RESEARCH ARTICLE

PREVALENCE OF ACNE VULGARIS AMONG ADOLESCENT FEMALES IN KINGDOM OF SAUDI ARABIA

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Manuscript Info	Abstract
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INTRODUCTION:

Acne vulgaris is a common heath problem affecting adolescents with considerable impact on their quality of life.

This health problem is widespread and common in adolescence where it is associated with changes in hormones in adulthood but this problem has caused much shame and isolation due to deformity of the face significantly and sometimes in a disgusting manner , this makes young people in psychological state sometimes, this mean that this is a big problem.

RATIONALE:

This research it's important to know how many adolescent females are suffer from the Acne Vulgaris and what is the associated risk factors for it.
On the other hand the some disease had a relation with acne vulgaris one of the most important disease (psychological stress).

Literature review:

-According to this study, Acne prevalence and associations with lifestyle: a cross-sectional online survey of

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THE RESULTS WAS:

The overall adjusted prevalence of self-reported acne was 57.8% (95% confidence interval 56.9% to 58.7%). The rates per country ranged from 42.2% in Poland to 73.5% in the Czech and Slovak Republics. The prevalence of acne was highest at age 15-17 years and decreased with age. On multivariate analysis, a history of maternal or paternal acne was associated with an increased probability of having acne (odds ratio 3.077, 95% CI 2.743 to 3.451, and 2.700, 95% CI 2.391 to 3.049, respectively; both P < 0.0001), as was the consumption of chocolate (OR 1.276, 95% CI 1.094 to 1.488, for quartile 4 vs. quartile 1). Increasing age (OR 0.728, 95% CI 0.639 to 0.830 for age 21-24 years vs. 15-17 years) and smoking tobacco (OR 0.705, 95% CI 0.616 to 0.807) were associated with a reduced probability of acne.

This means that the possibility of developing common acne increases in adolescence, and this is consistent with the existing research idea.

RESEARCH AIM:
To determine how many females, have Acne vulgaris and risk factors and effective treatment.

OBJECTIVES:

1- To determine the prevalence Acne vulgaris among adolescent and young females in kingdom of Saudi Arabia
2- Determine the risk factors of Acne vulgaris.
3- Determine the disease associated with Acne Vulgaris.
4- To consider how effective the medication is?

METHODOLOGY:

Study design:
This is an analytical cross-sectional study.
Study Setting and period:

This is an analytical cross-sectional study, KSA from April 2019 till November 2019.

Study population and sampling:

Study participants:

Inclusion criteria; Adolescent females.

Exclusion criteria; Females over the age of adolescent, Males

Sampling method:
Participants will be carried out by questionnaire.
Sampling size:
750

Measurements:
Explanatory variables:
1. Sociodemographic characteristics: age, nationality.

2. Disease-related information: suffering from acne vulgaris, types, situation.

Outcome measures

The outcome measure is by counting the ratio of the number of patients have acne vulgaris this will be measured using:

By determining the extent of the acne vulgaris and most common types and situation.

Prevalence study: will be carried to test the questionnaire if easily understood and the response of the participants. Data from the cross-sectional study will be used to calculate the sample size.

Data Management and Analysis plan:

