlins & Heacock, 1993, p. 133).

3. **Well-being.** Schlosser (1990, p. 129) considered well-being as "an appraisal of the status of one's functioning and outcome along several distinct but interrelated dimensions including global, mental, and physical health-fullness. He further says that well-being means to reside strictly in the positive domain of health indicators".

4. **Body-Image.** Body image is an individual's concept of his physical appearance and perception of a person's appearance and functioning (Rawlin & Heacock, 1993, p. 231).

5. **Social Withdrawal.** According to Rawlins and Heacock (1993, p.336) social withdrawal is an attempt to avoid interactions with others, thus avoiding relationships with others. He/she appears detached, disinterested, removed and does not share, experiences with other.

Following the written instructions the judges from the 50-items identified 14 items for the subscale of 'Anxiety', 13 for 'Depression', 8 for 'Body Image', 9 for 'Well-being', and 6 for 'Social Withdrawal'.

Phase III: Selection of Final Items

Final selection of the items was carried out on the basis of item-total correlation. The 50-item scale was administered on an independent sample of 65 dermatological patients. Item-total correlation yielded 40 items which were found significantly correlated at $p < .05$. The range of r is .36 to .83. A scoring key including the list of items for reverse scoring was also prepared. The score range for 40-item ESS-D is between 40 to 200, and for subscales it is as following:

For Anxiety subscale (9 items) 9 to 45; for Depression subscale (12 items) 12 to 60; for Body Image subscale (8 items) 8 to 40; for Well-being subscale (6 items) 6 to 30; and for Social Withdrawal subscale ($n = 5$) it is between 5 to 50 (see Annexure for ESS-D items).

Phase IV: Determination of Reliability and Validity

Sample

In order to determine the psychometric properties of ESS-D a sample of 75 dermatological patients with age range of 16 to 60 years was used including 45 women and 30 men. Among the participants 16 were suffering from psoriasis; 19 from eczema; 14 from atopic dermatitis; 15 from acne; and 11 from urticaria patients; and with reference to disease condition there were 57 patients with chronic skin diseases and 18 with acute skin diseases.

Instruments

Following scales were used to achieve the objectives of the study:

1. Emotional State Scale for Dermatological patients (ESS-D) developed and finalized during the Phase III of the present study.
2. Well-being Scale Affectometer-2 originally developed by Kammann and Flet (1983) and translated in Urdu by Naheed (1997) which is considered as a valid and reliable measure of well-being in terms of general happiness, based on negative and

well-being in terms of general happiness, based on negative and positive feelings. Split-half reliability had been found to be highly significant i.e., $r = .75$ ($n = 72$) between two parts and alpha coefficient was 0.88 ($n = 72$) which is also quite high.

3. Siddiqui Shah Depression Scale (SSDS; Siddiqui, 1992) has been used with the objective of further validation of ESS-D. SSDS is an indigenously developed depression scale in Urdu which is significantly reliable and internally consistent. It consists of 36 items arranged in 4-point Likert type scale ranging from 1 (never) to 4 (every time). The score range is between 36 to 144. The high score indicates the presence of symptoms of depression. Siddiqui (1992) has reported that SSDS has highly significant split-half reliability, for clinical group ($r = .99$) and ($r = .80$) for non-clinical group. It has also high internal consistency for both the groups i.e., an alpha coefficient of .91 for clinical group and .89 for non-clinical group.

Procedure

Patients were presented all the scales at the same time in the form of a booklet. They were instructed to read the instructions written for each scale carefully and to attempt all the items.

RESULTS

Reliability of ESS-D

For the determination of reliability of ESS-D, Cronbach Alpha Coefficients, interscale correlation, and split-half reliability coefficients were calculated.

Cronbach Alpha Coefficients

Cronbach's Alpha Coefficients show internal consistency of the scale (see Table 1).

Table 1

Alpha reliability coefficients of total and subscales of ESS-D), (N = 75)

Subscales	No. of Items	Alpha Coefficients
I. Anxiety	9	.92
II. Depression	12	.96
III. Body Image	8	.94
IV. Social Withdrawal	6	.80
V. Well-Being	5	.91
Total ESS-D	40	.97

Interscale Correlation Coefficients

The interscale correlation calculated for the subscales: Anxiety, Depression, Body Image and Social Withdrawal with total ESS-D have shown significant positive correlation of the subscale with each other and with the total ESS-D which manifests the internal consistency of all these scales (see Table 2). Whereas the negative correlation of the well-being subscale with the total ESS-D and the rest of subscales of Anxiety, Depression, Body Image, and Social Withdrawal indicates that patients who manifest disturbed emotional state will also report low sense of well-being. Similar findings have also been reported by Chren, Lasek, Quinn, Mostow, and Zynzanski (1996).

