Original Research Article

A study of impact of psoriasis on patients psycho-social activities

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Abstract

Background: Psoriasis ravages the quality of life (QOL) of afflicted individuals. The disease is enormously variable in duration, periodicity of flares and extent. The physical and psychosocial aspect of psoriasis interact and influence one another in reciprocal way to create an overall clinical picture. The afflicted often feel self-conscious, helpless, embarrassed, angry and frustrated about their disease. **Aim and objectives:** To study the impact of psoriasis on patient's psycho-social activities **Material and Methods:** It's a cross sectional, observational study consisting of 50 cases having chronic plaque psoriasis aged between 18-60 years of both sexes and duration of disease of at least 3 months included in the study. Study period is of 2 years from November 2010 to October 2012 and data collected from two hospitals attached to a tertiary health care centre. Predesigned and pretested questionnaire which were asked verbally was used for evaluation of Psoriasis Disability Index**. Results:** There were 41 male and 9 female patients. Mean age of onset of psoriasis was 33.6 years. Mean duration of disease was 7.3 years. We observed significant correlation of the PASI score with all subdivisions of PDI. Among the psycho-social measures investigated, psoriasis sufferers were found most likely to feel disturbed / depressed by extensive shedding of skin. **Conclusions:** Effective counselling of the patients, family members, friends, and people at the working place can be very effective for patients to come forward for early treatment which can contribute to a good control of the disease.
Key Words: Psoriasis, Psycho-social**.**

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INTRODUCTION

Psoriasis is a common, chronic, disfiguring, inflammatory and proliferative condition of the skin, in which both genetic and environmental influences have a critical role. The most characteristic lesions consist of red, scaly, sharply demarcated, indurated plaques, present particularly over extensor surfaces and scalp. The disease is enormously variable in duration, periodicity of flares and extent.[1] Psoriasis affects 1% to 3% of general population and estimates suggest that 0.4% to 2.3% of adult population have psoriasis but remain undiagnosed.

Psoriasis is associated with impairments in health-related quality of life even in mild cases.[2] Psoriasis is also the most frequent cause of hospitalization for dermatology patients.[3]It affects activities of daily living, emotional perceptions, sexual relationships, the decision to have children, and career choices.[4] Psoriasis patients often experience anguish, stress, and emotional disruption in their daily lives, their relationship with others, and their perception of themselves. They often report feeling stigmatized and tend to be anxious and depressed and to engage in excessive worrying.[5] The physical and psychosocial aspect of psoriasis interact and influence one another in reciprocal way to create an overall clinical picture. The more severe the psoriasis, as measured by the patient, the more uncomfortable or apprehensive the patient becomes about his or her physical appearance and the more unsightly and excluded the patient feels.[6] The

afflicted often feel self-conscious, helpless, embarrassed, angry and frustrated about their disease. People with psoriasis suffer from higher rates of depression and body cathexis problems.[6] Role of stressful events in psoriasis seems to be clear for both onset and relapses. Prevalence of depression in patients with psoriasis ranges between 10% and 58%.Suicidal ideation is most common in patients with high depression scores and in those who think that they have bad psoriasis.[7]

MATERIAL AND METHODS

It's a cross sectional, observational study consisting of 50 cases having chronic plaque psoriasis aged between 18-60 years of both sexes and duration of disease of at least 3 months attending the Department of Dermatology, Venereology and Leprology at Bapuji Hospital and Chigateri General Hospital attached to J.J.M. Medical College, Davangere constituted the source for a period of 2 years from November 2010 to October 2012.After obtaining the informed consent, patients of chronic plaques psoriasis were enrolled in the study.

Inclusion Criteria

- Age between 18-60 years.
- Patients with no significant medical conditions except psoriasis.
- Duration of the disease of at least 3 months.
- Patients willing for enrollment for study and able to come for regular follow up.

Exclusion Criteria

- Age <18 years and above 60 years.
- Psoriasis associated with any other major diseases.
- Patients unwilling for inclusion in the study and those who are not able to come for follow up.
- Pregnant women.

Predesigned and pretested questionnaire which were asked verbally was used for data collection from the psoriasis patients after applying the inclusion and exclusion criterias adequately. The statistical analysis was done by using appropriate statistical procedures.

Psoriasis Disability Index (PDI)[8]: The PDI was constructed by analysis of a group of patients who had chronic plaque psoriasis, focusing on which specific questions and on factor analysis, correlated best with disability and symptoms. No other validation was performed in its construction. It since has been used for almost 20 years, however, with 31 published articles describing its use. It is used in parallel with seven dermatology specific and general health measures and also in conjunction with four physical measures of psoriasis, in particular PASI (Psoriasis Area Severity Index) scores.PDI was calculated by summing the score of the 15 questions on a scale of 0-3. The higher the score, the more quality of life is impaired. The PDI can also expressed as a percentage of the maximum possible score of 45.

RESULTS AND OBSERVATIONS

Table 1: Age and Gender wise distribution of patients

Gender	Mean age in years
Males	43.2 ± 11.4
Females	32.2 ± 12.8

In the present study, out of 50 patients, 41 (82%) were males and 9 (18%) were females.

