PSYCHIATRIC ASPECTS OF SKIN DISEASES

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Summary

303 randomly selected skin out-door patients were assessed with P. G. I. Health questionnaire N-2 and an open-ended life event schedule. Functional group of skin patients were found to be remarkably different from organic group with regard to the consistency in the neuroticism score within diagnostic categories of each group, effect of duration and site of lesion, and emotionally disturbing situations on neuroticism score. In the organic group, these variables seem to effect the N-score as a reaction to illness, whereas functional group remains unaffected. Existence of a predisposed personality pattern in functional group of skin patients could explain these findings.

KEY WORDS: Neuroticism, Anxiety, Depression, Emotional upset, Personality, Skin lesion.

Introduction

Psychodyanamically, "Individuals who may or may not be constitutionally predisposed to skin disease and who are predisposed to emotional conflicts, especially in the spheres of self-esteem, sexuality, aggressiveness and cleanliness are exposed or expose themselves to situations which intensify these conflicts. Intensification of these conflicts either causes anxiety, feeling of guilt, an urge to confess and a desire for self punishment or lead to emotional dissociation and flight into illness with display of belle indifference"[1]. Extensive literature on these aspects from Western countries[2] as well as from India[3-5] is available.

While the role of emotional reactions as the primary cause of skin diseases remain disputed, the importance of these factors in influencing the course of the disease is unchallenged[6]. Aitken[7] has emphasised the need for elucidation of symptoms rather than etiology of disease and on diagnosis and treatment of known psychopathology, particularly mood disturbance rather than underlying speculative mechanisms.

Neuroticism is a concept which includes those personality characteristics which actually differ significantly between clinically judged neurotics and normals[8]. In clinical terms, a neuroticism scale measures anxiety and depression to a large extent. Earlier studies have used this scale in patients

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Received for publication on 20—5—1983

showing skin lesions[9-12] but its relationship with distribution of lesion and the effect of emotional upset either on onset or exaggeration of skin lesion has not been reported on adequate sample size from our country. Present study, therefore, aims to study the neuroticism in various kinds of skin diseases, their relationship with socio-demographic variables, duration and site of lesion. It is also aimed to find out whether the emotional upset plays any role in initiation or exaggeration of a skin lesion.

Material and Methods

The material comprised of 303 out-door skin patients randomly chosen from Skin O.P.D. of Associated Group of Hospitals, Bikaner in a period of four months (22 other patients were excluded from the study due to incomplete information). P.G.I. health questionnaire N=2 was administered to these subjects by a trained social worker[13]. The patients were clinically classified into "Functional" or "Organic" group. The functional group (N=148) included subjects suffering from eczematous dermatitis, urticaria, psoriasis and sycosis barbae. The organic group (N=155) included those suffering from leprosy, ringworm infection, oriental sore and scabies. The data were analysed with respect to duration of illness and distribution of lesion (visible, nonvisible; facial, scrotal, others) to observe whether neuroticism score is related to these variables. Finally, each patient was questioned briefly about emotional problems in common life situations (employment, economic, social, family etc.), that the patient could have faced in the month preceding the onset or exaggeration of skin condition and the response was recorded as either positive or negative.

Results

Table 1 presents the neuroticism score in relation to socio-demographic variables. While age does not affect the neuroticism score, women scored more than men ($p < 0.001$). There was an inverse trend observed in education categories; less the education more being the score ($p < 0.01$). The difference between the highest and the lowest categories were statistically significant.

TABLE 1

Socio-Demographic Variables and Neuroticism Score in Skin Patients

		N	Mean	SD±
	13—18	13	16.5	5.6
	19—25	64	15.8	8.8
	26—45	141	19.7	9.9
	46—65	71	19.5	10.6
	66+	14	18.2	12.3
	F=2.04, df 4,298 NS			
II	Sex			
	Male	189	17.0	9.4
	Female	114	21.3	10.2
	F=13.94, df 1,302 p<0.001			
III	Education			
	Illiterate/literate	110	21.0	10.5
	Primary	31	21.5	8.8
	Middle	47	18.1	10.6
	Higher secondary	62	17.6	9.8
	College/Technical	53	13.7	6.2
	F=6.11, df 4,298 p<0.01			
IV	Occupation			
	Professional	8	13.8	9.6
	Student	15	15.2	6.9
	Military/Police personnel	17	15.3	9.7
	Retired	16	16.1	9.2
	Skilled Labour	25	16.5	9.7
	Businessman	23	16.6	10.2
	Sedentary worker	56	18.6	10.3
	House Wife	86	19.9	8.5
	Agril. Labour	29	21.2	10.0
	Unskilled Labour	28	21.3	13.3
	F=1.72, df 9,293, NS			

Neuroticism score in relation to different diagnostic categories is presented in Table 2. While there was a little higher score in the functional group it did not differ statistically from the organic group. In the organic group, the score of scabies patients

TABLE 2
Clinical Categories and Neuroticism Score*

	N	Mean	SD±
A. Functional Group			
Eczematous-Dermatitis	65	18.9	11.7
Urticaria	20	18.7	9 9
Psoriasis	26	28.1	10.4
Sycosis barbae	17	16.8	8.7
Total	148	19.5	11.0
F=2.01, df=3,144 NS			
B. Organic Group			
Leprosy	36	24.5	6.5
Ringworm infection	47	21.8	5.9
Oriental sore	20	20.2	7.6
Scabies †	52	8.5	3.5
Total	155	17.8	8.7
F=71.91, df=3,151 p<0.001			

* Lie scores in all the categories were not statistically different from the norms provided by the author of this scale (Verma, 1978).

