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A Study on Mood Disorders in Acne among Patients Attending Skin Opd

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I. Introduction:

Acne is a very common skin condition of the face and upper trunk affecting millions of adolescents everyday [1]. It is of great interest and importance to explore it further to elucidate possible associated factors which may provide clues to its etiology.

The distribution of acne in populations has been shown to vary across gender [2-8], ethnicity [1, 9], socio-demographic variables [8, 10], cigarette smoking [11, 12], diet [13, 14], mental health problems and may even be associated with suicidal thoughts [15]. These studies have helped us identify risk factors for the development of acne and made us understand the burden this condition represents for young people. The importance acne may have on the daily life of adolescents must not be trivialized, and it has been demonstrated that the quality of life of acne patients is at the same level as patients with other chronic conditions such as asthma, epilepsy, diabetes, back pain and arthritis [16].

Since acne is a visual disease and starts in adolescents, as does an increase in the prevalence of depression and anxiety. It is particularly relevant to explore the way in which this skin condition is associated with psycho-social factors. Adolescence is an important and vulnerable period in most people's lives as it is the time of transition between the dependence of childhood to the independence of adulthood. There is, however, conflicting evidence about a coexistence of acne and mental health problems: some studies have found an association [17], while others have not been able to identify any. Isotretinoin therapy is used in the treatment of severe or recalcitrant acne. Several case reports have raised concern over the increased incidence of depression and suicide in patients receiving isotretinoin therapy [18].

II. Methodology:

Participants and study design:

The study population consisted of all the healthcare seeking individuals who attended skin OPD with complaints of pimples and were sent for psychological evaluation after careful clinical examination. Consent of the subjects were taken to evaluate the mood state using Beck's Depression inventory[19] and Hamilton's anxiety rating scale[20].

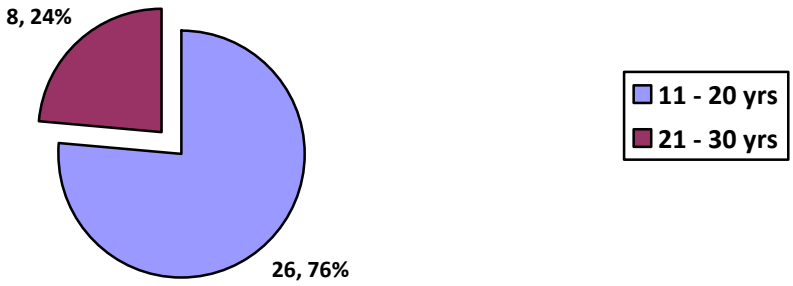
The results were analyzed by percentage methodology.

III. Results

Table1: Distribution of acne among different age groups

Age	
10-20	**21-30**
26(76.47%)	08(23.53%)

Chart 1: Age distribution among acne patients

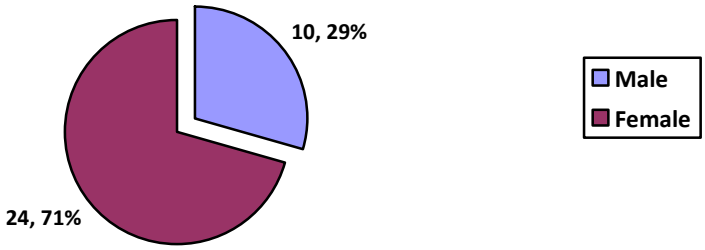


The above table shows distribution of Acne was more common among adolescent age group, more commonly in 2nd decade of life with 76.47% percent of prevalence.

