

A study of clinico-demographic profile of patients with psoriasis at tertiary health care centre

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Abstract

Background: Psoriasis is a common, chronic, disfiguring, inflammatory and proliferative condition of the skin, in which both genetic and environmental influences have a critical role. It is a disease with profound impact on the psychological and social aspect of the patient, particularly because of its visibility. **Aim and Objectives:** To study clinico-demographic profile of patients with psoriasis at tertiary health care centre **Material and Methods:** It's a cross sectional, observational study consisting of a total of 50 cases of chronic plaque psoriasis after inclusion criteria's were satisfied. The source for psoriasis cases was two major hospitals attached to J.J.M. Medical College, Davangere for a period of 2 years from November 2010 to October 2012. **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. Majority of patients had itching of various degree (90%). Majority of patients noticed exacerbation of lesions during winter season and head, trunk, upper limbs and lower limbs (64%) were most affected sites. Nail involvement was seen in majority of patients (74%) with pitting being most common nail abnormality. **Conclusions:** Psoriasis affects quality of life. Effective counseling 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: chronic plaque psoriasis.

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INTRODUCTION

Psoriasis is associated with impairments in health-related quality of life even in mild cases. 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.² Psoriasis has a major impact on patient's quality of life. It

affects activities of daily living, emotional perceptions, sexual relationships, the decision to have children, educational issues and career choices. Psoriasis patients often experience anguish, stress and emotional disruption in their daily lives, their relationships with others and their perceptions of themselves. They often report feeling stigmatized and tend to be anxious and depressed and to engage in excessive worrying.^{3,4} Treatment time and avoidance of public places may interfere with family leisure time. Treatment may be hazardous and the cost is a further burden to the patient or society.⁵ Most studies on quality of life in psoriasis patients have been conducted in western countries, with very few studies among Asian patients.⁶

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.

Pre-designed and pre-tested questionnaire was used for data collection from the psoriasis patients after applying the inclusion and exclusion criteria adequately. The statistical analysis was done by using appropriate statistical procedures.

RESULTS

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.

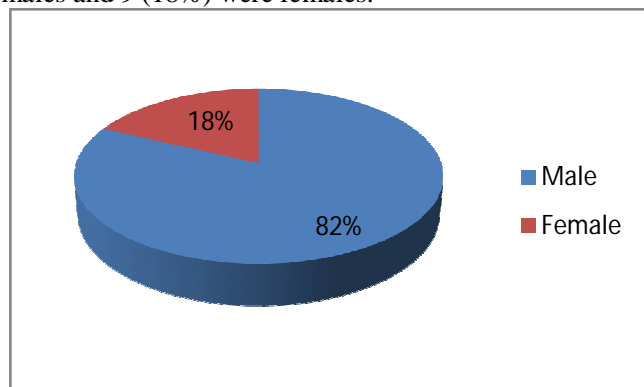


Figure 1: Pie diagram showing gender wise distribution of patients

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: Clinical profile of psoriasis patients under study

Clinical profile		Patient distribution	
		Frequency (N=50)	Percentage (%)
Age of onset (In years)	1 st decade	0	00
	2 nd decade	6	12
	3 rd decade	16	32
	4 th decade	11	22
	5 th decade	12	24
	6 th decade	5	10
Itching	Present	45	90
	Absent	05	10
Seasonal Variation	Winter	33	66
	Summer	04	08
	No variation	13	26
Family History	Positive	04	08
	Negative	46	92
Nail Involvement	Present	37	74
	Absent	13	26

In the present study, age of onset was 3rd decade of life in 16 (32%) patients, 5th decade in 12 (24%) of patients and 4th decade in 11 (22%) of patients. Mean age of onset was 33.6 years and the mean duration of disease was 7.3 years. About itching, 90% of patients had itching of

various degrees and there was no itching in 10% of patients. Almost 66% patients noticed exacerbation of lesions during winter season and out of 50 patients, 4 (8%) had family history of psoriasis.

Table 4: Distribution of psoriasis patients depending on site of involvement

Sites Involved	No. of cases	Percentage
H,LL	2	4
H,T,LL	1	2
H,T,UL,LL	32	64
H,UL,LL	1	2
LL	1	2
T,UL,LL	9	18
UL,LL	4	8
Total	50	100

(H-Head, T-Trunk, UL-Upper limb, LL- Lower limb)

In the present study, Table No. 04 shows distribution of cases depending on the part of body involved or body part showing psoriatic lesions shown and head, trunk, upper limb and lower limbs collectively involved in a maximum of 64% of psoriatic patients.

