

A STUDY OF THE PSYCHOLOGICAL IMPACT OF ACNE AMONG MALE MEDICAL STUDENT IN MAJMAAH UNIVERSITY, RIYADH, SAUDI ARABIA, 2017

Dr. Anas Saad Alsaab*, Dr. Syed Meraj Ahmed, Ahmad Nueva Almutairy, Abdullah Ayidh Alotaibi, Mohammed Abdulrahman Alhassan, Rayan Saad Alsaab, Wael Shaman Alotaibi and Nawaf Razhan Alsubaie

Saudi Arabia.

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***Corresponding Author**

Dr. Anas Saad Alsaab

Saudi Arabia.

ABSTRACT

Background: Acne vulgaris is a common skin disease with prevalence reaching up to 80% during adolescence. It can affect any age group, and those with post-adolescent acne are increasingly being referred for dermatological care. **Objectives:** Assess the Psychological impact of acne among male medical student in Majmaah university, Majmaah, Saudi Arabia **Methods:** This is an institutional based cross – sectional study. **Results:** The sample, with an average age of 22.3, showed 50.9% prevalence of acne infection. The most prevalent psychosocial

issue was “bothering about using anti acne medication”, “Embarrassment” and “feeling unattractive” There are no significant differences between having acne and the knowledge of its causes and predisposing factors.

KEYWORDS: Acne vulgaris, psychological impact, Majmaah.

Research Project Proposal

Names and Information of the Researchers

Names of Researchers*	Level
Anas saad alsaab	10
Ahmad nueva almutairy	10
Abdullah ayidh Alotaibi	10
Mohammed abdulrahman alhassan	10
Rayan saad alsaab	10
Wael shaman alotaibi	10
Nawaf razhan alsubaie	10

*The first name indicates the Principal Researcher (PR) and the Second name is the Co-Researcher designated by the PM to oblige responsibilities, in case of the withdrawal of the PR.

Research Problem and Motivation

Acne vulgaris is a common skin disease with prevalence reaching up to 80% during adolescence.^[1] It is one of the leading cause for visits to a dermatologist.^[2] It can affect any age group, and those with post-adolescent acne are increasingly being referred for dermatological care.^[3]

It's a chronic multifactorial inflammatory skin disorder in which there is an alteration in the pattern of keratinization within the pilosebaceous follicles. This results in comedones formation, an increase in sebum production, proliferation of the bacterium *Propionibacterium acnes*, and the production of perifollicular inflammation.^[4] It's characterized by noninflammatory, open or closed comedones and by inflammatory papules, pustules, and nodules. Acne vulgaris typically affects the areas of skin with the densest population of sebaceous follicles (face, upper chest, back). Local symptoms of acne vulgaris may include pain, tenderness, or erythema.^[5]

Justification

- Acne vulgaris is a common skin disease with prevalence reaching up to 80% during adolescence.
- Acne often leads to significant psychological and physical morbidity.
- This adverse health condition is responsible for large amounts of health care resources.
- To explore the Psychological impact of acne among medical student in Majmaah university.
- Increases awareness of the people concerned in planning of medical curriculum and teaching medical students regarding Psychological impact of acne in medical college.
- Lack of published studies about Psychological impact of acne among medical student in Majmaah university.

RESEARCH OBJECTIVES

General

Assess the Psychological impact of acne among male medical student in Majmaah university, Majmaah, Saudi Arabia.

Specific

To assess the impact of acne on the various psychosocial domains of daily life.

To assess knowledge, beliefs, and psychosocial effects of acne among acne vulgaris patients.

