



Psychosocial impact of acne-An epidemiological study

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Abstract

Background: Acne vulgaris is a common disorder, with inflammation of the pilosebaceous units that morphologically presents with Comedones, inflamed papules, pustules and nodules. Although its physical and psychosocial impact is studied in teen years, it is poorly understood in the Indian adult population.

Aim: To study the physical and psychosocial impact of acne in adult females.

Settings and Design: This exploratory study was done in the Medical college setting.

Materials and Methods: Twelve adult, unmarried females, between the age group of 18 and 25 years, having (mild-to-moderate), acne, for two consecutive years, were interviewed using a semi-structured clinical interview of the Skindex, a quality-of-life measure for patients with skin disease, developed by Chren et al., along with some open-ended questions. Both qualitative and quantitative analysis was done to analyze the data.

Result: The results indicated a higher level of emotional and social impairment, in terms of the feelings of physical discomfort, anger, and the intermingling impact of these, among the participants.

Conclusion: Acne is a common problem among adults and appears to have a considerable impact on the mental health, therefore, for the treatment to be successful, a sympathetic approach by doctors and significant others, with the basic psychosomatic treatment, are necessary.

Keywords: psychosocial impact, acne adult

Introduction

Acne is the most commonly seen condition in dermatology. Although acne does not cause direct physical impairment, it can produce a significant psychosocial burden^[1]. Acne commonly involves the face. Face is the mirror of a person so any one with severe acne is always stressed about his appearance. As part of the emotional impact, increased levels of anxiety, anger, depression, and frustration are observed in patients with acne^[2].

The majority of studies on the psychosocial impact of acne have been conducted among patient groups in the US and Europe,^[1, 2, 3, 4] but there is poor understanding of this among the Indian population. All the psychosocial effects of acne listed earlier are nowadays seen not only in the American society, but also in the Indian society. Self-presentation is not only a matter of importance in the American society, but also in Indian women, who are also becoming aware of the tremendous impact of first impression. Thus, taking this into consideration, the purpose of the present study was to determine the, 'physical and psychosocial impact of acne in adult.

The objectives of the study were as follows

1. To assess the physical and psychosocial impact of acne by administering the quality-of-life measure called Skindex.
2. To assess the physical and psychosocial impact of acne by administering open-ended questions involving the concepts of participant views, about the advantage of physical attractiveness in various dimensions of life, their views about whether acne causes more psychic suffering than other diseases, and what bothers them most about having acne.

Materials and Methods

The study included, 12 unmarried females, between the age group of 18 and 25 years, who had (mild-to-moderate) acne since the last two years and were attending our OPD in a period of 3 months. An experienced dermatologist confirmed the diagnosis.

All the subjects were generally healthy, with the majority reporting good health. The socioeconomic status of the participants was controlled and determined on the basis of certain socio demographic variables, such as, father's education, mother's education, and parent's income per month. The procedure of the study started with identifying the participants for the study. Following this identification, before the collection of the data, informed consent was taken from all the participants and they were assured about the confidentiality by telling them about the purpose of the study. Information gathering started with completing the demographic questionnaire, which was comprised of basic demographic data, with some basic questions about the participants' acne. Thereafter, the other measures were completed.

In addition to the socio demographic questionnaire, which was used to elicit information regarding the demographic details of the participants, the following tools were use

Skindex

A validated measure of skin disease quality of life, developed by Chren et al.,^[5] was administered. It is a 61 item self-administered instrument, having eight scales, each of which addressed a construct, in a comprehensive conceptual framework: cognitive effects, social effects, depression, fear, embarrassment, anger, physical discomfort, and physical limitation. It enquired about the subject's perception in the last four weeks.

Open Ended Questions

Open-ended questions, in a semi-structured interview form were asked from the participants, to get the richest insight into the effect of acne. In this, questions covering the concepts were asked from the participants, that is, their views about the advantage of physical attractiveness in various dimensions of life, their views about acne causing more psychic suffering than other diseases, and lastly what bothered them the most about having acne.

Statistical Methods

As per the method of analysis, a combined qualitative and quantitative analysis was carried out to analyze the data.

Results

Both qualitative and quantitative analysis was done to interpret the results. The quantitative analysis started with scoring of the items in the Skindex. The average scale scores were computed for all the eight scales of the Skindex and they were converted into percentages [Table 1]. Furthermore, for the qualitative analysis, the themes were taken out and a connection between them was found and they were put in a coherent order, after reading the transcript. An identifier to each of the master themes was also added, to indicate where in the transcript instances of it were found. Results indicated that the highest number of total average scores in the scales measured physical discomfort and anger [Table 1], which was also found during the qualitative analysis.

