

Personality Characteristics and Quality of Life in Patients with Psoriasis

Brajesh Kumar Mahawer^{1*}, Indra Dandaliya², Devendra Vijayvergia³

¹Department of Psychiatry, ²Department of Ophthalmology,
JLN Medical College and associated group of Hospitals, Ajmer, Rajasthan, INDIA.

³Department of Psychiatry, Govt. Medical College and
Associated Group of Hospitals, Kota, Rajasthan, INDIA.

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*Correspondence to:

Brajesh K Mahawer
Mammu colony,
Bharatpur road,
Mahwa,
Dausa, Rajasthan.
drbkm1985@gmail.com

ABSTRACT

Psoriasis is a chronic, inflammatory, painful and disfiguring skin disease. Person living with psoriasis poses problem for the individual concerned with physical, psychological, social functioning and daily living activities. It is linked with social stigmatization, discomfort, physical disability and profound impact on quality of life of patients. The aim of this study was to evaluate personality characteristics and quality of life in patient with psoriasis.

Subjects and methods: 100 consecutive patients diagnosed as suffering from psoriasis by consultant Dermatologist attending Dermatology OPD were taken up for study and 100 normal subjects preferably the relatives of the patients were constituted the control group.

Setting: Department of Psychiatry and Department of Dermatology in tertiary care center in Rajasthan.

Tools: 3 tools were used to collect data, (1) Semi structured proforma include sociodemographic characteristics of the study subjects (2) Eysenck's PEN inventory (3) WHO Quality of Life – Bref Scale

Results: The data were analyzed with appropriate statistical test. In our study personality characteristics were evaluated by administering of PEN inventory, the study population was more introverted (54%) than control group (14%) and control group had higher score for extraversion (58%) than study group (28%). On WHOQOL-BREF scale patients with psoriasis had poorer quality of life in all four domains than control group.

Conclusion: The psoriasis patients are more neurotic and introverted and poorer quality of life than the control group.

KEYWORDS: Quality of life, Psoriasis, Personality characteristics.

INTRODUCTION

Psoriasis is a chronic, inflammatory skin disease associated with recurrent and relapsing course. Psoriasis has a tendency to improve and then recur periodically throughout the life. The exact etiology unknown but certain factors like trauma, infection, drugs, smoking, stress and anxiety involved in exacerbation of psoriasis. The chronic nature of the disease and the lack of control over unexpected outbreaks of the symptoms are among the most bothersome aspects of psoriasis.

Psoriasis has a profound impact on patients' everyday life. The burden of the disease extends beyond physical manifestations and includes significant physical, social and psychological impairment.

Itching and pain can interfere with basic functioning such as self-care, walking, sleep and social life, daily activities, and sexual functioning. The negative impact

on body image, self-esteem, and self-concept and also have feeling of stigma, shame, embarrassment regarding their appearance.

Areas of functioning affected by psoriasis

(1) Physical functioning - Refer to pain and physical discomfort hindering daily routines as bathing, dressing, rest, sleep, work, and intimate relationships.^{1,2}

(2) Psychological functioning - The most frequently encountered negative reactions are: anxiety, depression, shame, guilt, helplessness, originating in an intense preoccupation and worry about the disease.¹

(3) Social functioning - negative changes in the quality of social contacts, activities that presume skin exposure e.g. (sunbathing, sports, and leisure time), sexual/intimate relationships, close friendship, and career.¹

AIMS OF THE STUDY

This study aims to evaluate the personality characteristics and quality of life of patients with psoriasis.

MATERIALS AND METHODS

Design Setting: The study was conducted in Department of Psychiatry and Dermatology

Subjects: Purposive subject of 100 adult patients suffering from psoriasis, their age range 18-70 year old with the following criteria, free from any other concomitant medical condition as well as dermatological diseases that can interfere with their ability to perform daily living activities were taken up in cases group. And 100 normal subjects preferably the relatives of the

patients were constituted the control group.

Tools for data collection: Three tools were used for data collection; the first tool was semi structured proforma which include identification data like name, Father's/husband name, age, gender, OPD Reg. No., address, religion, etc. and Sociodemographic data like education, occupation, marital status, economic status, domicile, type of family, family size, birth order.

Second tool was Eysenck's PEN inventory this contains a total of 78 questions.

