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Sournal of Research PARIPEN		Original Research Paper	Medical Science
		Study to Assess Role of Stress & Incidence of Depression in Patients of Psoriasis	
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ABSTRACT	Aim: To find out incidence of depression & role of stress in patients suffering from Psoriasis. Method: This was a cross sectional, single assessment study of patients of Psoriasis & control. Results: Incidence of depression in Psoriasis patients was 26. 67% & in control group it was10%. In age group above 30years 29.16% of psoriasis patients & 5.88% of control group were depressed. The difference was significant statistically (Z=2.49). Depression was found in 26.66% in psoriasis compare to5.88% in control group female, the difference was significant statistically (z-2.27). Life event score was more than 150 in 60% of depressed psoriasis patients as compared to 20% in depressed control group. The difference was statistically significant (z= 3.46) Conclusions: Present study confirms the role of stress in exacerbation of Psoriasis.		

# **KEYWORDS**

Psoriasis, Stress, Depression

## Introduction:

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Psoriasis is a chronic papulosquamous disorder affecting 1-2% of the population. The disease is characterized by erythematous scaly plagues involving extensors, bony prominences, scalp, nails and joints with varying severity. The trigger factors for psoriasis include stress, trauma, infections, alcohol, smoking, metabolic factors like pregnancy, hypocalcaemia, sunlight, drugs and sudden withdrawal of corticosteroids.

Stress appears to exacerbate psoriasis in a significant number of patients. 37-78% of psoriasis patients are stress responders. Stress can worsen psoriasis and also can increase the time for disease clearance. It can act as a trigger and consequence of psoriasis with an incubation period of 2days to one month. Chronic daily stressors are more burdensome. There is a substantial impact on social, occupational, relational functioning due to the chronic, relapsing, disfiguring nature of this disease.(1) Emotional suffering due to psoriasis can lead to depression and suicidal ideation; indeed, recent studies have shown that psoriasis is associated with a high risk of suicide.(2) Depression was reported to be 54% by National Psoriasis Foundation (2004). (3) Females, young males (<40yrs) and those with lower education levels are significantly more depressed. (4)

This study was undertaken to assess the incidence of depression in cases of psoriasis and to find out role of stress in causation or exacerbation.

Aims and objectives: The aim of current cross sectional study was to know the role of stress and to find out incidence of depression in patients suffering from psoriasis.

## Material and Method:

This was a cross sectional, single assessment study. It was con-

ducted at tertiary hospital in Maharashtra.

All patients of Psoriasis aged 15years or more, attending dermatology OPD and willing to give informed consent were enrolled in this study. After collection of socio demographic data, detailed dermatological assessment was done.

Similar number of controls, accompanying dermatological patients, not having any dermatological complaints and willing to participate in the study was enrolled. The patients of psoriasis and the controls were asked to see a psychiatrist for detailed psychiatric evaluation. ICD 10 criteria (5) were used for assessment of Depression. To know the severity of depression Hamilton Depression Rating Scale (HDRS) (6) was used. Holms & Rahe social readjustment rating scale (7) was used to assess role of stress, in which life events were noted. Life events score less than 150 indicate slight risk of illness, 151 – 299 indicate moderate risk of illness & >300 high risk of illness.

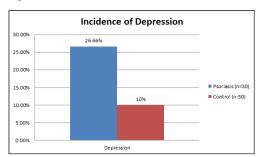
Patients with known psychiatric illnesses & those not willing to consent for the study were excluded from the study.