Table 1: Showing the mean of the Skindex scale scores of all the subjects

Cognitive			Social			Depression			Fear			Embarrassment			Anger			Discomfort			Limitation		
No. of items	Avg score	%	No of items	Avg score	%	No of items	Avg score	%	No. of items	Avg score	%	No. of items	Avg scores	%	No. of items	Avg scores	%	No. of items	Avg scores	%	No. of items	Avg scores	%
16	1.75	10.94	9	2.11	23.44	7	1.71	24.43	7	1.43	20.43	4	2	50	5	2.4	48	4	1	25	8	1.25	15.63
16	1.63	10.19	9	0.11	1.22	7	0.71	10.14	7	1.57	22.43	4	1.5	37.5	5	1.2	24	4	1.5	37.5	8	0.13	1.63
16	1.5	9.38	9	0.22	2.44	7	0.29	4.14	7	0.29	4.14	4	0.75	18.75	5	1.6	32	4	1.75	43.75	8	0.25	3.13
16	1.88	11.75	9	2.11	23.44	7	2.43	34.71	7	1.43	20.43	4	2.25	56.25	5	2.8	56	4	2.75	68.75	8	1.63	20.38
16	1.38	8.62	9	1	11.1	7	1.29	18.43	7	0.86	12.29	4	1.75	43.75	5	2.2	44	4	1.75	43.75	8	0.5	6.25
16	0.88	5.5	9	0.67	7.44	7	2	28.57	7	1	14.29	4	1.5	37.5	5	2	40	4	0.75	18.75	8	0.63	7.88
16	1.69	10.56	9	1.67	18.55	7	1.29	18.43	7	0.43	6.14	4	1.25	31.25	5	1.6	32	4	1.25	31.25	8	0.63	7.88
16	2.25	14.06	9	2.22	24.66	7	2.43	34.71	7	1.71	24.42	4	2	50	5	3	60	4	2	50	8	2	25
16	1.44	9	9	0.22	2.44	7	1.14	16.29	7	0.86	12.29	4	1	25	5	2.2	44	4	1.25	31.25	8	0.25	3.12
16	1.31	8.18	9	0.56	6.22	7	0.14	2	7	1	14.28	4	0.5	12.5	5	1.8	36	4	2	50	8	0.38	4.75
16	0.88	5.5	9	0.44	4.89	7	0.14	2	7	0.43	6.14	4	1	25	5	2	40	4	0.5	12.5	8	0.13	1.63
Total avg score			Total avg score			Total avg score			Total avg score			Total avg score			Total avg score			Total avg score			Total avg score		
22.59			11.33			13.57			11.01			15.5			22.8			16.5			7.78		

Discussion

Acne occurs most commonly during adolescence, affecting more than 96% of the teenagers, and often continues into adulthood. Acne is more common in females. Acne diminishes over time and tends to disappear or at the very least decrease after one reaches one's early twenties. There is, however, no way to predict how long it will take to disappear entirely, and some individuals will carry this condition well into their thirties, forties, and beyond^[6].

Acne develops as a result of blockages in follicles^[7]. The level of social, psychological, and emotional impairments in acne compares with asthma, epilepsy, diabetes, and arthritis^[8]. The present study addresses the issue of the physical and psychosocial impact of acne in adult females

Physical Discomfort

We found an increased impact of physical discomfort due to acne in a majority of the cases, both during qualitative and quantitative analysis.

As per the quantitative analysis, most of the subject's responses were extreme, that is, toward the negative side, in the items determining physical discomfort, and therefore, the total average score and the percentages were also higher in this scale, as compared to the other scales [Table 1]. Furthermore, a similar trend was also found in qualitative analysis, where it was reported by most of the subjects that they felt discomfort due to pain, scars, redness, and daily new eruptions left by the acne, which restricted them from attending social gatherings.

Similar findings were also demonstrated in earlier studies, wherein it was reported that patients with acne, besides anxiety and depression, are prone to low self-esteem, low self-confidence, low self-assertiveness, embarrassment, social inhibition, affectation, shame, altered body image, psychosomatic symptoms (e.g., pain and discomfort), obsessive-compulsiveness, and suicidal ideation^[9, 10].

Anger

The trait of anger, which is related to heart disease and other morbidities, may also affect acne and a patient's adjustments to it. Rapp et al.,^[11] in a study, found that anger is associated with the quality of patient's lives and with their satisfaction with the treatment. Care of acne patients should include attention to anger and other chronic emotional states, quality of life, as well as to the clinical severity

Findings in consonance with the literature review were also found in our study, wherein, an increased impact of acne on the feelings of anger was also found both during qualitative and quantitative analysis. In the quantitative analysis, majority of the subject's responses were extreme, that is, toward the negative side with regard to the items determining the impact of acne in terms of anger, that is, most of the participants reported that they felt bothered by the comments made by others about their skin condition, which increased their anger [Table 1]. In addition, when conducting qualitative analysis also, this extreme response was found in most of the cases, as they all felt angry due to useless advice from outsiders, which further led to feelings of irritation, frustration, and decrease in social interaction in most of them.

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