Table 2

Interscale correlations of total and sub-scales of Emotional State Scale for Dermatological patients (ESS-D) (N = 75)

Subscales	I	II	III	IV	V	ESS-D (Total)
I. Anxiety	-	.48***	.85***	-.67	.35**	.57***
II. Depression		-	.84***	-.07	.82***	.94***
III. Body Image			-	-.04	.91***	.93***
IV. Well-Being				-	-.03	-.10
V. Social Withdrawal					-	.290***

* $p < .05$, ** $p < .01$, *** $p < .000$

Split half Reliability

The split-half reliability was found to be .88. The alpha reliability coefficient of part I and part II of ESS-D was found to be .91 and .90, respectively.

Validity of ESS-D

Content Validity

All the items of ESS-D have been empirically determined on the basis of open-ended questionnaire administered on dermatological patients. In additions experts opinion have also been sought. All this exercise shows ESS-D has sufficient content validity.

Construct Validity

In order to establish the construct validity of ESS-D, a correlation was computed between ESS-D and Well-Being Scale Affectometer 2 (Naheed, 1997).

Table 3

Correlation of scales of Well-being Affectometer-2 with ESS-D and its five subscales (N = 75)

Subscales	Part I	Part II	Total affectometer-2
I. Anxiety	-.31**	-.29***	-.32**
II. Depression	-.55***	-.70***	-.76***
III. Body Image	-.44***	-.65**	-.63***
IV. Well-Being	.26*	.25*	.27*
V. Social Withdrawal	-.49***	-.72***	-.69***
ESS-D (Total)	-.50***	-.71***	-.69***

* $p < .05$, ** $p < .01$, *** $p < .000$

The results in Table 3 showed that there is a negative correlation between the Part I and Part II of Urdu version of Well-being affectometer-2 with the total ESS-D and its subscales: Anxiety, Depression, Body Image, and Social Withdrawal which confirms discriminant validity of ESS-D. While positive correlation of well-being

subscale of ESS-D with the well-being affectometer-2 (Urdu version) total and Part I and Part II shows the convergent validity of this subscale.

Further validation of ESS-D with another scale namely Salma Shah Depression Scale (SSDS, 1992) has also been done with an independent sample ($N=80$) of dermatological patients. For discriminant validity the scores on SSDS has been correlated with the scores of well-being subscale of ESS-D, and for convergent validity, these have been correlated with the scores on total ESSD and its other subscales namely Anxiety, Depression, Body Image, and Social Withdrawal. The significant positive correlation between scores of dermatological patients on SSDS and ESS-D and its subscales: Anxiety, depression, body image, and social withdrawal except the well-being scale indicates convergent validity of ESS-D and its subscales, whereas negative correlation of well-being subscale of ESS-D and SSDS provides the discriminant validity of ESS-D (see Table 4).

Table 4

Correlation of Scales of ESS-D with Siddiqui Shah Depression Scale (SSDS) (N=80)

ESS-D	SSDS
I. Anxiety	.90***
II. Depression	.91***
III. Body Image	.81***
IV. Well-being	-.21*
V. Social Withdrawal	.89***
ESS-D (Total)	.91***

* $p < .05$, ** $p < .01$, *** $p < .000$

DISCUSSION

Folklore substantiates the fact that human beings have been interested for centuries in the connection between emotional states and changes in the functioning of various bodily organs. Researchers had been trying to explore the relationship of emotional state to the physical disorders by conducting experiments. Wolff and Wolff (1947) have

been succeeded to establish the principle of "stimulus specificity"—that different kinds of stress produce different kinds of physical response. This principle has since confirmed by the other investigators. For example, Schwartz (1978) observed that fear and anger have significantly different effects not only on gastric activity of stomach, but also on the heart rate, blood pressure, muscle tension, respiratory rate, and other physical functions.

