Original article

Acne and One’s Self Confidence: Cross-sectional study on Malaysian Student population

Abhinitha P1, Ravina Suloshini Gengatharan2, Sarah Zulkiflee3, Purveena Ganisan4, Sitharrthen Arumugam5, Naveen Kumar6

Abstract

Introduction: Self-confidence of an individual must be motivated by self without the inference of any internal or external consequences. Acne is a common skin defect among adolescents, and even in adults that can cause psychological weakness affecting one’s self-confidence level. The objective of this study is to investigate the effect of acne on the self-esteem of young adults of Malaysian student population. Materials and Method: A cross-sectional survey was done using a newly developed questionnaire having majorly close ended (in 2-point scale) questions. Total of 185 Malaysian MBBS students were randomly chosen, and only 171 valid responses from the victims of acne were analyzed. Results: Among the students with acne problems, 88% of them opine that they lose their self-confidence due to the effect of acne. Out of this, 78% of them were preferred to associated with the people where as 22% of the students do not prefer to be involved with the individuals. Conclusion: From the results, it was found that acne significantly reduces self-confidence of a majority of students whereas a small group of participants does believe that acne does not describe them. Students with acne problems are more self-conscious and perform poorly in social life. It is regardless of the clinical severity of their acne. In conclusion, acne influences students’ ability in public affairs.

Keywords: Acne; Self-confidence; Malaysian; depression

Introduction

Acne is a common skin defect among adolescents, and even in adults. It is caused by inflammation of the skin glands and hair follicles with the increased sebum secretion. The presence of acne has the impact of being associated with several psychological distresses, including anxiety, depression, self-consciousness, lowered self-concept and lack of self-confidence. Scientific literature have described the negative impact of acne upon one’s mood self-esteem and interpersonal relationships. Severity of acne even could lead to depression and suicidal ideation. Self-confidence relates to a feeling or consciousness of one’s power or of reliance on one’s circumstances. A person’s self-assuredness is necessary for curbing depression and depicts how personal achievements are valued. Self-confidence is of much importance in a young adult’s life. The psychological perspectives of skin diseases are well studied. However, disease-specific questionnaires as used in the form of clinical trials are

1. Abhinitha P, Department of Anatomy, Melaka Manipal Medical College (Manipal Campus), Manipal Academy of Higher Education (MAHE), Manipal, Karnataka, INDIA
2. Ravina Suloshini Gengatharan
3. Sarah Zulkiflee
4. Purveena Ganisan
5. Sitharrthen Arumugam
   Bachelor of Medicine and Bachelor of Surgery (MBBS) Students, Melaka Manipal Medical College, Manipal Academy of Higher Education (MAHE), Manipal , Karnataka, INDIA
6. Naveen Kumar, Department of Anatomy, Melaka Manipal Medical College (Manipal Campus), Manipal Academy of Higher Education (MAHE), Manipal, Karnataka, INDIA

Correspondence to: Dr. Naveen Kumar, Department of Anatomy, Melaka Manipal Medical College (Manipal Campus), Manipal Academy of Higher Education (MAHE), Manipal, Manipal, Udupi District, Karnataka, INDIA 576104, email: naveentonse@gmail.com
scanty. In this regard, survey-based studies to assess the impact of facial acne on health-related quality of life could help in the evaluation of therapeutic changes. The present study was undertaken to understand the attitude of Malaysian undergraduate students concerned with the facial acne. The primary parameters evaluated through this study were the self-confidence pattern of students with acne and the social behavior of both acne affected and non-affected students. The responses given by these students might be helpful in drafting a suitable method to handle any problems associated with it, for instance, depression and inferiority complex among students.

**Materials and Methods**

**Sample size:** This is a cross-sectional study based on random sampling method. A total of 185 medical undergraduate students, comprising of 102 male students and 83 female students aged 17-19 years participated in this study and the response rate was 100%. The students belonged to three different Malaysian ethnic races i.e. Malays, Chinese and Indians (Malaysian Indians) were chosen randomly. **Data collection:** Self designed questionnaires were used in the study. The questions were mostly closed-ended (in 2-point scale) with few optional open-ended. The questionnaire validated by the expert faculties of Melaka Manipal Medical College, Manipal University. The questions were designed in the simple form answerable by the students according to our objectives, and it included questions which assess the student’s perceptions regarding the effect of acne on their self-confidence. This questionnaire constituted of 11 closed-ended questions which were validated by academic faculty. **Data analysis:** All the data that obtained after evaluating the questionnaires was analyzed percentage wise. The results obtained were represented as tables and pie charts using Microsoft Excel 2007. **Ethical Clearance:** Ethical clearance was obtained from the institutional research committee, before the study and the students gave their informed consent before taking part in this study. Participation was purely on voluntary basis. **Results:** Out of 185 students who were voluntarily involved in the study through the random selection, only 171 students (92%) responses were validated as they have self-declared that either they had experienced the acne related complications or presently being experiencing. The remaining 14 students (8%) ruled out that they have not been victims of facial acne in their life (Figure 1).