Table 5: Nail changes encountered in psoriatic patients

Nail changes	Number of patients (N=37)
Pitting	29
Longitudinal ridging	14
Subungual hyperkeratosis	7
Yellowish discoloration	7
Nail dystrophy	3
Onycholysis	3
Beau's lines	2
Melanonychia	2
Onychodystrophy	1

In the present study, out of 50 patients 37 (74%) patients showed nail changes. Pitting was the most common nail abnormality followed by longitudinal ridging over the nails seen in our study.

DISCUSSION

In the present study, mean age (in years) in males and females was 43.2 ± 11.4 and 32.2 ± 12.8 respectively. In the study of Rakesh S V *et al*⁷ 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*⁸ 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*⁹, Manjula *et al*¹⁰, Pakran *et al*¹¹, Hariram *et al*¹², 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*¹³, Zachariae *et al*¹⁴ similar observations were made i.e. more number of married individuals than unmarried. Whereas in study of Manolache *et al*¹⁵ 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 Kuppaswamy's socio-economic status scale. There is almost equal distribution of patients from rural (48%) and urban (52%) areas. Age of onset of psoriasis among patients in present study was 3rd decade of life in 16(32%) patients, 5th decade in 12(24%) patients and 4th decade of life in 11(22%) patients with a mean age of onset was 33.6 years. Comparable results shown by study of Koo J *et al*¹⁶ age of onset of the disease was more in 18-24 years age group followed by 25-34 years i.e., 20%. The mean age of onset was 30.3 years, 21 years, and 31 years in the studies of Hariram *et al*¹², Yang *et al*¹⁷, Manolache *et al*¹⁵ respectively. The mean duration of disease was 7.3 years. Similar observations were made by Pakran *et al*¹¹, whereas in studies of Hariram *et al*¹², Reimus *et al*¹⁸, Manolache *et al*¹⁵ it was higher compared to our study. This could also be due to chronicity of the disease and course of the disease which makes the patient reluctant to come forward for treatment. In the present study, 90% of patients had itching of various degrees. In the studies of Yang *et al*¹⁷, Gowda *et al*¹⁹ pruritus was found in 79% and up to 90% of patients respectively but in the studies of Ramsay *et al*²⁰, Richards *et al*²¹ pruritus was found in only 23% and 21% of patients respectively. Similar to our present study (66%), in the study of Farber *et al*²², 89% patients experienced worsening of their skin lesions during winter. In the present study, out of 50 patients, 4 (8%) had family history of psoriasis. Similar observations were made by Pakran *et al*¹¹ whereas in the study of Hariram *et al*¹², Ramsay *et al*²⁰, Raychaudhuri *et al*²³ it was slightly higher compared to the above studies. On the contrary the family history was seen in 48% of patients in the study of Ramsay *et al*²⁰. This could be probably due to variations in the genetic predisposition to psoriasis. Similarly, in our study head, trunk, upper limbs, lower limbs were involved in 64% of patients. These observations are similar to various studies of Finlay *et al*¹³ and Ramsay *et al*²⁰. Regarding nail changes in psoriatic patients, out of 50 patients, 37 (74%) showed nail changes. Among all, pitting was the most common nail abnormality seen in our study. In the study of Tham *et al*²⁴ nail involvement was seen in 78% cases whereas incidence of nail involvement was considerably low in the study of Ghosal *et al*²⁵. Thus, as observed in literature nail changes are more common in psoriasis.

SUMMARY AND CONCLUSIONS

Mean age of onset was low in females compared to males, which could be due to stress factors in females. Psoriasis did not seem to be a handicap for marriage or many of the patients may not have revealed about the psoriatic status to spouse before marriage. There was no variation in rural and urban distribution. Mean duration of the disease was 7.3 years which is probably because of few number of lesions in the beginning, due to reluctance of the patients or could also be due to the mild nature of symptoms. 'Itching' was seen in most of the patients which is in contrast to the definition of psoriasis mentioned in the literature. Head and trunk were the most common sites affected followed by other parts which is variable in different studies. Nail was involved in almost three fourth of the patients out of which more than half patients had pitting.

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