It has been estimated that at least one out of every two persons who seek medical aid suffers from an illness related to emotional stress (Herschback, Henrich, & Von, 1999). The prevalence of disturbed emotional state was found to be high in the patients with chronic skin diseases as compared to the cardiac, asthma, and gastric patients (Gupta & Gupta, 1998). As the body's largest organ the skin functions as the most important human communication organ, possessing communicative aspect of earning and healing of self and others (Schulte, 1991). It plays a tangible role in building up of one's confidence. With an ugly skin people tend to lose their self confidence. On the other hand to be beautiful is a passport for success. That is why people like to look beautiful. Therefore the majority of women spend on average 15 to 20 minutes a day making up. Putting on 'a face is as much a ritual to most of us as dressing and brushing our teeth, and the way our face looks is our signature. It completes our total image and makes a statement about the way we feel about ourselves (Kettle, 1986). It can be observed from paintings and manuscripts, that early cultures liked to accentuate their eyes, lips, and facial complexion to enhance their facial beauty. For this purpose lips were dyed with a mixture of red ochre combined with fat or oil, and for whitening the skin, white powder made either from alabaster or sand with added performance or white lead (the toxic effect of which had the most drastic results). Red ochre was used for rouge.

The psychoanalysts find a great deal of symbolic use of the skin. In general, all repulsive skin eruptions are seen as indications of masochistic tendencies on the part of the patient. He is turning his hostility inward on himself, and at the same time that he is hurting himself. He is also punishing himself socially by becoming repulsive to other people. Some of the analysts believe that the location of the lesions has specific symbolic significance. For example, a rash on the hands would be connected with sexual conflict over masturbation. Freudians also hold that breaking out of the skin is evidence in some cases of exhibitionism. Saul and Bernstein (1941) in an early study attempted to give the psychodynamics of the urticaria. They found that the rash broke out as a result of the frustration of intense longings for

love. The patients had been deprived of mother's love and had formed an attachment to the father that had strong masochistic overtones. These patients dreamed of being beautiful and admired and wanted to have fine things. They tended to enter professions such as dancing and modeling in which they could "exhibit" themselves. According to Pulimood et. al., (1996) the psychiatric morbidity present in the dermatological patients affects the course of dermatological condition as well as the duration of hospitalization.

The literature review suggests that a psychiatric consultation or assessment, as well as the judicious use of psychotherapy is frequently necessary in the clinical management of the skin patients i.e., a liaison between dermatology, and psychiatry or clinical psychology is necessary and useful. Unfortunately no step has been taken in the psychosomatic dermatology in Pakistan. The dermatological patients who need the psychiatric and psychological consultation are really deprived of it. For a better management of such patients first of all we should have psychological instrument in our hand to assess their psychological comorbidity. In this regard the present research is the first of its kind in Pakistan in which Emotional State Scale for Dermatological Patients (ESS-D) has been developed. It is an instrument which measures emotional state of dermatological patients in terms of anxiety, depression, body image, well-being, and social withdrawal. ESS-D simultaneously covers all the three basic aspects or components of emotion the cognitive, behavioral, and physiological, i.e., it includes items related to psychological feelings as well as psychological or somatic complaints. Frese (1985) found that self-description of psychological feelings do not define a different factor from those items that describe somatic complaints. Moreover an instrument that includes both the items of psychological as well as somatic complaints, is less likely to be affected by the factor of social desirability. Another important point of ESS-D is that it measures emotions on different intensity levels, i.e., it is a Likert type ratio scale arranged in 5 points with intensity levels ranging from 'not at all' to 'very much'. This has been strongly supported by Frijda, Ortony, Sonnemans, and Clore (1992) who document that emotional measurement must be made on intensity levels because intensity is the salient feature of emotions. Psychometric analysis was also performed for 40-item ESS-D. The determination of reliability and validity of ESS-D yielded satisfactory results. Although further research is always required to examine psychometric properties of a newly constructed scale using additional samples, and factor analysis of its items will help in the construct validation of this instrument.

To conclude it can be stated that ESS-D is a reliable and valid measure of emotional disturbance in terms of anxiety, depression, well-being, body image, and social withdrawal especially meant for dermatological patients for the first time in Pakistan. Due to easy scoring procedure and items in Urdu language ESS-D can be used candidly by nurses, doctors, and psychologists in dermatological clinics for finding the emotional states of patients, suffering from chronic skin disease.