LITERATURE REVIEW

Acne is generally limited to areas where sebaceous glands are largest and most abundant — the face, neck, chest, upper back, and upper arms. Individual lesions are centered about sebaceous follicles. Correct classification of lesion type is essential for choosing the most effective therapy. At the 1990 Consensus Conference on Acne Classification,^[6] a global evaluation of lesions and their complications (drainage, hemorrhage, pain) was proposed. Psychosocial impact, failure to respond to previous therapies, and occupational disability are three additional factors used in grading acne. Noninflammatory acne lesions are either closed or open comedones. Acne that manifests as noninflammatory lesions is not classified as severe unless the number, size, and extent of such lesions are so overwhelming as to warrant the designation. Inflammatory acne lesions are papules, pustules, and nodules.

These lesions are classified as papulo-pustular, nodular, or both. The severity grades assigned (mild, moderate, severe) are based on lesion count approximations. The term cystic acne should probably be abandoned, as there are no true cysts in acne (on rare occasion, these cysts develop as a residual effect of acne lesion healing).

Major complications of acne are scarring and psychosocial distress which persists long after the active lesions have disappeared.^[7] Skin diseases have had a negative impact on human beings, both in acceptance of their own image and in quality of life.^[8] Its onset in adolescence may add to the emotional and psychological challenges experienced during this period^[9] and it can lead to the developmental issues of body image, socialization and sexuality.^[10]

Psychological issues such as dissatisfaction with appearance, embarrassment, self-consciousness, lack of self-confidence, and social dysfunction such as avoidance of social interactions with peers and opposite gender, reduced employment opportunities have been documented.^[10,11,12] Acne can negatively influence the intention to participate in sports.^[13] Moreover, anxiety and depression are found to be more prevalent among acne patients than controls.^[14,15,16] Even suicidal ideation was found in 6–7% of acne patients.^[17]

Psychological and social consequences of acne vulgaris are considerable although it is not causing severe morbidity or physical disability.^[18,19,20] Acne often leads to significant psychological and physical morbidity.^[21,22] More than a cosmetic nuisance, acne can produce anxiety, depression and other psychological problems that affect patients' lives in ways comparable to life-threatening or disabling diseases.^[23] Severe acne is associated with increased depression, anxiety, poor self-image and poor self-esteem.^[24,25]

Given the fact that acne causes psychological suffering, acne can affect social, vocational, and academic performance of teenagers.^[26]

Based on the data gathered above this will be a good opportunity to evaluate the psychological aspect of acne among medical students studying in the university.

RESEARCH METHODOLOGY

Study design

A community based cross-sectional study; to detect the Psychological impact of acne among male medical students in Majmaah university.

Study area

This study will be conducted in Majmaah city in Sudair area in the north of Riyadh region, which includes "HawtahSudair, Rawdat Sudair, and surrounding villages. Sudair is located in the middle of Najed heights Almajmaah city which is an area of 30,000 km² and has a population of 133 thousand people. It is the capital city of the province. The study will concern on Majmaah University in Majmaah city. It serves different city in the region like, Majmaah, Zulfi, HawtahSudair, Ghat, and Rumah. Total number of students is 24288, and for medical college is 206 (180 male, 26 female).

Study population

All the students from 2nd year to 6th year of the College of Medicine, Majmaah University will be included in the study.

Sampling: Total enumeration method will be used for including all the students (270) in this study.

Data collection**Variables**

- Personal and socio demographic data
- Family income
- academic year
- Lifestyle: number of sleeping hours, smoking and exercise
- Diet and Food Habits and Nutritional status (BMI).
- Stress, Anxiety, and Depression
- Chronic diseases

Tool of data collection: Pre-tested, questionnaires will be used in data collection. The respondents will be the students themselves.

Inclusion

1. 2nd, 3rd 4th, 5th and 6th year students
2. Male students

Exclusion

1. 1st year students and intern.
2. Female students

Data analysis: Data will be analyzed by computer using Statistical Package for Social Sciences (SPSS) version 22.

Ethical concern: The ethical approval will be obtained from the ethical committee of the Basic Health Research Centre of Majmaah University. Informed consent will be obtained from the students.