Data will be entered and analyzed using SPSS version 17.0 Descriptive statistics will be performed and categorical data will be displayed as frequencies and percentages while measures of central tendencies and measures and dispersion will be used to summarize continuous variables. Univariate and multivariate analysis will be performed to investigate association between exposure factors age, nationality, suffering from acne vulgaris, types , situation. statistical significance is set at a P value of 0.05 or less.
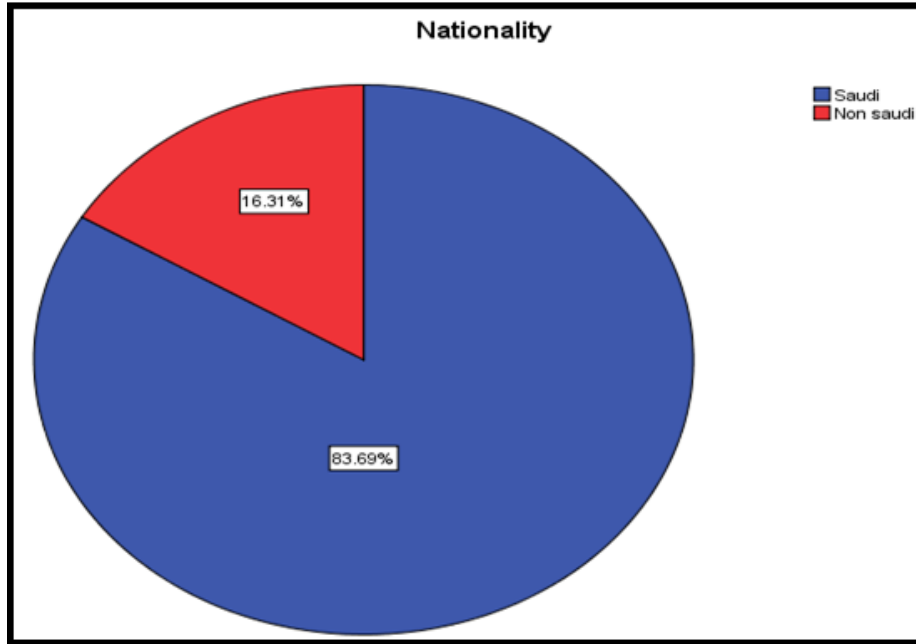
RESULTS
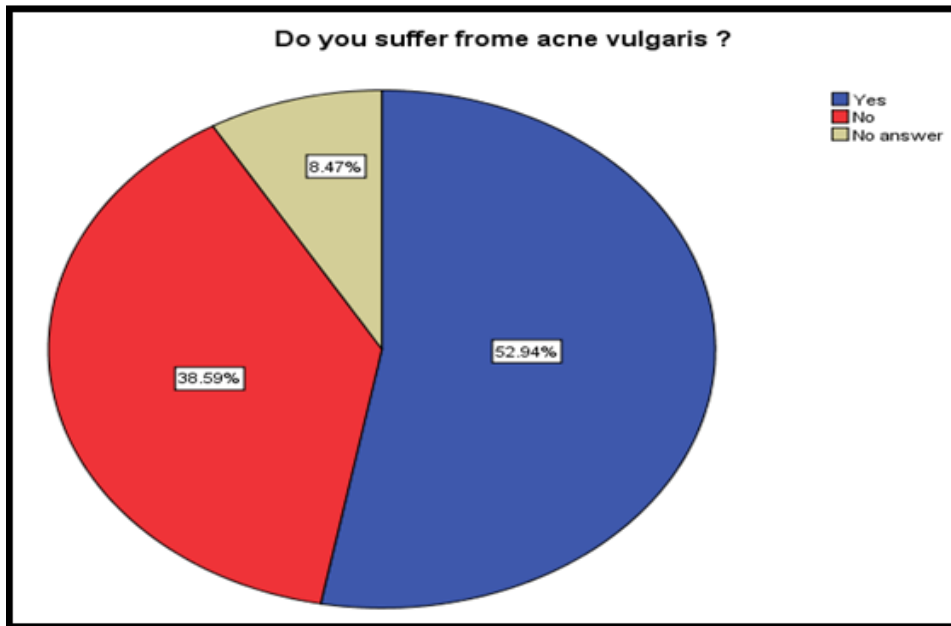**1122 responses were collected showing the following results and conclusion :**

