



Impact of Acne Vulgaris on Self Esteem in Adolescent and Young Adult

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ABSTRACT

Objective: To determine the impact of acne vulgaris on Self-esteem in adolescents and young adults. **Study Design:** Descriptive Cross-Sectional Study. **Settings:** Department of Dermatology, Civil Hospital, a tertiary care public sector health facility in Karachi. **Duration:** January 1, 2018 to June 30, 2018 (Six Months). **Methodology:** The study was conducted after informed consent; 158 patients diagnosed with acne vulgaris were evaluated for the impact it had on their self-esteem by using Rosenberg's Self Esteem Scale (RSES). Chi square test was used to determine the correlation among different categorical variables. **Results:** Total 158 adolescent and young adults with acne vulgaris were included in the study, with 126 (79.7%) being females and 32 (20.3%) were males. The median age was 22.0 ± 4.62 years. Mean RSES score was 14.94 ± 0.141 and low self-esteem was reported in 67 (42.4%) participants. **Conclusion:** Acne vulgaris adversely effects self-esteem of patients, with one-third of the study population reporting low self-esteem. It was significantly low in females as compared to males.

Keywords: Acne Vulgaris, Self-esteem, Rosenberg's Self Esteem Scale (RSES), Adolescent.

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INTRODUCTION

Acne vulgaris is a common and chronic skin disorder caused by pilosebaceous unit blockage and/or inflammation (hair follicles and sebaceous glands).¹ Globally acne affects approximately 650 million people and is estimated as the 8th most common disease in the world.² 40–50 million people in the US population are diagnosed with acne in the US; with a prevalence of 85% between the ages of 12–24 years.³ Onset of acne normally begins in adolescence, but it can be experienced by adults after puberty. Prevalence rates of acne vulgaris in different studies range from 28.9 % to 91.3 % in adolescents.⁴⁻⁷ Acne is associated with significant psychological burden.⁸ Depressive disorder, anxiety disorders as well as social phobia are strongly linked to acne.⁹ Acne patients are also susceptible to low confidence, negative self-esteem, altered body image and suicidal ideation.^{8,10} Self-esteem may be described as a feeling of contentment or discontent when one's ideal self-image is in conflict with one's perceived self-image. The degree of satisfaction is an important predictor of life outcomes.¹¹ In adolescence, low self-esteem is a potential risk factor for depression and is associated with increased suicidality.^{12,13}

In Pakistan, so far, no such data exists on self-esteem among young acne vulgaris patients. The scarce data that is currently available cannot be applied to population of our setting and the consequences faced by the young patients with acne vulgaris. Therefore, this study is aimed to determine the degree of low self-esteem in adolescent and young adults diagnosed with acne vulgaris.

METHODOLOGY

Study Design: Descriptive cross-sectional study.

Settings: The study was conducted at the Dermatology Outpatient Department (OPD) of Civil Hospital Karachi (CHK), a tertiary care public sector health facility in Karachi Pakistan.

Duration: January 1, 2018 to June 30, 2018 (Six Months).

Sample Technique: Convenient sampling technique.

Sample Size: 158 subjects.

Inclusion Criteria: Adolescent and young adult patients of either sex, aged between 16-30 years, diagnosed by a dermatologist with acne vulgaris.

Exclusion Criteria: Any other dermatological disorder, any florid psychotic symptoms, previously diagnosed case of psychiatric illness.

Methods: After approval by the ethical review committee of Department of Psychiatry, CHK, one hundred and sixty-five (165) patients with acne vulgaris who fulfilled the inclusion criteria were recruited in the study.

Inclusion criteria included adolescent and young adult patients of either sex, aged between 16-30 years, diagnosed by a dermatologist with acne vulgaris and attending the dermatology OPD of civil hospital. Confidentiality was assured to the participants along with an informed consent regarding the inclusion of patient's data in this study. The demographic information of the study participants was noted on a semi-structured proforma and self-esteem was assessed by using Rosenberg self-esteem scale (RSES).

The Rosenberg self-esteem scale (RSES) developed by Dr. Morris Rosenberg, a sociologist, is a valid tool which quantifies and measures self-esteem. It is a Likert-type scale with 10 items and a score range between 1 and 30. Five of the ten items have statements which are positively worded and the remaining five have statements which are worded negatively.¹⁴ The

respondents are asked to relate their prevailing feelings on a four-point scale to measure self-esteem.

The statistical package for Social Science (SPSS) version 19 was used to analyze the data. Study variables included age, gender, severity, total scores. Mean and standard deviation were calculated for qualitative variables (age, total RSES and duration of acne).

Whereas frequencies and percentages were calculated for quantitative variables (Sex, marital status, occupation, smoking, education, residence, family history of psychiatric illness, obesity, and outcome, measure of low self-esteem). Effect modifier variables (age, gender, marital status, education, smoking, family history of psychiatric illness, obesity, residence and duration of acne) were stratified. Post stratification chi square test was used to see the effect of these variables on outcome variable. P-value less than 0.05. ($P < 0.05$) was considered statistically significant.

RESULTS

Among 158 study individuals, 126 (79.7%) were female and 32 (20.3%) were male respectively. Female gender was predominant over male gender. Median age was 22.0 ± 4.62 (Median \pm SD) ranging from 16 to 30 years. In age category, most of study patients 62 (39.3%) fall in age group 16 to 20 year. Majority study subjects 125 (79.1%) belonged from urban area as compared to rural area 33 (20.9%).

Regarding occupation most of the female's participants were housewives 69 (43.7), 53 (33.5) were students, employed participants were 14 (8.9), and those unemployed were 12 (7.6). According to marital status, more than half of the participants 88 (55.7) were not married. One third of the study participants had a positive family history of psychiatric illness 52 (32.9). Among all study participants, majority 127 (80.4) were educated whereas one-fifth of study participants 31 (19.6) had no formal education.

