

# STUDY OF PREVALENCE OF PSYCHIATRIC MORBIDITY, ESPECIALLY DEPRESSIVE & ANXIETY DISORDERS IN ACNE VULGARIS PATIENTS

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## Abstract:

**Introduction:** Dermatological illnesses are frequently connected with psychiatric co-morbidity, which may be present in at least 30% of patients and has a negative impact on overall impairment. Acne patients have been observed to have low self-esteem, poor body image, and to have activity restriction and social isolation. Increased degrees of wrath, irritation, and anxiety are also observed as part of the emotional impact. Acne patients were shown to have a higher rate of depression than controls.

**Materials and Methods:** To fulfill above aims and objectives, this study was conducted in the OPD of Skin & V.D. Department in Santhiram Medical College, Nandyal. 100 acne patients attending skin OPD who fulfilled inclusion criteria were taken for the study & interviewed in detail (group A). They were compared with 100 matched normal healthy controls (group B) preferably relatives of acne patients. Patients were assured that information revealed by them will be kept confidential and will be used for research purpose only.

**Results:** Most of acne patients (60%) in our study were adolescents (age 13-19 years) & nearly all patients fell in age group 13-30 year. Gender distribution showed 56% of acne patients were males & 44% were females. Majority were Hindus (76%), most (90%) of acne patients were unmarried & majority (92%) were from urban background. In study group 80% acne patients were found to score 2 or more than 2 on GHQ12, while only 60% participants in control group were GHQ positive. These GHQ positive cases were evaluated in detail; psychiatric diagnosis was made by a consultant psychiatrist according to ICD10. Depression & anxiety were found to be common psychiatric diagnosis in our study.

**Conclusion:** Acne patients suffered from higher psychiatric morbidity as compared to control group. Severity of acne was found to be positively correlated to severity of depression & anxiety.

**Key Words:** psychiatric co-morbidity, Acne, adolescents, depression, anxiety.

## **INTRODUCTION**

Dermatological illnesses are frequently connected with psychiatric co-morbidity, which may be present in at least 30% of patients and has a negative impact on overall impairment. Acne patients have been observed to have low self-esteem, poor body image, and to have activity restriction and social isolation.<sup>1</sup> Increased degrees of wrath, irritation, and anxiety are also observed as part of the emotional impact. Acne patients were shown to have a higher rate of depression than controls. Suicidal ideation was discovered in 6-7% of acne patients. It has been demonstrated that females are more prone to the negative psychological impacts of acne than males.<sup>2</sup>

Acne vulgaris remains the most commonly skin disease treated by physicians with prevalence reaching up to 80% during adolescence.<sup>3</sup> It is a disease of the pilosebaceous units, clinically characterized by seborrhea, comedones, papules, pustules, nodules and in some cases, scarring.<sup>4</sup>

Acne vulgaris most frequently affects the face, making it impossible to hide. It is most prevalent in young adults at the time when individuals undergo maximum development of social skills and interpersonal relationships.<sup>5</sup>

## **MATERIALS AND METHODS**

To fulfill above aims and objectives, this study was conducted in the OPD of Skin & V.D. Department in Santhiram Medical College, Nandyal.

**Sample of study:** 100 acne patients attending skin OPD who fulfilled inclusion criteria were taken for the study & interviewed in detail (group A). They were compared with 100 matched normal healthy controls (group B) preferably relatives of acne patients.

Patients were assured that information revealed by them will be kept confidential and will be used for research purpose only.

### **Inclusion Criteria:**

1. Persons over age 13.
2. Literacy level such that he/she could understand the questionnaire.
3. Persons who gave informed consent. Those patients who were below 16 years of age consent were taken from parents/guardians.
4. Diagnosis and grading of acne confirmed by consultant Dermatologist (M.D. skin & V.D.)

**Exclusion Criteria:**

1. Persons suffering from major medical or surgical illness.
2. Persons suffering from other dermatologic disorders.
3. Persons with known psychiatric disorders.

The selected patients (group A) & controls (group B) were interviewed in detail by using a specially designed proforma which included: Identification & Sociodemographic data, history of the patient, details related to illness like site of lesion, where appeared first, progress, whether involve face, habit of acne picking & treatment history. Clinical diagnosis & severity of acne grading was confirmed by a consultant Dermatologist.

Subjects from both the group were administered Goldberg's Health Questionnaire (GHQ-12). Cut-off score of the test was taken as equal to, or more than 2. The subjects who crossed this cut-off mark were termed GHQ positive cases. GHQ positive cases were shown to a consultant Psychiatrist & a psychiatric diagnosis was made according to ICD-10 criteria.