REFERENCES

- Al'Abadie, M. S., Kent, G. G., & Gawkrödger, D. J. (1994). The relationship between stress and the onset and exacerbation of psoriasis and other skin conditions. [CD-ROM] *Medline*. Abstract from Silver Platter File 3.11: Psychosomatic Dermatitis. Marked in Search of # 4.
- Alexander, F. (1950). *Psychosomatic medicine: Its principles and application*. New York: Norton.
- American Psychiatric Association (1994). *Diagnostic and statistical manual of mental disorders* (4th ed.). Washington DC: American Psychiatric Association.
- Ashford, S. (1990). Upward mobility, status inconsistency and psychological health. *The Journal of Social Psychology*, 130(1), 71-76.
- Bootzin, R. R., Acocella, J. R., & Alloy, L. B. (1993). *Abnormal psychology: Current perspectives* (6th ed.). New York: Bogota.
- Burrows, G., Davies, M., & Brian, F. (Eds.). (1980). *Anxiety and skin diseases: Handbook of studies on anxiety*. New York: Elsevier.
- Cameron, P. (1975). Mood as an indicator of happiness: Age, sex, social class, and situational differences. *Journal of Gerontology*, 30, 216-224.
- Cannon, W. B. (1929). *Bodily changes in pain, hunger, fear and rage, on account of recent researches into the function of emotional excitement* (2nd ed.). New York: Appleton.
- Chren, M. M., Lasek, R. J., Quinn, L. M., Mostow, E. N., & Zynzanski, S. J. (1996). Skindex, a quality of life measure for patients with skin disease. [CD-ROM] *Medline*. Abstract from Silver Platter File 3.11: Psychosomatic Dermatitis. Marked in Search of # 16.

- Chu, A., & Cunliffe, W. J. (1999). The inter-relationship between isotretinoin/acne and depression. [CD-ROM] *Medline*. Abstract from Silver Platter File 3.11: Psychosomatic Dermatitis. Marked in Search of # .
- Costa, P. T., & McCrae, R. R. (1987). Neuroticism, somatic complaints, and disease: Is the bark worse than the bite? *Journal of Personality*, 55, 299-316.
- Cotterill, J. A., & Cunliffe, W. J. (1997). Suicide in dermatological patients. [CD-ROM] *Medline*. Abstract from Silver Platter File 3.11: Psychosomatic Dermatitis. Marked in Search of # 24.
- Dunbar, F. (1943). *Psychosomatic diagnosis*. New York: Harper & Row.
- Ekelund, A. G. (1995). The 7th congress on dermatology and psychiatry: Bodily contact promotes peace of mind. [CD-ROM] *Medline*. Abstract from Silver Platter File 3.11: Psychosomatic Dermatitis. Marked in Search of # 7.
- Emmons, R. A. (1992). Abstract versus concrete goals: Personal striving, physical illness, and psychological well-being. *The Journal of Personality and Social Psychology*, 62, 292-300.
- Folks, D. G., & Kinney, F. C. (1992). The role of psychological factors in dermatologic conditions. [CD-ROM] *Medline*. Abstract from Silver Platter File 3.11: Psychosomatic Dermatitis. Marked in Search of # 12.
- Frese, M. (1985). Stress at work and psychosomatic complaints: A causal interpretation. *Journal of Applied Psychology*, 70, 314-328.
- Frijda, N. H., Ortony, A., Sonnemans, J., & Clore, G. L. (1992). The complexity of intensity: Issues concerning the structure of emotion intensity. In M. S. Clark (Ed.), *Review of personality and social psychology*, (pp. 60-90). Newbury Park, CA: Sage.
- Graham, D. T. (1967). Health, disease, and the mind-body problem: Linguistic parallelism. *Psychosomatic Medicine*, 39, 52-71.
- Gupta, M. A., & Gupta, A. K. (1996). Psychodermatology: An update. [CD-ROM] *Medline*. Abstract from Silver Platter File 3.11: Psychosomatic Dermatitis. Marked in Search of # 16.
- Gupta, M. A., & Gupta, A. K. (1998). Depression and suicidal ideation in dermatology patients with acne, alopecia areata, atopic dermatitis and psoriasis. [CD-ROM] *Medline*. Abstract