† With a cut off point of 9 (as advised by author of original scale) there was no statistically significant difference in neuroticism score in scabies patients. However, all the remaining categories of both organic and functional group had significantly higher neuroticism. ($P<0.01$, Chi square test was applied).

was nearly same as that of normals, but significantly less as compared to the score of remaining three diagnostic categories ($p < 0.01$). However, within the functional group the difference was insignificant.

Duration of illness does not effect the scores in functional group, but in organic group, patients with more than one year of illness had significantly higher score than those with less than one year of illness ($p < 0.01$).

Table 4 shows that female patients of both functional and organic group with visible lesions had significantly higher neuroticism score than their counterparts with invisible lesions ($p < 0.01$). However, all the patients with scrotal or facial lesions scored more than those who had lesion at other sites irrespective of sex.

Table 5 shows that patients in functional group experienced significantly more emotionally upsetting situations in the month preceding either the onset or exaggeration of their skin lesion ($p < 0.01$).

Discussion

A higher than normal neuroticism scores in both the functional and organic groups are understandable. Any illness of either etiology may release anxiety that had been adequately handled earlier. A higher neuroticism score in female and low educational and low occupational categories could be due to relatively vulnerable position of these groups in the society. This observation finds support from some of the epidemiological studies from our country[14].

TABLE 3
Duration of Disease and Neuroticism Score

Duration	Functional Group			Organic Group		
	N	Mean	SD±	N	Mean	SD±
Upto 1 month	17	15.8	9.9	58	14.3	8.4
1 month to 3 months	23	17.5	9.2	19	15.6	7.6
4 months to 6 months	22	19.6	9.8	11	16.8	9.3
7 months to 1 year	31	20.2	10.8	20	17.9	8.5
1 year +	37	20.7	11.2	35	23.1	7.2
2 years +	18	21.8	15.2	12	23.0	6.5
	F=0.80, df 5.142 NS			F=6.59,	df 5,149	p<0.01

TABLE 4

Site of Lesion and Neuroticism Score

Site of the lesion	Functional Group		Organic Group	
	Male Mean SD	Female Mean SD	Male Mean SD	Female Mean SD
A Visible — Non-visible — Dimension				
1. Visible	*19.9 9.0 (26)	†30.2 4.0 (22)	18.2 6.1 (29)	†25.9 11.3 (17)
2. Non-visible	15.2 10.5 (67)	20.8 10.1 (33)	17.1 9.4 (67)	15.1 5.8 (42)
B. Scrotal/Facial/Other Dimension‡				
1. Scrotal	*20.9 11.2 (18)	—	†20.8 7.2 (29)	—
2. Facial	*21.7 11.1 (12)	*31.2 10.9 (10)	*19.7 7.1 (17)	†26.4 6.8 (19)
3. Others	14.3 9.2 (63)	23.1 9.7 (45)	14.8 8.8 (50)	14.3 7.4 (40)

Figures in parenthesis indicate number of patients

* Significant at 5% level

† Significant at 1% level

‡ Both scrotal and facial categories values compared with that of others category.

TABLE 5

Emotionally upsetting events in the preceding month of onset or exaggeration of lesion

Disease group	Male N	Male %	Female N	Female %
Functional	49	52.7	28	50.9
Organic	30	30.2	16	27.1

For Male $\chi^2=8.93$, $p<0.01$

For Female $\chi^2=6.79$, $p<0.01$

In the present study, functional and organic groups seems to be remarkably different with regard to the consistency in the neuroticism score within the diagnostic categories of each group, effect of duration of diseases on neuroticism score, effect of site of the lesion and reported emotional upset in the preceding month of onset or exaggeration of disease. In the organic group, scabies patients did not differ with normals on neuroticism score and both these (scabies and normal subjects) differed from remaining three diagnostic categories i.e. leprosy, oriental sore and ring worm infection significantly ($p<0.01$). Since the duration of disease also significantly influenced the score in this group, it is possible that higher neuroticism score in leprosy patients is an effect of duration of illness as well as of stigma of the disease. Patients suffering from leprosy, ring worm and oriental sore ($N=102$) had longer duration of illness, unlike those with scabies whose disease was of shorter duration. Most of the patients with oriental sore had a visible lesion, and in majority the lesion was facial. Facial lesions were associated with significantly higher neuroticism score irrespective of sex. It would appear that the social handicap of a disfiguring disease has serious effect on psyche of patients of either sex. Visible lesions had adverse effect predominantly in females who could be more conscious of it than males. Ring worm infection mostly affected scrotum and that could also have led to personal and social disability arousing feeling of shame

and guilt. Significantly small number of patients in the organic group reported emotional upset before the onset or exaggeration of their disease ($p<0.01$) and perhaps higher neuroticsim score in this group is more of a reaction to their disease.

There was almost similar neuroticism score in all the four diagnostic categories of functional group which was not influenced by the duration of the illness. Visible lesions affected both the sexes. Significantly more patients in this group reported emotional turmoil in the previous month of onset or exaggeration of their disease. These observations are consistent with the concept of a predisposed personality developing the illness after some emotionally upsetting event which could have given rise to a conflict possibly in the sphere of self esteem, sexuality and cleanliness (particularly in facial and scrotal lesion or visible lesion).

Srivastava et al[10] have reported increase neuroticism score proportional to duration of disease. Regarding the site of lesion our observations are strikingly similar to those reported by Kidd and Watt[9] and Degossely. Only further study of individual patient can throw light on the nature of the conflict leading to specific skin lesions and the information so obtained may be of great value in the management of at least functional group of skin disorders.

Acknowledgement

We are grateful to Dr. B. B. Lal, Reader and Head, Skin and V.D. Department and Prof. J. N. Vyas, Head of the Psychiatry Department for their support in carrying out this work.

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