RESULTS

We included 128 male medical students From Majmaah University and excluded 10 of them in the statistical analysis due to incomplete general information, averaging 22.3 year of age and SD ± 3.3 . we included 21 (17.8%), 20 (17%), 24 (20.3%), 35 (29.7%) and 14 (11.9%) from 2nd, 3rd, 4th, 5th and 6th academic years respectively. Prevalence of acne infection was 50.9% (n=58), 2 students had food allergy, 5 addicted and 2 with drug allergy as showed in table 1.

Statistically significant difference between students with and without acne infection was observed in “Losing sleep due to having acne” (figure 1), “inability to enjoy normal daily activities” (figure 2), “Dissatisfaction with appearance” (figure 3), “Embarrassment” (figure 4), “Feeling unattractive” (figure 5) and “bothering about using anti acne medication” (figure 6) as showed in table 2.

Unable to feel responsibilities, feeling proud of themselves, Loss of self-confidence, thinking as a worthless person and inability of concentrate in study was not significant between the 2 groups (table 2).

There was no Statistically significant difference of effect of having acne on knowledge of its causes and predisposing factors (table 3).

Table 1: Participants' characteristics.

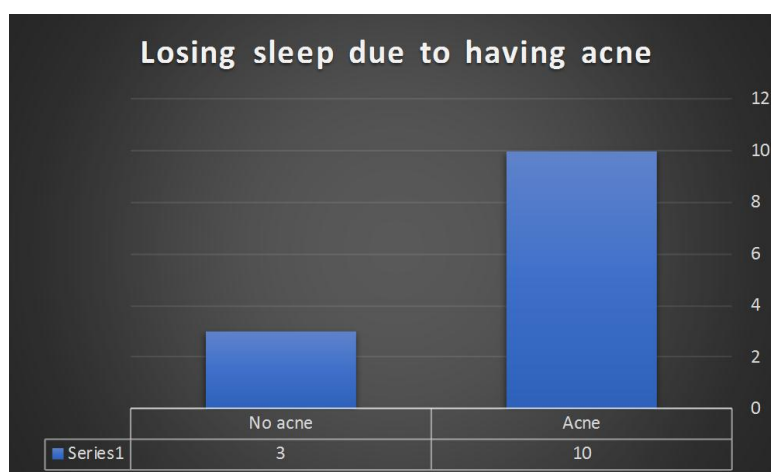
Variable	Value
Age (mean \pm SD)	22.3 \pm 3.3
Academic year	
2 nd	21 (17.8%)
3 rd	20 (17%)
4 th	24 (20.3%)
5 th	35 (29.7%)
6 th	14 (11.9%)
Fascial acne	
Yes	58 (50.9%)
No	56 (49.1%)
Food allergy	
Yes	2 (3.4%)
No	57 (96.6%)
Addiction	
Yes	5 (10.4%)
No	43 (89.6%)
Drug allergy	
Yes	2 (3.4%)
No	57 (96.6%)