1)
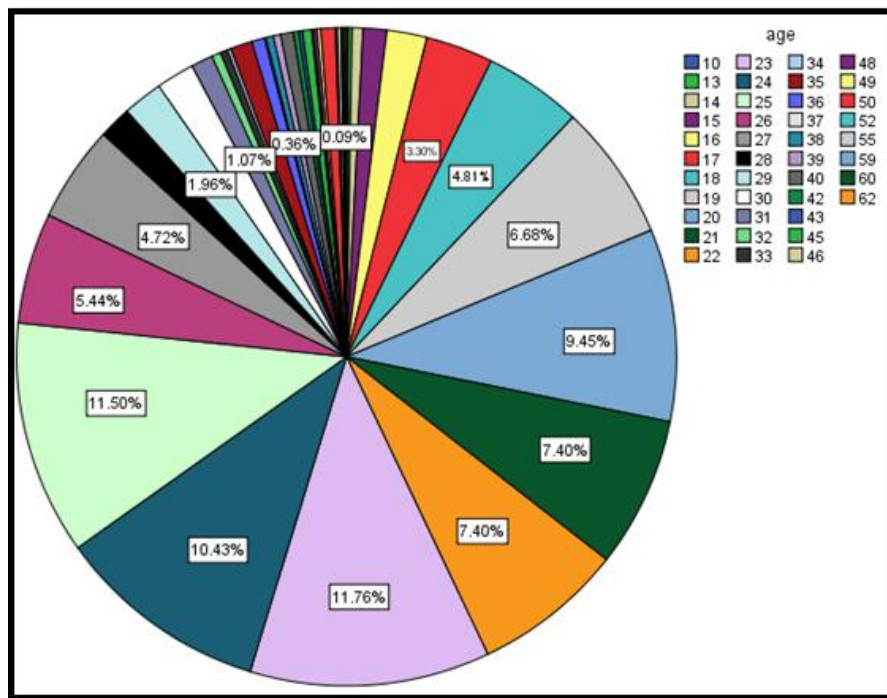
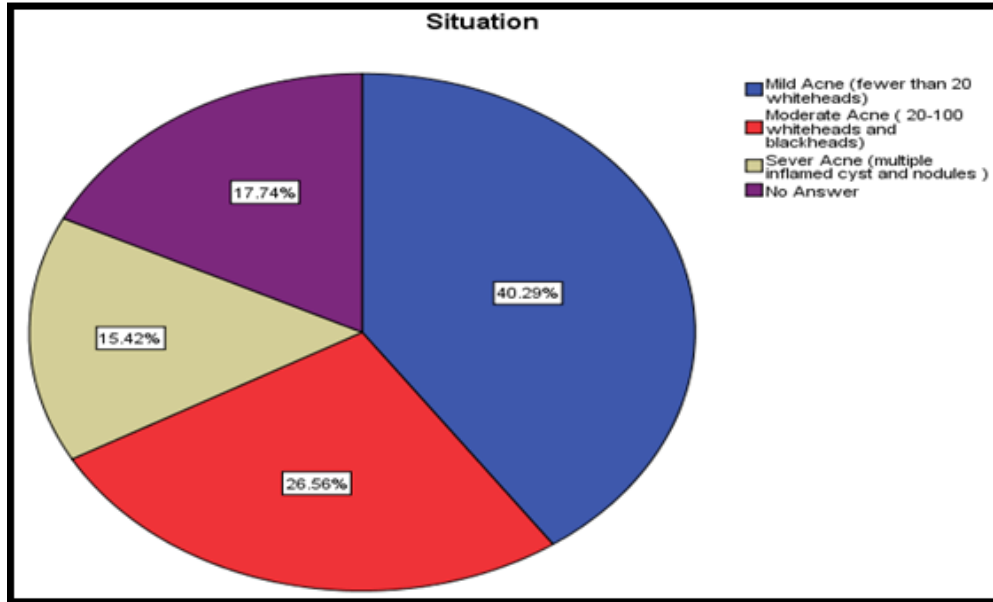The results showed that most of the sample was between the ages of 18 to 30 years.

2)

The results show that most of the respondents are Saudis.
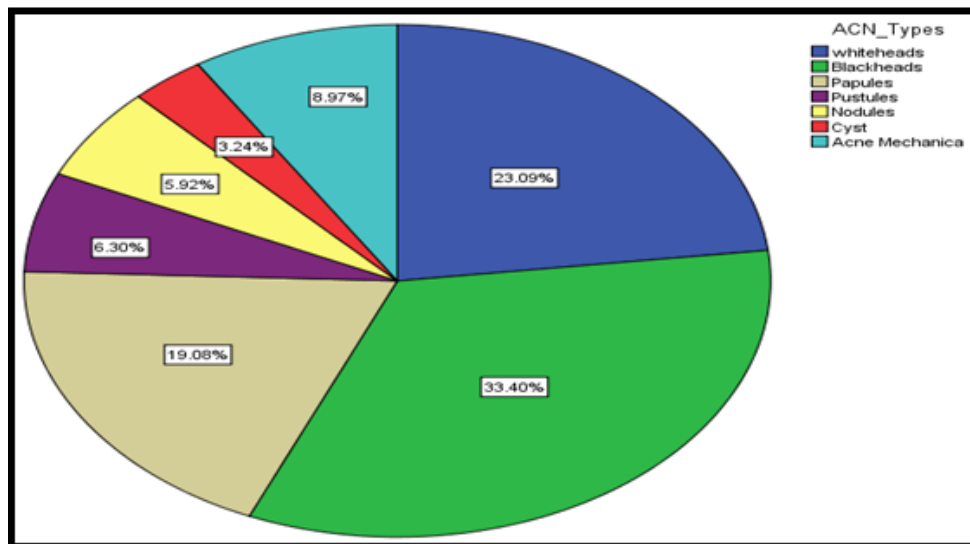
3)