![Acne profile of the participants](figure1.png)

Figure 1: Acne profile of the participants

Further analysis of data collected from 171 students with acne related issues, majority of them (150 students with 88% of incidence) expressed that, they would not be self-confident enough at times due to their facial acne. While remaining 21 students (12%) stated that presence of acne does not affect their self-confidence level at all. (Figure 2)

![Confidence profile of students with facial acne](figure2.png)

Figure 2: Confidence profile of students with facial acne

Upon analyzing the social behavior attitude of students with the issues of acne, 133 out of 171 (78%) students are willing to be associated with the peoples, while remaining 38 students (22%) are not ready to be social with the individuals due to their acne problems (Table 1).

| Social behaviour attitude | Students with acne (n=171) |
|---------------------------|---------------------------|
| Prefer to associate with the people | 133 (78%) |
| Does not prefer to associate with the people | 38 (22%) |

Table 1: Social behavior attitude of students with the affected acne problems
**Discussion**

Acne is a universal problem seen amongst young adults. More than an apparent skin disease, it can result in psychosocial distress. It has been widely experienced that, individual with acne related issues show lower self-confidence than their peers without acne and multiple studies exhibit a correlation between acne and diminished quality of life, anxiety, and suicidality. Based on our assessment of the subjects, a majority state that acne influences their self-consciousness, present-ability, and level of inferiority to communicate with others. Among the subjects who suffer from acne, many of them resort to applying methods to overcome their problem. It is presupposed that subjects view acne as an intolerable entity. According to the outcome, the subject’s perception of their condition is not parallel with the clinical severity of their acne. Thus, an individual’s personal assessment is the crucial determinant of one’s psychosocial problems.

In a previous study by Hassan et al examined 132 patients from a specialist acne clinic and equated their response to questionnaires including the Derriford appearance scale and self-rated acne scales\(^5\). Subjects above 20 years of age were more prone to suffer from appearance distress due to acne compared to those between 16 to 19 years old. The authors noted that a personal evaluation of facial acne severity increased the likeliness of self-consciousness in women, but not in men.

Uslu et al., done a cross-sectional study with a population of 563 high school students, aged between 13 to 19 years of age. The report documented an acne prevalence of 63.6% with more lesions seen in males than females. Responses assessed from a questionnaire about acne, involving both, General Health Questionnaire (GHQ), and the Rosenberg Self-Esteem Scale (RSES) showed that adolescents with the improvement of acne due to treatment subsequently had higher levels of self-esteem\(^6\).

An interview-based study by Magin et al., was conducted from randomly selected patients visiting general practices and specialty dermatology practices in Australia. The study group involved 26 patients suffering from acne. Authors concluded that, with ranging ages and acne stages, participants had considerable issues with impaired self-image, embarrassment, frustration, and low self-esteem\(^7\). Smithard et al, conducted a cross-sectional study with 317 adolescents using the Strength and Difficulties Questionnaire (SDQ) and the Acne Management Questionnaire (AMQ) to measure psychological status, acne knowledge, and help-seeking behavior of the participants. According to their perceptions, higher SDQ scores presumed to low self-confidence. The authors have also reported that, the participants with definite lesions (more than 12 lesions) of acne proved to have higher levels of emotional difficulties, and the level of understanding about the cause of acne was low. However, a prevalence of 77% of participants had normal SDQ scores\(^8\). However, Srivastava et al., reported no correlation between acne and quality of life of patients even though presence of higher psychiatric morbidity in the patients with acne vulgaris\(^9\).