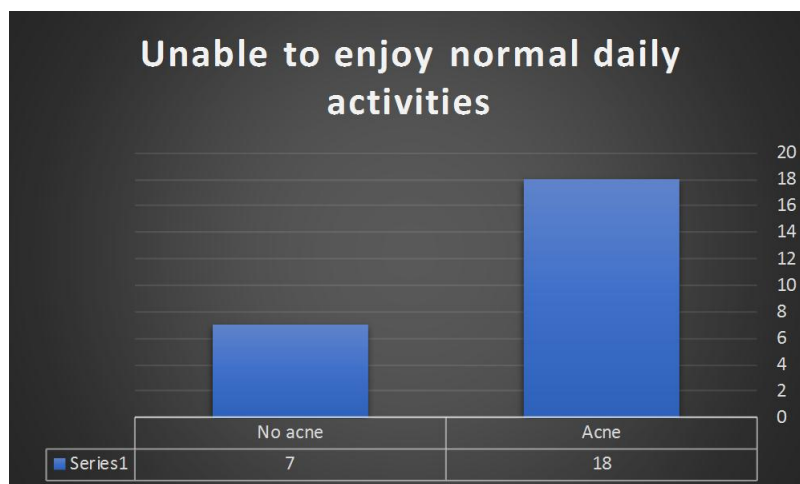
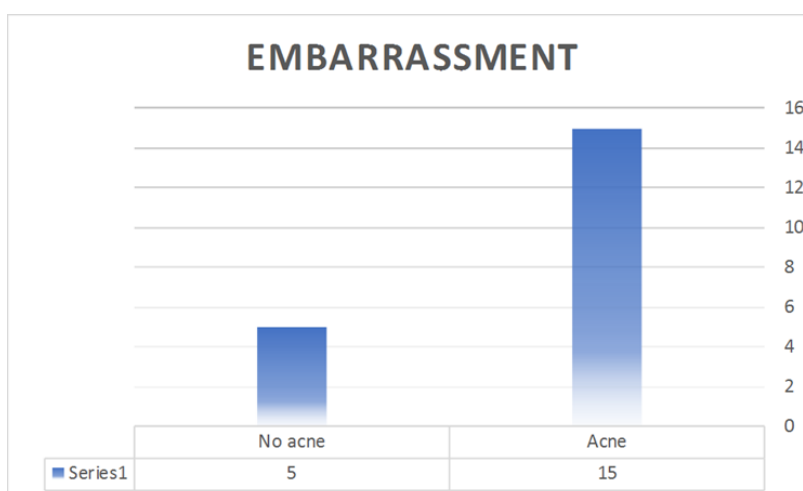
Table 2: Effect of having acne on the psychological aspects.

Outcome	Acne	No acne	P value
Unable to concentrate in studies	14 (63.6%)	8 (36.4%)	0.48
Losing sleep due to having acne	10 (77%)	3 (23%)	0.03*
Unable to enjoy normal daily activities	18 (72%)	7 (28%)	0.04*
Unable to feel responsibilities	9 (50%)	9 (50%)	0.3
Proud of yourself	33 (59%)	23 (41%)	0.23
Loss of self confidence	10 (51.3%)	9 (48.7%)	0.54
Feeling unhappy	9 (48.7%)	10 (51.3%)	0.31
Thinking as a worthless person	6 (40%)	9 (60%)	0.08
Dissatisfaction with appearance	18 (69%)	8 (31%)	0.02*
Embarrassment	15 (66.7%)	5 (33.3%)	0.03*
Feeling unattractive	22 (68.8%)	10 (31.2%)	0.02*
Having problem socializing with people	6 (46%)	7 (54%)	0.23
Bothered about using anti acne medication	24 (83%)	5 (17%)	0.002**

Table 3: Effect of having acne on knowledge.

Outcome	Acne	No acne	P value
Is acne a disease?	40 (50.7%)	39 (49.3%)	0.36
Is acne treatable?	50 (51%)	48 (49%)	0.42
Is acne treatment necessary?	33 (56%)	26 (44%)	0.14
Does anti acne treatment work?	41 (51%)	38 (49%)	0.5
Did you get benefit from anti acne treatment	29 (60%)	19 (40%)	0.17