Those patient who met the ICD-10 criteria for depression & anxiety disorder were subjected to detailed evaluation by administering BDI & HAM-A respectively & severity of depression & anxiety was assessed. Information so gained and data so collected were subjected to suitable statistical analysis (Chi square test, Pearson coefficient of correlation) and conclusions were drawn.

**RESULTS**

Most of acne patients (60%) in our study were adolescents (age 13-19 years) & nearly all patients fell in age group 13-30 year. Gender distribution showed 56% of acne patients were males & 44% were females. Majority were Hindus (76%), most (90%) of acne patients were unmarried & majority (92%) were from urban background.

In study group 80% acne patients were found to score 2 or more than 2 on GHQ12, while only 60% participants in control group were GHQ positive. These GHQ positive cases were evaluated in detail; psychiatric diagnosis was made by a consultant psychiatrist according to ICD10. Depression & anxiety were found to be common psychiatric diagnosis in our study.

Depression was found in 30% of patients of acne, anxiety disorders in 12% & mixed anxiety depressive disorders were found in 18%. Bipolar disorder was found in 4%, psychotic disorder in 2% & other neurotic disorders in 6%. Prevalence of psychiatric disorders was higher in acne patients when compared to control group, which was statistically significant.

In our study 30% patients suffered from mild acne, 42% from moderate acne & 28% from severe acne. Table 2 shows severity of acne with severity of depression & anxiety.

Score on GHQ-12		Study group	Control group	P Value
	>2	80 (80%)	60 (60%)	P<0.4
	<2	20 (20%)	40 (40%)	
Psychiatric diagnosis according to ICD-10	Organic disorders	0	0	P< 0.5
	Schizophrenia & related disorders	0	0	
	Bipolar affective Disorder	4 (4%)	2 (2%)	
	Depressive episode	30 (30%)	12 (12%)	
	Gen. Anxiety Dis.	12 (12%)	04 (04%)	
	Mixed Anxiety Dep. Disorder	18 (18%)	12 (12%)	
	OCD	0	0	
Dissociative Disorder (Conversion disorder)	6(6%)	2(2%)		

Table 1: distribution according to GHQ-12 & psychiatric diagnosis according to ICD10

		Mild Acne	Moderate Acne	Severe Acne
Severe score on BDI	0-9	16 (53%)	24 (57%)	12 (42%)
	10-16	08 (27%)	10 (24%)	8 (29%)
	17-30	6 (20%)	8 (20%)	8 (29%)
	>30	0	0	0
Score on HAM-A	0-17	24 (80%)	30 (72%)	16 (57%)
	18-24	6 (20%)	10 (24%)	8 (29%)
	25-30	0	01 (5%)	4 (15%)
	>30	0	0	0

Table 2: distribution of depression & anxiety according to severity of acne

## DISCUSSION

Several studies have demonstrated psychological abnormalities including depression, suicidal ideation, anxiety, psychosomatic symptoms, including pain and discomfort, embarrassment and social inhibition among patients of acne.<sup>6</sup> Effective treatment of acne was accompanied by improvement in self-esteem, affect, obsessive-compulsiveness, shame, embarrassment, body image, social assertiveness and self-confidence. Acne is associated with a greater psychological burden than a variety of other disparate chronic disorders.<sup>7</sup> The results of our study show that acne patients suffer from considerable psychiatric morbidity when compared to normal controls, which is consistent with the findings of Aktan S et.al 2000, Hughes JE et.al 1983, Khan MZ et.al 2001, Picardi A et.al 2000.<sup>8</sup>

The severity of depression was positively correlated with severity of acne & pearson coefficient of correlation was found to be 0.8986. Our findings are consistent with the findings of

Wu SF et.al 1988& Cunliffe WJ et.al 1989 who found direct link between acne severity & level of clinical depression.<sup>9</sup> However, Niemeier V et.al 1998 concluded that impairment is not correlated with the objective severity of acne. Layton AM et.al 2002<sup>17</sup> found that even mild to moderate disease can be associated with significant depression and suicidal ideation and psychologic change does not necessarily correlate with disease severity.<sup>10</sup> The severity of anxiety showed high positive correlation with severity of acne & pearson coefficient of correlation was found to be 0.9998. Our findings are consistent with the findings of Wu SF et.al 1988. Yazici K et.al 2004 concluded that greater impairment of dermatologic quality of life seems to put the patient at an increased risk for anxiety disorder. However, Niemeier V et.al 1998 concluded that impairment is not correlated with the objective severity of acne.

## CONCLUSION

Acne patients suffered from higher psychiatric morbidity as compared to control group. Severity of acne was found to be positively correlated to severity of depression & anxiety.

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