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# Original Research

# Assessment of cases of Psoriasis - A clinical Study

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# ABSTRACT:

**Background:** Psoriasis is a rare chronic skin disease characterized by formation of scaly erythematous plaques. The present study was conducted to assess cases of Psoriasis in both genders. **Materials & Methods:** 90 cases of psoriasis of both genders were included. Smoking history was obtained. Psoriasis Area and Severity Index (PASI) was recorded in all patients. **Results:** Out of 90 patients, males were 52 and females were 38. The onset was mild in 15%, moderate in 60% and severe in 25%. The mean PASI score in smokers was 12.9, in non- smokers was 8.0, in alcoholics was 10.2 and in non- alcoholics was 5.8. The difference was significant (P< 0.05). **Conclusion:** PASI score was highest among smokers and alcoholics. Psoriasis was predominantly seen in males.

Key words: Psoriasis, PASI, Smoker

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#### **INTRODUCTION**

Psoriasis is a skin disease that causes red, itchy scaly patches, most commonly on the knees, elbows, trunk and scalp. Psoriasis is a common, long-term (chronic) disease with no cure. It tends to go through cycles, flaring for a few weeks or months, then subsiding for a while or going into remission.<sup>1</sup>

Importance of lifestyle factors such as smoking and alcohol use in its pathogenesis are being increasingly recognized.<sup>2</sup> Several studies have shown an association between smoking and psoriasis. Alcohol consumption also has been reported to increase the risk of developing psoriasis. However, there have been only a few published studies on the association of smoking and alcoholism with increased severity of psoriasis.<sup>3</sup>

It is a T-cell mediated autoimmune disorder leading to keratinocyte hyperproliferation.<sup>5</sup> Psoriasis has genetic predisposition that is further aggravated by certain stimulating factors. In spite of significant advances in understanding the pathogenesis of psoriasis, the exact etiology of the disease remains unknown. The clinical

manifestations of this disease include various forms that affect different parts of the body. Treatment options vary according to the mode of application or severity of the disease.<sup>4</sup>

Currently, the disease remains associated with a mortality rate of about 6% despite the use of various adjuvant treatments. This mortality is essentially attributed to the side effects of used treatments, corticosteroids, and immunosuppressants. A therapeutic challenge of this last decade was the research of new treatments able to replace corticosteroids and presenting less important side effects.<sup>5</sup> The present study was conducted to assess cases of Psoriasis in both genders.

#### **MATERIALS & METHODS**

The present study was conducted among 90 cases of Psoriasis of both genders in the department of Dermatology. All patients were informed regarding the study and written consent was obtained.

Data such as name, age, gender etc. was recorded. Smoking history was obtained. Psoriasis Area and Severity Index (PASI) was recorded in all patients. Epidemiological aspects, disease history, symptomatology, intercurrent diseases, treatment, and clinical evolution were reviewed. Results thus obtained were subjected to statistical analysis. P value less than 0.05 was considered significant.

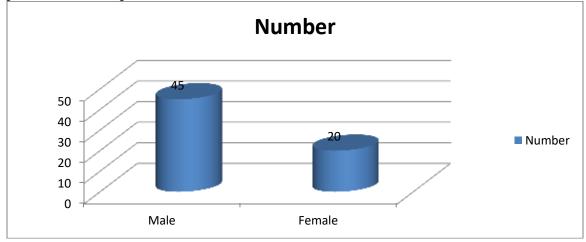
# RESULTS

#### Table I Distribution of patients

Total-90			
Gender	Males	Females	
Number	52	38	

Table I, graph I shows that out of 90 patients, males were 52 and females were 38.

#### **Graph I Distribution of patients**



#### Table II Onset of disease

Onset	Number	P value
Mild	15%	0.01
Moderate	60%	
Severe	25%	

Table II shows that onset was mild in 15%, moderate in 60% and severe in 25%. The difference was significant (p< 0.05).

#### **Table III PASI index in patients**

Parameters	Mean	P value
Smokers (65)	12.9	0.03
Non smokers (25)	8.0	
Alcoholics (50)	10.2	0.05
Non- alcoholics (40)	5.8	

Table III shows that mean PASI score in smokers was 12.9, in non- smokers was 8.0, in alcoholics was 10.2 and in non- alcoholics was 5.8. The difference was significant (P < 0.05).

## DISCUSSION

Psoriasis is a condition in which skin cells build up and form scales and itchy, dry patches. Psoriasis is thought to be an immune system problem. Triggers include infections, stress and cold. The most common symptom is a rash on the skin, but sometimes the rash involves the nails or joints.<sup>6</sup>

Psoriasis is best viewed as a multi-factorial disease where there is an interplay between genetic and environmental factors.<sup>7</sup> Psoriasis is also associated with chronic obstructive pulmonary disease, nonalcoholic fatty liver disease, and coronary artery disease. Persons with psoriasis may also have a significantly decreased quality of life and psychological burden including anxiety, depression, and suicidal thoughts and behavior.<sup>8,9</sup> The present study was conducted to evaluate cases of Psoriasis in both genders.