**Figure 1:**

**Figure 2:****Figure 3:****Figure 4:**

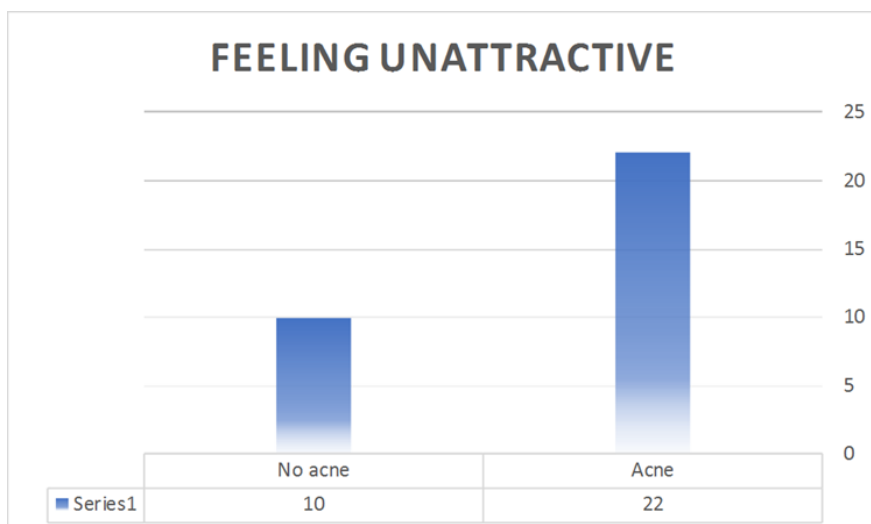


Figure 5:

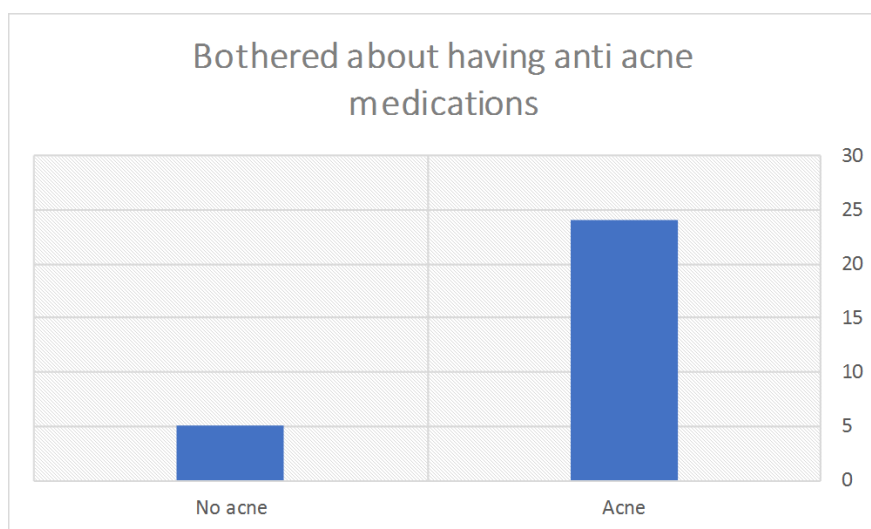


Figure 6:

DISCUSSION

Acne vulgaris is a popular skin disease among teenagers and mid-aged adults. It has a huge psychological effect on them that varying from one to another. We wanted to Assess the Psychological impact of acne among male medical student in Majmaah university, Majmaah, Saudi Arabia. According to our results, acne has prevalence 50.9% among Majamaah's male medical students.

The most prevalent psychosocial aspects in our study was “bothering about using anti acne medication”, presentin 29 cases. The study of Vilar, et al presented different results: the most common attitude or feelingtriggered by acne was “fear thatacne will never cease”, observed in 58% of the cases, followed by “frequent manipulation of pimples”, in53.9% and next,

“feeling distressed for having pimples” in 52.1% of the cases This may be a sequela of that, we used a different questionnaire, the age groups were different and the cultures of the two populations is different.

Acne infection has no significant effect on knowledge of the causes of the disease but it has a major effect on the self-estimation and satisfaction with appearance.

According to Rosenberg, the low self-estimation is defined as feelings of inadequacy, incompetence and inability to deal with challenges; the average is expressed by the oscillation of the individual between feelings of self-acceptance and rejection; and high self-estimation consists of self-judgement of value, competence and trust^[27] It is expected that acne infection, being a dermatosis that compromises the esthetics of the face and other exposed areas, will negatively influence the self-estimation of those it affects, mainly those who are teenagers.

The main strength points of our study were

The limitations of our study were

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