- from Silver Platter File 3.11: Psychosomatic Dermatitis. Marked in Search of # 11.
- Gupta, M. A., Gupta, A. K., Schork, N. J., & Ellis, C. N. (1994). Depression modulates pruritus perception: A study of pruritus in psoriasis, atopic dermatitis, and chronic idiopathic urticaria. [CD-ROM] *Medline*. Abstract from Silver Platter File 3.11: Psychosomatic Dermatitis. Marked in Search of # 3.
- Hajek, P., Jakoubek, B., & Radil, T. (1990). Gradual increase in cutaneous threshold induced by repeated hypnosis of healthy individuals and patients with atopic eczema. [CD-ROM] *Medline*. Abstract from Silver Platter File 3.11: Psychosomatic Dermatitis. Marked in Search of # 13.
- Harvima, I. T., Viinamaki, H., Naukkarinen, A., & Paukkonen, K. (1993). Association of coetaneous most cell and sensory nerves with psychic stress in psoriasis. *Psychotherapy and Psychosomatic*, 60, 168-176.
- Herschback, P., Henrich, G., & Von, R. M., (1999). Psychological factors in functional gastrointestinal disorders: Characteristics of the disorder or of the illness behavior? [CD-ROM] *Medline*. Abstract from Silver Platter File 3.11: Psychosomatic Dermatitis. Marked in Search of # 2.
- Holray, A. K., & Coyne, J. (1987). Personality and health in the 1980s: Psychosomatic medicine revisited? *Journal of Personality*, 55, 374-375.
- Kamman, R., & Flett, R.(1983). Affectometer 2. In J. P. Robinson, R. R. Shaver, & L. S. Wrightsman (Eds.), *Measures of personality and social psychological attitudes*, (pp. 98-99). New York: Academic Press.
- Kettle, J. (1986). *The Hamlyn basic guide to make-up*. London: Hamlyn Publishing.
- King, R. M., & Wilson, G. V. (1991). Use of a diary technique to investigate psychosomatic relations in atopic dermatitis. [CD-ROM] *Medline*. Abstract from Silver Platter File 3.11: Psychosomatic Dermatitis. Marked in Search of # 16.
- Klein, G. F., & Fritsch, P. O. (1996). Psychosomatics – an urge. [CD-ROM] *Medline*. Abstract from Silver Platter File 3.11: Psychosomatic Dermatitis. Marked in Search of # 21.

- Koblentz, C. S. (1996). Pharmacology of psychotropic drugs proved to be useful in dermatologic practice. [CD-ROM] *Medline*. Abstract from Silver Platter File 3.11: Psychosomatic Dermatitis. Marked in Search of # 5.
- Koo, J. Y., & Pham, C. T. (1992). Psychodermatology: Practical guidelines on pharmacotherapy. [CD-ROM] *Medline*. Abstract from Silver Platter File 3.11: Psychosomatic Dermatitis. Marked in Search of # 12.
- Ledoux, J. E. (1986). The neurobiology of emotion. In J. E. LeDoux & W. Hirst (Eds.), *Mind and brain: Dialogues in cognitive neuroscience*, (pp. 301-354). Cambridge: Cambridge University Press.
- Maddi, D. R., Bartone, P. T., & Puccetti, M. C. (1987). Stressful events are indeed a factor in physical illness: Reply to Schroeder and Costa (1984). *Journal of Personality and Social Psychology*, 52, 833-843.
- Naheed, S. (1997). *Professional attitude of teachers and their psychological well-being*. Unpublished M. Phil dissertation, National Institute of Psychology, Quaid-i-Azam University, Islamabad, Pakistan.
- Panconesi, E., & Haufmann, G. (1999). Psychophysiology of stress in dermatology: The psychobiologic pattern of psychosomatics. [CD-ROM] *Medline*. Abstract from Silver Platter File 3.11: Psychosomatic Dermatitis. Marked in Search of # 16.
- Preston, D. (1999). The misery of acne: A look at the treatment options. [CD-ROM] *Medline*. Abstract from Silver Platter File 3.11: Psychosomatic Dermatitis. Marked in Search of # .
- Pulimood, S., Rajagopalan, B., Rajagopalan, M. Jacob, M., & John J. K. (1996). Psychiatric morbidity among dermatology inpatients. [CD-ROM] *Medline*. Abstract from Silver Platter File 3.11: Psychosomatic Dermatitis. Marked in Search of # 16.
- Rawlin, R. P., & Heacock, P. E. (1993). *Clinical manual of psychiatric nursing* (2nd ed.). London: Mosby.
- Saul, L., & Bernstein, C. (1941). The emotional setting of attacks of urticaria. *Psychosomatic Medicine*, 3, 351.
- Schlosser, B. (1990). The assessment of subjective well-being and its relationship to the stress process. *Journal of Personality Assessment*, 54, 128-140.