Table 2: Distribution of patients depending on various socio-demographic variables

Demographic variables		Patient distribution	
		Frequency (N=50)	Percentage(%)
Gender	Male	41	82
	Female	09	18
Married Status	Married	41	82
	Unmarried	08	16
	Widowed	01	02
Socioeconomic status	I	00	00
	II	17	34
	III	17	34
	IV	15	30
	V	01	02
Residence	Rural	24	48
	Urban	26	52
Habits	Alcohol	06	12
	Smoking	12	24
	Alcohol and smoking	09	18
	No any habit	23	46

In the present study, out of 50 patients 41 (82%) were married, 8 (16%) were unmarried and 1 (2%) was widow and 8 (16%) patients had onset of disease before the marriage and 33 (66%) had onset of disease after the marriage.All the patients were almost equally distributed in class II, III and IV according to Kuppuswamy's socio-economic status scale. There is almost equal distribution of patients from rural (48%) and urban (52%) areas. Out of 50 patients,24% patients were smoker, 12% were alcoholic and 18% were having habits of both smoking and alcohol consumption.

Table 3: Mean values of Psoriasis Disability Index (PDI)

Sex	Mean±SD
Male	16.3± 7.8
Female	14.6± 6.6

In the present study, the mean PDI was 15.98 (35.51%). Mean PDI in males and females was 16.3 ± 7.8 and 14.6 ± 6.6 respectively.

Table 4: Relationship between PASI scores and subdivisions of PDI

QOL indices	PASI	
	r-value*	p-value
Daily activities	0.625	<0.001
Employment related	0.756	<0.001
Personal relations	0.429	<0.01
Leisure	0.542	<0.001
Treatment	0.592	<0.001

*Pearson's correlation coefficient.

In the present study, we observed significant correlation of the PASI score with all subdivisions of PDI.

Analysis of pattern of response in PDI questionnaire

- **Daily activities:** In the present study, among the daily activities, 88% patients wore different type/colors of clothes due to psoriasis and 72% patients had problem in carrying out work around the house or garden and 72% patients changed or washed their clothes.
- **Work or school:** In the present study, 94% of patients lost their time of work or school but the career was least affected.
- **Personal relationship:** In the present study, personal relations with partners and friends were more affected than sexual life.
- **Leisure:** In the present study, about 76% of the patients stopped going out socially whereas sports activities were least affected (22%).
- **Treatment:** In the present study, in 14% of patients treatment of psoriasis 'very much' affected their house by making it messy and untidy.

In the present study among the psycho-social measures investigated, psoriasis sufferers were found most likely to feel disturbed / depressed by shedding of skin, heard insensitive remarks / comments, felt self-conscious among strangers, spent more time on taking care of themselves, felt degraded by people implying the skin condition as AIDS, leprosy or venereal disease. Whereas problem like avoidance of sunbathing was not at all affected.

DISCUSSION

In the present study, mean age (in years) in malesand females was 43.2 ± 11.4 and 32.2 ± 12.8 respectively. In the study of Rakhesh SV *et al*[9] mean age in males was 40.52 ± 12.02 years where as in females it was 34.02 ± 12.20 years. Whereas in the study of Gupta S *et al*[10] mean age in males was 47±15.3 years and in females it was 49.1±16.5 years. Thus mean age is variable in different studies. From our study, out of 50 patients 41 (82%) were males and 9 (18%) were females. In the studies of Gelfand*et al*[11],Manjula *et al*[12], Pakran*et al*[13,] Hariram *et al*[14], males were more affected. Thus, there is a difference in sex distribution among the patients which could be probably due to variations about the knowledge of the disease in different areas as well as the amount of eagerness in seeking the treatment for the problem. About marital status,in the studies of Finlay *et al* [15],Zachariae *et al* [16] similar observations were made i.e. more number of married individuals than unmarried. Whereas in study of Manolacheetal[17]number of married and unmarried patients were equal. All the patients in our study were almost equally distributed in class II, III and IV according to Kuppuswamy's socio-economic status scale. There is almost equal distribution of patients from rural (48%) and urban (52%) areas. In the present study, the mean PDI was 15.98 (35.5%). Similar observation was made in the study of Rakhesh SV *et al* [9] whereas in the study of Pakran *et al* [13] it was low as compared to our study. In the present study the mean PDI in males and females was 16.3 ± 7.8 and 14.6 ± 6.6 respectively. In the study of Rakhesh SV *et al* [9] mean PDI in male was 15.56 ± 7.00 but in female mean PDI was high (20.25 ± 9.30). PDI in the patients of psoriasis is variable in males and females. In the present study it could be due to the system of outdoor work, manual labour which is more in male. In the present study, we observed significant correlation of the PASI score with all subdivisions of PDI.In the study of Rakhesh SV*et al*[9] similar observations were made except treatment related activities. Thus extensive clinical involvement causes physical disability and imposes limitations on their life styles. About analysis of pattern of response in PLSI questionnaire, a comparable observations were seen instudy by Rakhesh SV *et al*[9]but, in their study they had deleted the question regarding sunbathing as they found it obsolete. This could be because psoriasis is a chronic disease which causes cosmetic disfigurement, social stigma, sometimes people treat the condition as contagious. This shows that pattern of problems of psoriasis patients is universal.

SUMMARY AND CONCLUSIONS

Males constituted the majority in the study group probably because they have more social exposure compared to females and hence come forward for treatment early. Among the patients who had habits of smoking and consumption of alcohol, it was started after the onset of disease in majority probably because of frustration due to chronic nature of disease and social stress. Mean PASI score was almost same in both males and females.Extensive shedding of scales seems to add significant stress which could be due to the comments in the social life and also the inconvenience caused by shedding of the scales and also due to misconception about the disease in the society. Finally, effective counselling of the patients, family members, friends, and

people at the working place can be very effective for patients to come forward for early treatment which can contribute to a good control of the disease. The good support from the above set of people other than the patient can take off or minimize the psychological stress of the patient which can definitely improve QOL of the patient.

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