Table 2: Sex distribution in acne patients

Sex	
Male	Female
10 (29.41%)	24 (70.59%)

Chart 2: Sex distribution in acne patients

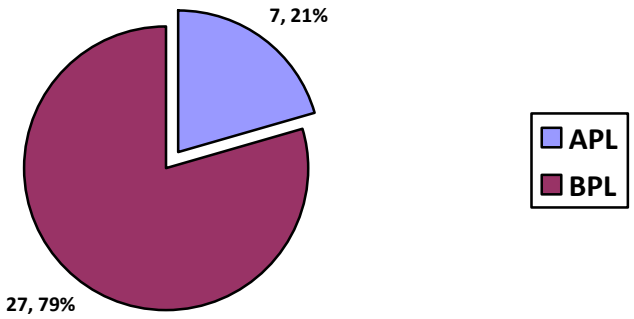


The above table shows Acne was more common among females than in males with prevalence of 70.59%.

Table 3: Sociodemographic distribution of Acne

Sociodemographic data	
Above Poverty Line (APL)	Below Poverty Line (BPL)
07 (20.59%)	27 (79.41%)

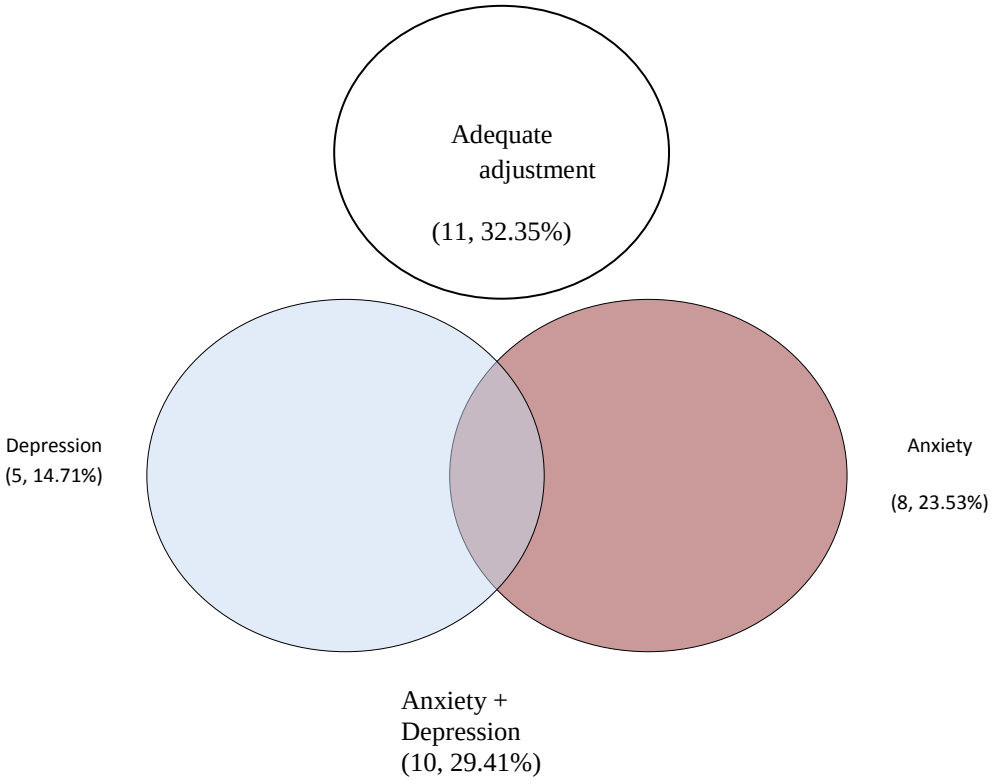
Chart 3: Sociodemographic data



This table shows Acne to be common among below poverty line adolescents (79.41%).

Table 4: Mood disturbances in acne patients

Adequate adjustment	Depression	Anxiety	Mixed Anxiety and Depression
11(32.35%)	5 (14.71%)	8 (23.53%)	10 (29.41%)



10 people (29.41%) had both depression and anxiety.

This shows variences in the mood among persons with acne. 32.35% of the people did not have any mood disturbances. 44.12% of the people experienced sadness amounting to depression and 52.94% of them

suffered from anxiety. Of the people who were suffering from depression and anxiety 29.41% showed both anxiety as well as depression.