The results showed that a large percentage of the sample suffer from acne.
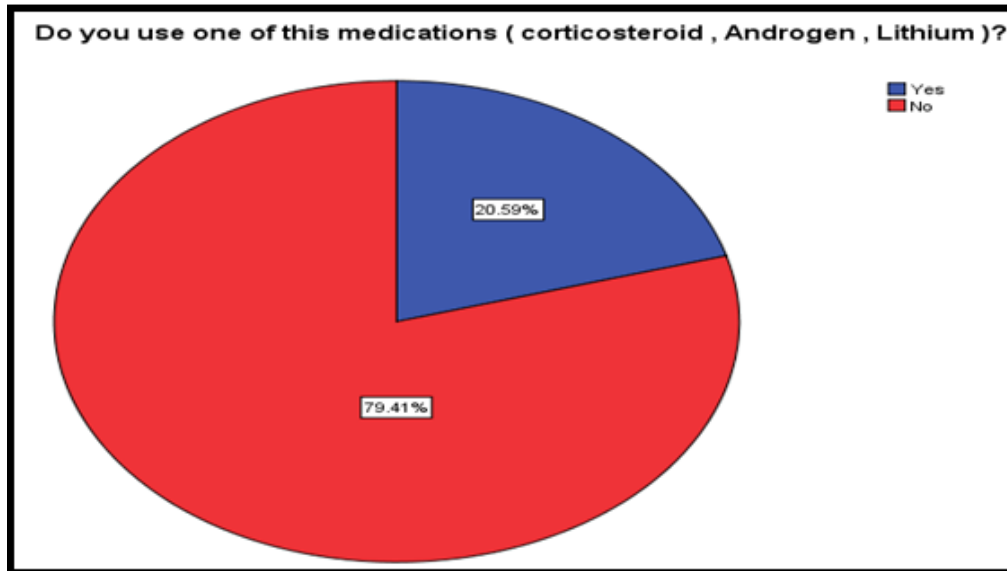
4)

The results showed that the majority of cases of acne are whiteheads less than 20.

5)

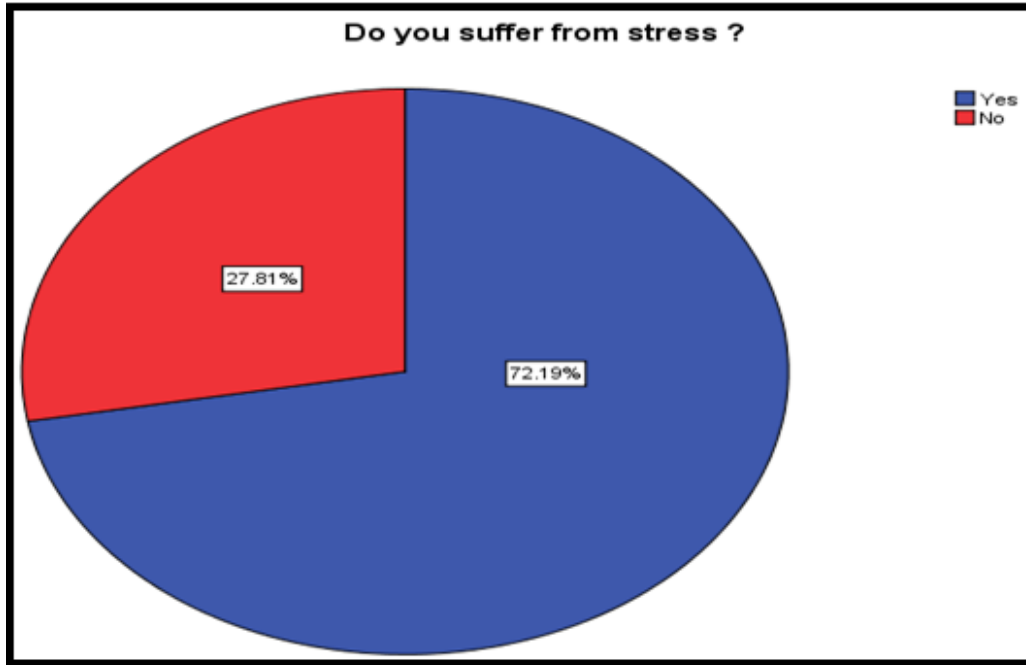The results show that the most common type of acne is the blackheads.