Third tool was World Health Organization Quality Of Life- Brief (Hindi Version) this contains a total of 26 questions and four domains which are (1) Physical health (2) Physiological well-being (3) Social relations (4) Environment.

Table 1: Distribution according to socio-demographic variables

Variables	Psoriasis (n=100)	group Control group (n=100)	X ² p value
Age			
20-45 yr	61 (61%)	90 (90%)	22.733
45-70yr	39 (39%)	10 (10%)	(p<0.05)
Gender			
Male	76 (76%)	69 (69%)	1.229
Female	24 (24%)	31 (31%)	(p>0.05)
Education			
Illiterate	37 (37%)	12 (12%)	
Middle	34 (34%)	33 (33%)	25.397
Sr. Secondary	18 (18%)	20 (20%)	(p<0.05)
Gradate/Post-graduate	11 (11%)	35 (35%)	
Occupation			
Unemployed	33 (33%)	27 (27%)	18.25
Self employed	14 (14%)	30 (30%)	(p<0.05)
Farmer/Labourer	28 (28%)	16 (16%)	
Service (Govt.+Private)	24 (24%)	17 (17%)	
Student	01 (1%)	10 (10%)	
Family type			
Nuclear	52 (52%)	55 (55%)	0.462
Joint	46 (46%)	44 (44%)	(p>0.05)
Live alone	02 (2%)	01 (1%)	
Family income (Rs/month)			
<5000	49 (49%)	18 (18%)	
5000 – 10000	32 (32%)	57 (57%)	21.234
>10000	29 (29%)	25 (25%)	(p<0.05)
Locality			
Rural	49(49%)	50(50%)	0.02
Urban	51(51%)	50(50%)	0.8875

RESULTS & DISCUSSION

200 subjects were included in the study, 100 psoriasis patients were included in study group and 100 normal subjects were included in control group. Their mean age was 41.53 (SD =12.22) in study group and in control group mean age was 36.33 (SD=9.63) having a

minimum of 18 year and a maximum of 70 years. This finding is supported by the study of Barker JNWN³ which shows that psoriasis is common between ages 20 to 45 years.

There were 76% male and 24% female in Psoriasis group and in control group male were 69% and female

were 31%. As to the level of education 37% were illiterate, 34% had upto middle school education, 18% had senior secondary education and 11% were graduate/post-graduate in psoriasis group and in control group respective percentage was 12%, 33% , 20%, and 35%. Thirty-three percent of psoriasis patients were unemployed, 14% were self-employed, 28% were farmer/laborer, 24% were in service and 1% was student. And in control group respective percentage was 27%, 30%, 16%, 17% and 10%. As to the family type 52%

belongs to nuclear family, 46% were joint family and 2% were live alone in psoriasis group while in control group 55% were belongs to nuclear family, 44% were belongs to nuclear family and 1% were living alone. Forty-nine percent of psoriasis patients had their family income less than 5000 Rs, 32% patients family income was between 5000-10000 and 29% patients family income was more than 10000 Rs. And in control group percentages of family income was 18%, 57% and 25% respectively. (Table 1)

Table 2: Distribution According To Personality Variables

	Study group (N=100)	Control group (N=100)	X ² /p value
Score On Extroversion			
>13	28(28%)	58(58%)	X ² = 17.156
<13	72(72%)	42(42%)	p= 0.0001
Score on Neuroticism			
>10	54(54%)	14(14%)	X ² = 33.89
<10	46(46%)	86(86%)	p= 0.0001
Score on Psychoticism			
>7	20(20%)	18(18%)	X ² = 0.032
<7	80(80%)	82(82%)	p= 0.8580
Lie score			
>10	22(22%)	28(28%)	X ² = 0.667
<10	78(78%)	72(72%)	p= 0.4142

Table 3: Distribution according to Quality of life by WHOQOL – BRIEF Scale

Domain for quality of life	Mean ± S.D. of transformed score		Unpaired t test	
	Study Group	Control Group	t score	P value
Physical health	53.92± 14.14	75.15± 9.36	12.5197	0.0001
Psychological	52.84± 16.65	72.49± 13.65	9.1268	0.0001
Social relationship	64.64± 15.10	76.94± 13.09	6.1549	0.0001
Environmental	54.94± 16.25	66.62± 12.36	5.7209	0.0001