## Results:

A total of 30 patients of Psoriasis and similar number of controls were chosen for the study from the patients attending the dermatology outpatient department in a tertiary care hospital

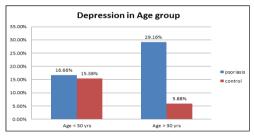
HDRS score more than7 suggesting Depression was found in 26.67% of psoriasis patients &10% of control group. The difference was not statistically significant (z value=1.70

#### Figure 1



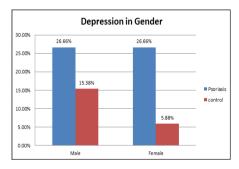
In the age group less than 30years 16.6% of Psoriasis patients & 15.38% of control group were depressed but the difference was not significant statistically. While in age group above 30 years, 29.16% of Psoriasis patients & 5.88% of control group were depressed, the difference was statistically significant (z=2.49). Average age of psoriasis patient was 44.9 years & average age of control group was 31.9 years.

## Figure 2

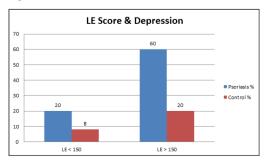


In male gender 26.66% of Psoriasis and 15.38% of control male were depressed. The difference was not statistically significant. Among the female group 26.66% of Psoriasis & 5.88% of control group female were depressed, the difference was statistically significant (z= 2.27). Duration of illness in Psoriasis patients was from few months to 30 years, average was 4years 7months.

## Figure 3



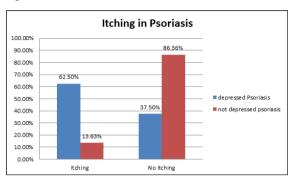
## Figure 4



Out of 30 psoriasis patients 56.6% were exposed to stressful

life events prior to episode. Life event score was less than 150 in 20% of depressed Psoriasis patients & 8% of depressed control group but the difference was not statistically significant (z=1.35). Life event score more than 150 were found in 60% of depressed Psoriasis patients & 20% of depressed control group. The difference was statistically significant (z= 3.46). Itching was present in 62.5% of depressed psoriasis patients.

#### Figure 5



**Discussion:** Psoriasis is a chronic inflammatory skin disease, associated with psychosocial morbidity where anxiety & depressive symptoms are commonly seen. Stressful life events can precipitate or exacerbate this condition. It is important to consider these associations in overall management of Psoriasis.

A total of 30 patients of Psoriasis & 30 controls were enrolled in this study. Depression was found in 26.66% of Psoriasis patients & 16.6% of control.

Depression score was 67% & 12% in psoriasis patients & control respectively in study by Masoud Golpour, Seyed Hamzeh Hosseini et al which are comparable to our findings.(8)

According to various studies incidence of depression was 25.9%, 26.7%, 32%, 20%, 29% &23.3% which was comparable to our findings. (9, 10, 11, 12, 13, 14)

Depression was found in 62% of patients in study by Esposito M et al (4), 58% in study by A Akay, A Pekcanlar et al.(15) A study by Surender Kumar et al (16) reported 90% of psoriasis patients had depression of some grade and Deshpande et al (17) found that 50%-97% of psoriasis patients had depression, these findings are very high compared to our findings

Psoriasis can be a cause for stress & psychological morbidity. Similarly stress is an important cause for precipitation or exacerbation of psoriasis which was confirmed by National psoriasis foundation also.(18) In a prospective study done by Louise Gaston et al (19) found a positive correlation between severity of psoriasis & psychological distress

In our study 56.66% of Psoriasis had experienced stressful life events prior to onset or exacerbation of illness. Comparable findings were reported in study by P Pacan et al (12) 61%, Polenghi et al (20) 72%. Study by S K Malhotra et al 26 % (21) & Gupta et al reported 39% (22). A study by Krueger GG (23) et al reported that Psoriasis is made worse by stress in approximately 30 to40% of the cases.

In our study pruritus was present in 62.5% of depressed psoriasis &13.6% of non depressed psoriasis patients. Gupta M A, Gupta A k (24) reported degree of depressive psychopathology directly correlated with pruritus severity in psoriasis patients. Study by Reich, Adam; et al (25) reported pruritus in 89.2% of patients during exacerbation of Psoriasis with associated depressive symptoms.

Conclusion: there is an association of psoriasis with psychiat-

#### ric morbidity like depression. Stress exacerbates psoriasis.

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