6)

Do you use one of this medications (corticosteroid , Androgen , Lithium)?

Yes
No

20.59%

79.41%

The results indicated that most respondents do not use any of the mentioned medicines.

7)

Do you smoke ?

Yes
No
X smoke
Missing

3.83%   3.48%

15.78%

76.92%
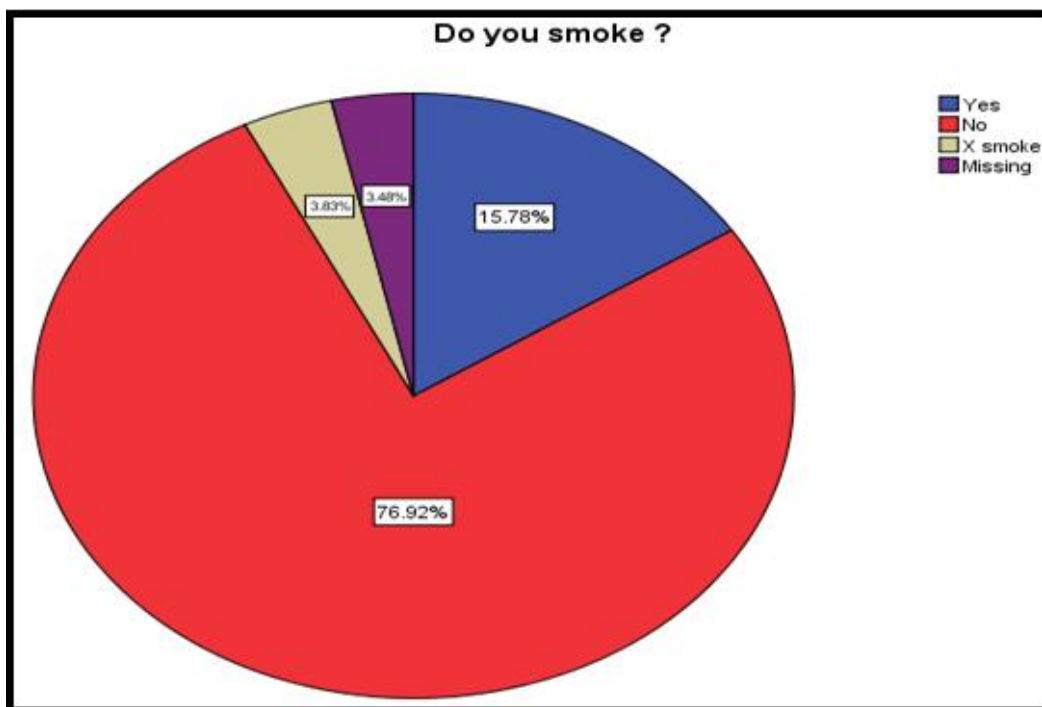
The results indicated that most respondents do not smoke.

8)

Do you suffer from stress ?

27.81%

72.19%

Yes
No

The results indicated that most respondents suffer from stress .

9)

Are you Diabetic Patient ?