Personality characteristics of both groups were evaluated through Eysenck’s personality inventory. (Table 2) According to this scale 28% of psoriasis patient scored higher on extroversion, while in control group the figure was 28%. Psoriasis patients scored low on extroversion as compared to controls and the difference between both group was statistically significant (p= 0.0001). Our finding was consistent with the finding of Seinsbury et al⁴ (1960) who report higher introversion in psoriasis patients. As regard to neuroticism in our study it was found that 54% of psoriasis patients scored higher on neuroticism, while in control group only 14% scored higher and this difference was statistically significant (p= 0.0001). Earlier study by Seinsbury et al⁴ (1960) also reported higher score on neuroticism in psoriasis/ dermatological patients. The findings of our study were also similar to study by Buthune HC et al⁵ (1961) he was found that morbid self-perception on the part of patient in respect of skin lesion was product of neuroticism.

It was evident that 20% of psoriasis patients and 18% of controls score higher on psychoticism. Mean psychoticism score for psoriasis patients was 5.96, while for controls it was 4.86, the difference between both groups was statistically not significant (p= 0.8580). The results of our study were consistent with study of Zeljko-Penavic J⁶ (2013) he reported that higher score in psoriasis patients on the psychoticism scale. On lie score it was observed that 22% of psoriasis patients and 28% of normal controls scored higher on lie score. Mean lie score for psoriasis patients was 9.08 and for control it was 9.06 and the difference between both groups statistically not significant (p= 0.8650). The results of our study were consistent with national psoriasis foundation⁷ they observed that patients with psoriasis experience more emotional disturbances, are vulnerable to stressful events, suffer feelings of stigmatization and possibly share nonfunctional personality traits.

In our study quality of life was assessed by applying WHOQOL BREF (Hindi version). (Table 3) According to this scale It is evident that mean of transformed score (0 – 100) in physical, psychological, social relationship, environmental domain was 53.92, 52.84, 64.64 and 54.94 in study group while in control group mean of transformed score was 75.15, 72.49, 76.94 and 66.62 respectively. Domain score of both the group were in descending order for physical, psychological, social relationship, environmental domain. The scores were higher in control group for all the domains and on application of unpaired t-test there was a statistically significant difference between case and control. Thus the perceived quality of life was significantly better for all the domains in control group. It is fairly consistent with previous study by Ryu JH et al⁸. Who found that total WHOQOL scores and all domain scores, except those of the environmental domain, of the WHOQOL scale in patients with psoriasis were lower than those of the healthy controls. The present study also reflected finding of a previous study by De Korte J et al¹ who reported that patients with psoriasis experienced physical discomfort, impaired emotional functioning, and lower levels of quality of life. The finding of present study also similar to previous study by D Butler et al⁹, who reported restricted daily and social activities as well as significantly lower QOL in psoriasis then controls. Our findings are supported by finding of Monali J Bhosle¹⁰ Psoriasis is a serious condition and is associated with significantly lower QOL. Earlier study by Gerald Krueger MD¹¹ (2001) reported that the psoriasis has a profound emotional and social as well as physical impact on their quality of life.

SUMMARY & CONCLUSION

The aims of this study were to determine prevalence of anxiety-depressive disorders in psoriasis patients and its impact on their quality of life with different domain of wellbeing. Both groups (case and control) completed a semi-structured sociodemographic proforma, Eysenck's PEN inventory and WHOQOL-BREF questionnaire. The information thus gathered was presented in various tables & subjected to suitable statistical analyses. Following important conclusion were drawn from the present study. The result of Eysenck's PEN inventory showed that 54% of psoriasis patients scored high on neuroticism while 28% on extroversion. These findings are in the concordance with the definition of neuroticism which is characterized by high level of negative effect such as depression and anxiety. Neurotic people has low activation threshold and unable to inhibit or control their emotions , reactions, experience negative effect (fight or flight) in the face of very minor stressors, they easily become nervous and upset. The quality of life in both groups was significantly differed from each other. Psoriasis patient showed significantly poorer quality of life on the domain of physical health, social relationship,

psychological health and environmental domain than the control group. The psoriasis patients are more neurotic and introverted and had poorer quality of life than the control group.

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