In this study, out of 90 patients, males were 52 and females were 38. Asokan et al<sup>10</sup> found that of a total of 338 patients, 148 were smokers and 173 used to consume alcohol. Mean PASI score of smokers was more than that of non-smokers. Those with severe psoriasis were more likely to be smokers. There was a significant correlation between PASI scores and Fagerström score. Mean PASI scores of persons who used to consume alcohol and those who did not were comparable. There was no association between severity of psoriasis and alcohol consumption. There was no correlation between PASI scores.

We observed that onset was mild in 15%, moderate in 60% and severe in 25%. The mean PASI score in smokers was 12.9, in non- smokers was 8.0, in alcoholics was 10.2 and in non- alcoholics was 5.8. Affandi et al<sup>11</sup> found that among 15,794 patients, Malays were the most common (50.4%), followed by Chinese (21.4%), Indian (17.6%), and others (10.6%). Te mean age onset of psoriasis for our study population was  $35.14 \pm 16.16$  years. Male to female ratio was 1.3: 1. 23.1% of patients had positive family history of psoriasis. The most common clinical presentation was chronic plaque psoriasis (85.1%), followed by guttate psoriasis (2.9%), erythrodermic psoriasis (1.7%), and pustular psoriasis (1.0%). Majority of our patients (76.6%) had a mild disease with BSA < 10%. 57.1% of patients had nail involvement, while arthropathy was seen in 13.7% of patients. Common triggers of the disease include stress (48.3%), sunlight (24.9%), and infection (9.1%). Comorbidities observed include obesity (24.3%), hypertension (25.6%), hyperlipidemia (18%), diabetes mellitus (17.2%), ischaemic heart disease (5.4%), and cerebrovascular disease (1.6%). Te mean DLQI (Dermatology Life Quality Index) was 8.5  $\pm$  6.6. One-third (33.1%) of the patients had a DLOI score of more than 10, while 14.2% of patients reported no efect at all. Morsya et al<sup>12</sup> assessed clinically, and then the Dermatology Life Quality Index (DLQI) was determined and SF-36 questionnaires were administered to patients. Of the 40 patients, there were 14 male and 26 female patients. Range of the DLQI for male patients was 8.0-22.0 and that for female patients was 3.0-27.0. The DLOI showed a significant correlation with surface area measured (P=0.048).

## CONCLUSION

Authors found that PASI score was highest among smokers and alcoholics. Psoriasis was predominantly seen in males.

## REFERENCES

- 1. Raychaudhuri SP, Gross J. Psoriasis risk factors: Role of lifestyle practices. Cutis 2000;66:348-52.
- Herron MD, Hinckley M, Hoffman MS, Papenfuss J, Hansen CB, Callis KP, *et al.* Impact of obesity and smoking on psoriasis presentation and management. Arch Dermatol 2005;141:1527-34.
- Naldi L, Chatenoud L, Linder D, Belloni Fortina A, Peserico A, Virgili AR, *et al.* Cigarette smoking, body mass index, and stressful life events as risk factors for psoriasis: Results from an Italian case-control study. J Invest Dermatol 2005;125:61-7.
- Gerdes S, Zahl VA, Weichenthal M, Mrowietz U. Smoking and alcohol intake in severely affected patients with psoriasis in Germany. Dermatology 2010;220:38-43.
- Kaur G, Chahal KS, Malhotra SK. Clinicopathological Correlation of Non Infectious Erythematous Papulosquamous Lesions of Skin. J Adv Med Dent Scie Res 2019;7(2):131-135.
- Gupta MA, Gupta AK, Watteel GN. Cigarette smoking in men may be a risk factor for increased severity of psoriasis of the extremities. Br J Dermatol 1996;135:859-60.
- Sugathan TN, Soman CR, Sankaranarayanan K. Behavioural risk factors for non communicable diseases among adults in Kerala, India. Indian J Med Res 2008;127:555-63.
- Jankovic S, Raznatovic M, Marinkovic J, Jankovic J, Maksimovic N. Risk factors for psoriasis: A case-control study. J Dermatol 2009;36:328-34.
- 9. Matos TR, Ling TC, Sheth V. Ultraviolet B radiation therapy for psoriasis: pursuing the optimal regime. Clin Dermatol 2016;34(5):587-93.
- 10. Asokan N, Prathap P, Rejani PP. Severity of Psoriasis among adult males is associated with smoking, not with alcohol use. Indian J Dermatol 2014;59:237-40.
- Mohd Affandi A, Khan I, Ngah Saaya N. Epidemiology and clinical features of adult patients with psoriasis in Malaysia: 10-year review from the Malaysian Psoriasis Registry (2007–2016). Dermatology research and practice. 2018 Apr 23;2018.
- Morsya H, Abdel-Motaleba AA, Solimanb AM. Qualityof-life assessment in pemphigus vulgaris in Upper Egypt using the Dermatology Life Quality Index and SF-36 questionnaires. Egypt J Dermatol Venerol 2016;36:1-3.