3.48%

2.85%

93.67%

Yes
No
No Answer
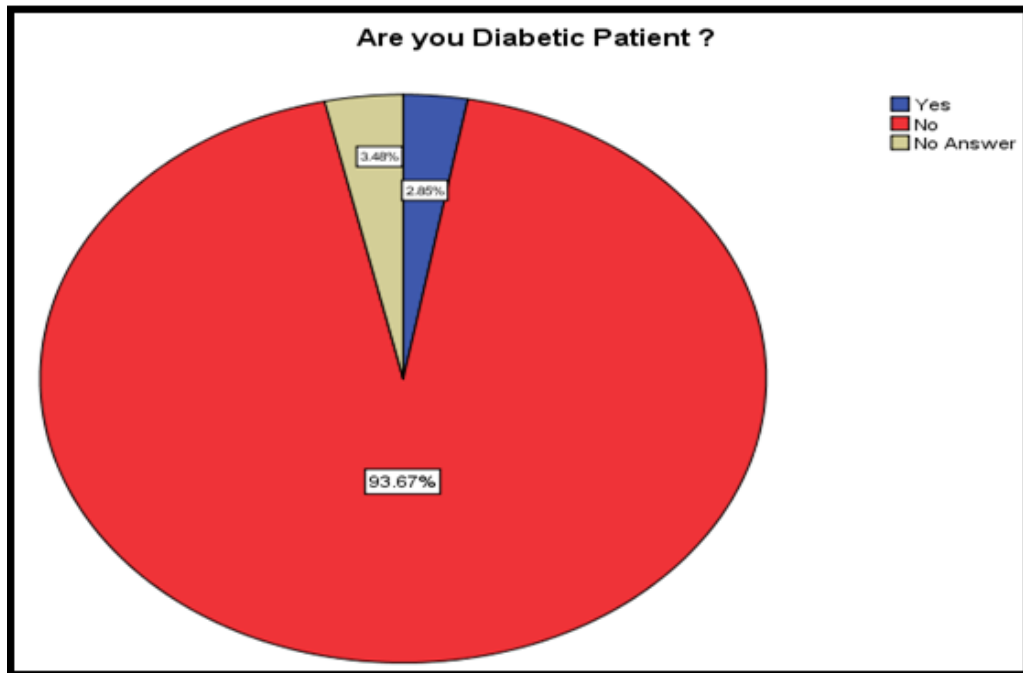
The results indicated that most respondents are not diabetic patients.