Based on the results obtained, despite being medical students, they not confident with themselves when they have acne. However, they do not have a problem in association with an individual who are having acne. Some different opinions were given by the participants of these questionnaires. The majority of them have an opinion that acne does affect self-confidence in one or another way. Most of them given their views that they tend to have an uncomfortable or inferior feeling when they have acne on their face. Serious problems of being victims of acne reduce their self-confidence levels as others pay more attention to the acne on the face. According to some students, acne reflects hygiene. So, they think that people with acne do not maintain their cleanliness. Moreover, acne victims assume that it makes their appearance unaesthetic. A few of them share the opinion that having acne on the face is not presentable and makes people judge them wrongly. All these reasons contribute to the fact that acne reduces an individual’s self-esteem in a way.

The present study involving the teens, and the fact is teens gain independence during adolescence. At this stage, their attitude towards the acne could adversely effect on their academic activities and hamper their social behaviors. So, it is imperative to consider the presence of co-morbid psychological disorders in the treatment of acne related issues to attain a successful impact of therapy on psychological outcomes\(^10\). Timely guidance either from their parents or friends could overcome these complications, as there is a positive correlation between treatment adherence and improved quality of life\(^11\).

**Conclusion:**

Based on the data collected, the majority of the students of our investigation share a similar opinion that acne diminishes their self-confidence level. From the results, Students with acne problems are more self-conscious and perform poorly in social life. A
few respondents gave subjective perspectives, which acne presents as a result of unhygienic behavior. A particular group of subjects perceived that facial acne becomes a concentration point to others, thus making the individual feel inferior of themselves.

Conflict of interest: Authors declared that they have no conflict of interest

Authors' Contributions:
Data gathering and idea owner of this study: Abhinitha P
Study design: Abhinitha P, Ravina Suloshini Gengatharan
Data gathering: Ravina Suloshini Gengatharan, Sarah Zulkiflee, Purveena Ganisan
Writing and submitting manuscript: Abhinitha P, Sitharrthen Arumugam, Naveen Kumar
Editing and approval of final draft: Abhinitha P, Ravina Suloshini Gengatharan, Sarah Zulkiflee

References:
1. Ayer J, Burrows N. Acne: more than skin deep. Postgrad Med J 2006;82(970):500-6. https://doi.org/10.1136/pgmj.2006.045377
2. Fried RG, Gupta MA, Gupta AK. Depression and skin disease. Dermatol Clin 2005;23(4):657-64. https://doi.org/10.1016/j.det.2005.05.014
3. Fried RG, Wechsler A. Psychological problems in the acne patient. Dermatol Ther 2006;19(4):237-40. https://doi.org/10.1111/j.1529-8019.2006.00079.x
4. C. J. Girman, S. Hartmaier, D. Thiboutot, J. Johnson, B. Barber, C. DeMuro-Mercon, J. Waldstreicher. Evaluating Health-Related Quality of Life in Patients with Facial Acne: Development of a Self-Administered Questionnaire for Clinical Trials. Quality of Life Research 1996; 5: 481-490. https://doi.org/10.1007/BF00540020
5. Hassan J, Grogan S, Clark-Carter D, et al. The individual health burden of acne: appearance-related distress in male and female adolescents and adults with back, chest and facial acne. J Health Psychol 2009;14(8):1105-18. https://doi.org/10.1177/1359105309342470
6. Uslu G, Sendur N, Uslu M, et al. Acne: prevalence, perceptions and effects on psychological health among adolescents in Aydin, Turkey. J Eur Acad Dermatol Venereol 2008;22(4):462-9. https://doi.org/10.1111/j.1468-3083.2007.02497.x
7. Magin P, Adams J, Heading G, et al. Psychological sequelae of acne vulgaris: results of a qualitative study. Can Fam Physician 2006;52:978-9
8. Smithard A, Glazebrook C, Williams HC. Acne prevalence, knowledge about acne and psychological morbidity in mid-adolescence: a community-based study. Br J Dermatol 2001; 145(2):274-9. https://doi.org/10.1046/j.1365-2133.2001.04346.x
9. S. Srivastava, Manjeet S. B., P. Das, S. N. Bhattacharya. A Cross-sectional Study of Quality of Life and Psychiatric Morbidity in Patients. Journal of Pakistan Psychiatric Society 2008; 5(2): 86.
10. Lauren K. D., Jenna L. O., Steven R. F. Acne in Adolescents: Quality of life, Self-esteem, Mood, and Psychology Disorders. Dermatology Online Journal 2011; 17(1):1.
11. Zaghloul SS, Goodfield MJ. Objective assessment of compliance with psoriasis treatment. Arch Dermatol 2004;140(4):408-14. https://doi.org/10.1001/archderm.140.4.408