IV. Discussion:

According to study conducted by Burton JL et al[2] among 1555 school children aged between 8-18 yrs, comedones were present in a large population of even the youngest children and were universal by mid teens and clinical acne appeared 2 yrs earlier in girls than in boys and the prevalence was reached at age of 14 years in girls and 16 years in boys. There after the prevalence of more severe grades of acne continued to increase steadily in boys but declined in girls. The age of menarche in girls didn't effect the severity of acne which ultimately developed. Our study too showed the prevalence to be more in the age group of 10-20 years accounting to 76 percent.

Smithard A et al[21] conducted a community based study regarding acne prevalence, knowledge about acne and physiological morbidity in mid adolescence in which 317 pupils from a school in Nottingham aged 14-16 years were examined. An age appropriate, validated measure of emotional well being, the Strength and Difficulties Questionnaire (SDQ)[22] and an Acne Management Questionnaire were used to assess participant psychological health, level of acne knowledge and health seeking behavior. There was a prevalence of acne in 50% of study sample. Participants with definite acne (12+ lesions) ($P < 0.01$) and girls ($P < 0.05$) had higher levels of emotional and behavioral difficulties. Patient with acne were nearly twice as likely as those without acne to score in abnormal/borderline range of the SDQ (32% vs 20%; odds ratio 1.86; 95% confidence interval 1.03-3.34). Knowledge about the cause of acne was low (mean 45%) and was unrelated to acne status.

According to secondary analysis conducted by Purvis D et al[15] of a cross sectional survey - Youth 2000 (New Zealand national survey of youth health). Among a total of 9567 secondary school students aged 12-18 years participated in the survey. The main outcome measures were self reported acne, depressive symptoms (Reynold Adolescent Depression Scale >77)[23], anxiety (Anxiety Disorder Index from Multidimensional Anxiety Scale for children)[24] and self reported suicidal attempts. It revealed that 'Problem Acne' was associated with increased probability of depressive symptoms with odds ratio 2.04 (95% confidence interval 1.7 - 2.45); anxiety, odds ratio 2.3 (1.74 - 3.00) and suicidal attempts, odds ratio 1.83 (1.51-2.22) in a logistic model that included age, gender, ethnicity, school decile and socio-economic status. The association of acne with suicidal attempts remained after controlled for depressive symptoms and anxiety, with odds ratio 1.5 (1.21-1.86) and was concluded that young people presenting with acne are at increased risk of depression, anxiety and suicidal attempts.

Another study conducted by Saif Mutair Al Saedi Al Huzali et al[17] to determine the prevalence of depression among acne patients in King Faisal and King Abulaziz hospital in Makkah, Saudi Arabia in which 228 acne patients with their age ranged between 14 and 39 years (mean of 23.9 ± 5.7 years) were studied. Among them more than half of the participants were females (56.1%). Depression regardless of its severity was reported among 40.8% of acne patients. Severe depression was reported by 12.3% of acne patients while mild and moderate depressions were reported by 16.2% and 12.3% respectively. Extremely severe depression was not reported among any of acne patients. Age, gender and severity of acne were significantly associated with depression and it was concluded that mental problems as an important factor in acne but the casual relationship remains elusive.

V. Implication Of The Study:

The presence of acne can negatively affect quality of life, self esteem, and mood in adolescents. Acne is associated with an increased incidence of anxiety, depression, and suicidal ideation. The presence of these and other comorbid psychological disorders should be considered in the treatment of acne patients when appropriate. A strong physician patient relationship and thorough history taking may help to identify patients at risk for the adverse psychological effects of acne. In addition to the effect of acne on the patient, family and social relationships may also be strained. Parents may worry about the short and longterm repercussions of their child's appearance, such as being bullied at school or having permanent scarring from acne lesions. As teens gain independence during adolescence, their attitudes toward treatment and adherence to the prescribed regimen may be adversely affected. Parents and patients may not always be adequately educated about the causes and treatment of acne, which may further delay or affect successful treatment. Poor adherence to therapy is a barrier to successful acne treatment. Hence there is a need for a study to understand the link between mood disorders and acne.

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