Self-esteem among acne vulgaris patients was measured by Rosenberg's Self Esteem Scale (RSES) questionnaire. Mean RSES score was reported 14.94 ± 0.141 ranging from 11 to 22. (Table 1).

Table 1: Self Esteem mean score among study participants (male and female)

Parameters	Self Esteem Mean Score
Mean \pm SD	14.94 ± 0.141
Male	15.09 ± 0.235
Female	14.90 ± 0.167
Minimum	11
Maximum	22

Low self-esteem was reported in 67 (42.4) of study participants. (See table 2).

Table 2: Low Self Esteem among study participants (N=158)

Low Self Esteem	Frequency	Percentage
No	91	57.6
Yes	67	42.4
Total	158	100.0

Mean RSES score was lower in female patients 14.90 ± 0.167 as compared with male patients 15.09 ± 0.235 . Statistically significant low self-esteem was reported in female patients 60 (47.6) than male patients 7 (21.9) ($P=0.009$). (Table 3). There was a statistical correlation between self-esteem and marital status ($P= 0.030$). No statistical correlation was observed between self-esteem and education ($P= 0.452$), area of residence ($P= 0.047$) or family history of psychiatric illness ($P = 0.176$) (Tables 3).

Table 3: Association of Low Self Esteem with Gender, Marital Status, Education, Area of Residence and History of Psychiatric Illness in Family among Female and Male Study Participants (N=158)

Low Self Esteem	Female	Male	Total	P-Value (Sig)
No	66 (52.4)	25 (78.1)	91 (57.6)	0.009
Yes	60 (47.6)	07 (21.9)	67 (42.4)	
Total	126 (100.0)	32 (100.0)	100.0	
Low Self Esteem	Married(N)	Un-Married (N)	Total	P-Value (Sig)
No	47	44	91	0.030
Yes	23	44	67	
Total	70	88	158	
Low Self Esteem	Education		Total	P-Value (Sig)
	Yes (N)	No (N)		
No	75	16	91	0.452
Yes	52	15	67	
Total	127	31	158	
Low Self Esteem	Urban (N)	Rural (N)	Total	P-Value (Sig)
No	77	14	91	0.047
Yes	48	19	67	
Total	125	33	158	
Low Self Esteem	History of Psychiatric illness		Total	P-Value (Sig)
	Yes (N)	No (N)		
No	26	65	91	0.176
Yes	26	41	67	
Total	52	106	158	

DISCUSSION

Rosenberg described low self-esteem as “characterized by feelings of inadequacy, incompetence and incapability of facing challenges”. High self-esteem consists of self-judgement of value, trust and competence whereas the average is expressed by the oscillation of the individual between feelings of self-approval and rejection.¹⁵ This study reported low self-esteem in forty-two (42%) percent of acne vulgaris patients. Tasoula *et al*¹⁶ reported similar findings that 46.8% individuals had decreased self-esteem due to acne. Adolescents who reported improvement with treatment subsequently had lower scores on RSES as compared to participants with no improvement reported ($P < .001$) This further confirms that low self-esteem is associated with acne vulgaris which improved significantly when treated.^{17,18} A cross-sectional study conducted by Uslu *et al*¹⁷ in Turkey on 563 students in high school, using a questionnaire on acne and the Rosenberg’s Self Esteem Scale (RSES), reported similar findings of higher RSES scores associated with severe acne ($P < .001$ and $P = .01$, respectively).

The main finding of this study was that low self-esteem was statistically significant in females than males. A questionnaire-based survey conducted by Dalgard *et al*¹⁹ on 3775 adolescents reported that both girls and boys with acne had a lower self-esteem and more depressive symptoms than those without acne; however, gender difference was non-significant. In this study females had more self-esteem as compared to males. A possible reason in the difference could be that over all prevalence of self-esteem in females is more than double as compared to boys. Another reason could be that in eastern countries girls are more stigmatized than boys because of acne and that’s the main hurdle when females get married. Females are more distressed regarding their condition and feel that it makes them stand-out in comparison to males; they also feel more discomfited with a higher negative body image.²⁰ Young and colleagues²¹ had similar finding as this study. They found that the risk of major depression, suicide and low self-esteem was strongly associated with acne and was higher in females as compared to males.²¹ Higher anxiety amongst girls with acne when compared to boys was reported by a study;²² a finding that was not related to acne severity. It concluded that in comparison to boys, girls were more prone to negative emotional effects of acne.²²

One third of the study participants in this study had a positive family history of psychiatric illness. In contrast to this study a previous study conducted in Iran, with 1002 young adults, concluded that a positive family history of psychiatric illness doubled the risk of acne vulgaris.²³

CONCLUSION

Acne vulgaris adversely effects self-esteem of patients, with one-third of the study population reporting low self-esteem. It was significantly low in females as compared to males. There is a need for similar studies on a larger scale in order to assess the suitability of the existing RSES scale in evaluating the outcome of acne vulgaris in adolescents and young adults in Pakistan.

LIMITATIONS

The major limitation for the study was small sample size, no grading of severity of acne. Only adolescent and young patients were included with no follow-up of the participants. Future studies in this area are needed with a bigger sample size, evaluating all age groups and a follow-up of the group.

SUGGESTIONS / RECOMMENDATIONS

There is a need for similar studies on a larger scale in order to assess the suitability of the existing RSES scale in evaluating the psychiatric outcome of acne vulgaris in adolescents and young adults in Pakistan.

CONFLICT OF INTEREST / DISCLOSURE

None

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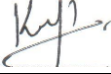
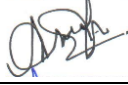

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