10)
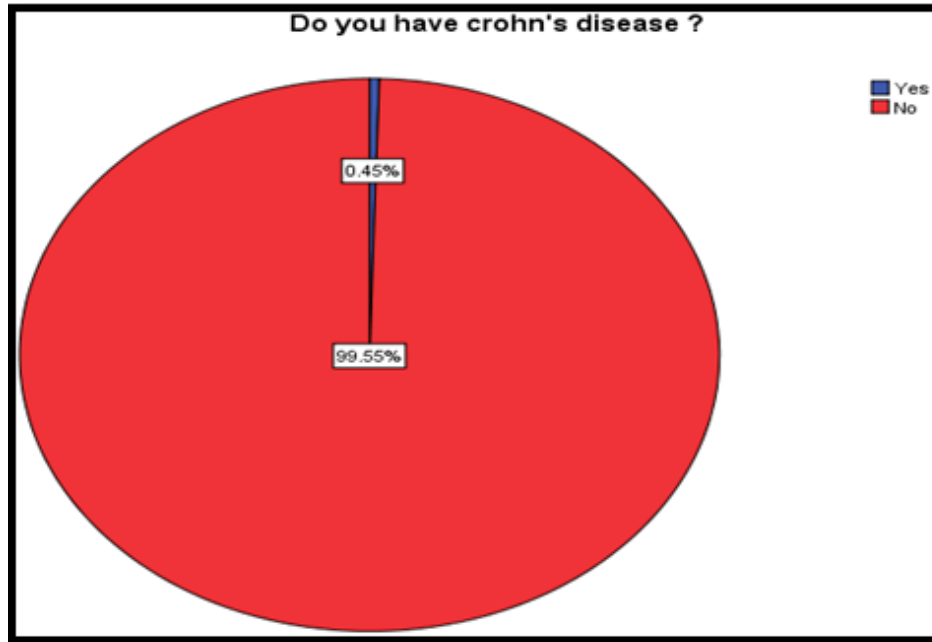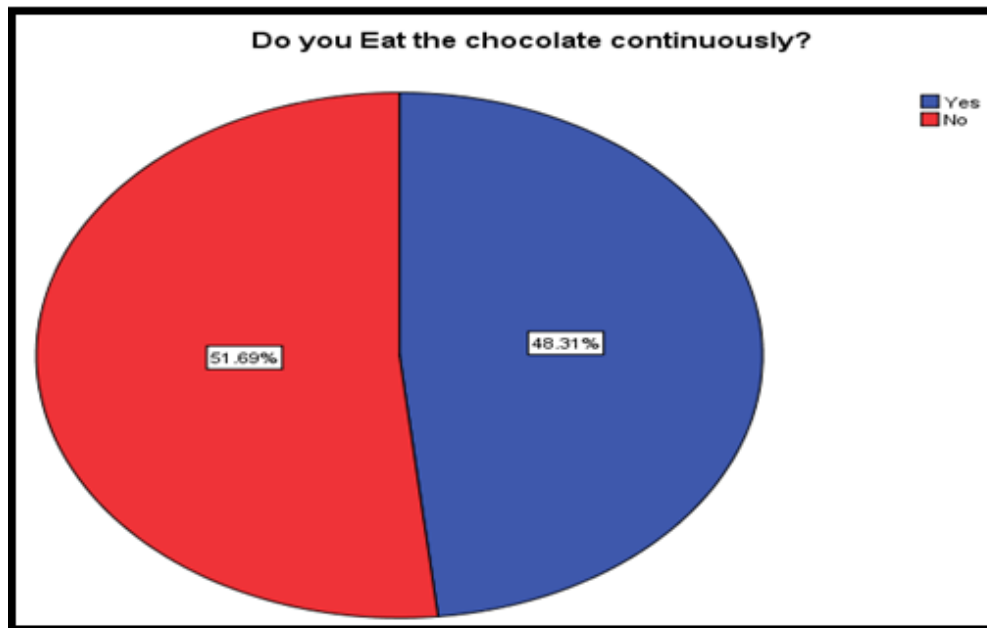
The results indicated that most respondents do not have crohn's disease.
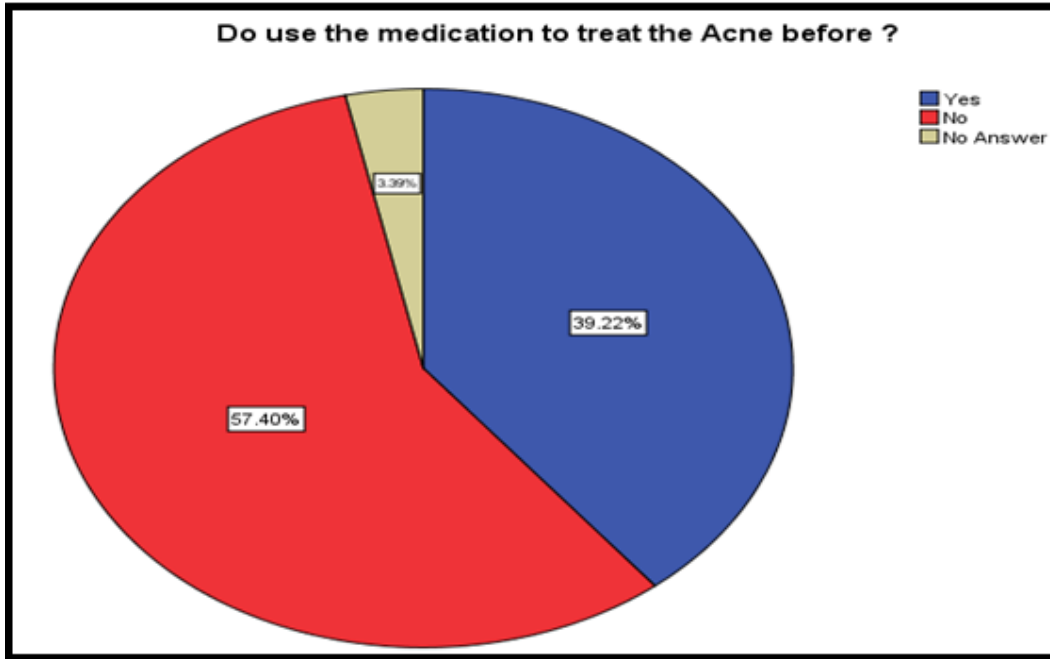
11)