- Schulte, M. A. (1991). Self care activating support: Therapeutic touch and chronic skin disease. [CD-ROM] *Medline*. Abstract from Silver Platter File 3.11: Psychosomatic Dermatitis. Marked in Search of # 21.
- Schwartz, G. E. (1978). Psychological foundations of psychotherapy and behavior change. In S. L. Garfield & A. E. Bergin (Eds.), *Handbook of psychotherapy and behavior change*. New York: Wiley.
- Sharma, S., & Rao, C. (1974). Personality factors and adjustment patterns of peptic ulcer patients in India. *Psychosomatic*, 15, 139-142.
- Siddiqui, S. (1992). *Assessment of attributional style of depressives and non-depressives through an indigenously Developed Depression Scale*. Doctoral dissertation, National Institute of Psychology, Quaid-i-Azam University, Islamabad, Pakistan.
- Soderberg (1992). Pathominia. [CD-ROM] *Medline*. Abstract from Silver Platter file 3.11: Psychosomatic Dermatology. Marked in Search # 12.
- Taylor, S. E. (1990). Health psychology: The science and the field. *American Psychologist*, 45, 40-45.
- Windemuth, D., Stucker, M., Hoffman, K., & Altmeyer, P. (1999). Prevalence of psychological symptoms in dermatologic patients of an acute clinic. [CD-ROM] *Medline*. Abstract from Silver Platter File 3.11: Psychosomatic Dermatitis. Marked in Search of # 21.
- Wolff, S., & Wolff, H. G. (1947). *Human gastritis functions*. New York: Oxford University Press.

EMOTIONAL STATE SCALE FOR DERMATOLOGICAL PATIENTS (ESS-D)

1. I very often burst into tear due to my ailment.
2. I often feel palpitation and suffocation.
3. I should spend money on my skin treatment.
4. I often perspire in winter.
5. Perhaps people think that they might get infected if they touch me.
6. I avoid discussing my disease with others.
7. I remain gloomy due to my disease.
8. I take my treatment regularly.
9. I have lost my appetite due to this disease.
10. Usually I cover the affected parts of my body in front of others.
11. I do not make new clothes because of my disease.
12. My life has become colorless.
13. I think my skin looks ugly.
14. I think my disease is incurable.
15. The members of my family hesitate to use my things.
16. I take medicine in time.
17. This disease has made me irritable
18. Usually life seems burden to me.
19. My confidence has been shaken due to this disease.
20. This disease has developed interiority complex in me.
21. I feel my skin has been damaged permanently.
22. I remain worried about my disease.
23. I wish I could get rid of my disease.

24. Due to this disease, I have lost interest in every thing.
25. I remain sad due to this disease.
26. I often remain worried about one thing or the other.
27. I dislike myself due to my damaged skin.
28. I avoid attending parties and marriages.
29. While working my hands often tremble.
30. I am fed up of my disease.
31. I can not concentrate for long on a single task.
32. I work under great tension and restlessness.
33. I have stopped seeing my friends and relatives because of my disease.
34. I easily get flare up due to my disease.
35. I keep my soap, hairbrush, comb, and towel separate.
36. My skin has become more rough than before.
37. Now I don't like using make up due to my disease.
38. I like taking care of my skin.
39. I am sure that only death can relief me from this disease.
40. People usually give a strange look to my skin.

Note: Anxiety Items No. 2, 4, 7, 17, 22, 26, 29, 31, 32, 34.

Depression Items No. 1, 7, 9, 12, 14, 18, 19, 20, 24, 25, 30, 39

Body Image Items No. 5, 10, 13, 21, 27, 36, 37, 40.

Well-Being Items No. 3, 8, 15, 23, 35, 38.

Social Withdrawal Items No. 6, 11, 16, 28, 33.

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