The results indicated that half of the respondents eat chocolate ,which could be a strong reason to gain acne vulgaris
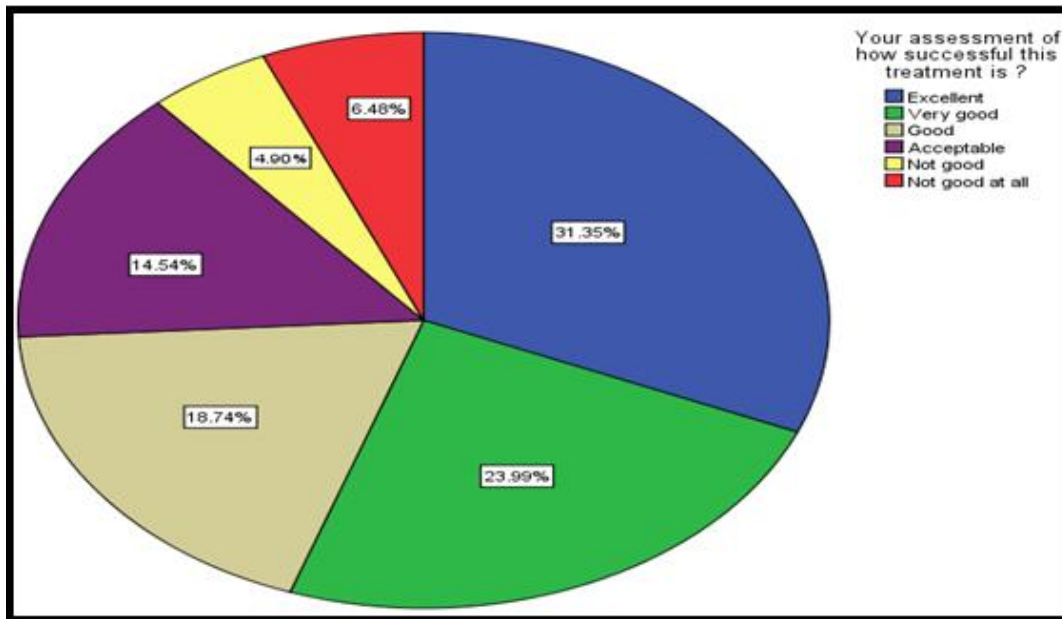
12)

The results indicated that most respondents do not use the medication to treat the can before.

13)

The results indicated that most respondents evaluated the assessment as an excellent assessment.

Conclusion:

This study was applied to a sample of young men and women, to know the prevalence of acne and the prevalence of diseases and habits causing acne, and the results showed that more than half of the sample suffer from acne and that is a huge percentage. However, the results showed that more than 75% of the sample do not smoke or use medicines that may cause the increase in the appearance of acne, and that is positive thing. But, there is a very high percentage

of the sample suffering from stress which may sometimes cause increased appearance of acne. The results showed that most of the sample did not suffer from diabetes or crohn, which is a good indicator, because diabetes and crohn affect many parts of the body, including the skin. Half of the sample eat chocolate continuously and that is one of the most important reasons for increasing the appearance of acne.

Ethical considerations:

Administrative approval will be sought from the unit of biomedical ethics research committee Ethical approval will be sought from the ethical committee of the faculty of medicine, king abdulaziz university. An informed consent will be sought from the participants.

REFERENCES
1. MSD Manual Professional Edition. (n.d.). *Acne Vulgaris - Dermatologic Disorders - MSD Manual Professional Edition*. [online] Available at: https://www.msdmanuals.com/professional/dermatologic-disorders/acne-and-related-disorders/acne-vulgaris.
2. Dermnetnz.org. (n.d.). *Acne vulgaris / DermNet NZ*. [online] Available at: https://www.dermnetnz.org/topics/acne-vulgaris/.
3. Rahmayani, T., Putra, I. and Jusuf, N. (2019). *The Effect of Oral Probiotic on the Interleukin-10 Serum Levels of Acne Vulgaris*. [online] Pubmed. Available at: https://www.ncbi.nlm.nih.gov/pubmed/31949525 [Accessed 21 Oct. 2019].
4. HS, S. (2004). *Pattern of skin diseases in a hospital in southwestern Saudi Arabia. - PubMed - NCBI*. [online] Ncbi.nlm.nih.gov. Available at: https://www.ncbi.nlm.nih.gov/pubmed/15083226 [Accessed 2004].
5. Wolkenstein P, e. (2018). *Acne prevalence and associations with lifestyle: a cross-sectional online survey of adolescents/young adults in 7 European countries. - PubMed - NCBI*. [online] Ncbi.nlm.nih.gov. Available at: https://www.ncbi.nlm.nih.gov/pubmed/28707712 [Accessed Feb. 2018].