

Knowledge and Beliefs Regarding Acne Vulgaris among Governmental Secondary School Students in Makkah Almukarramah, 2018

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Abstract Background: Acne, also known as acne vulgaris, is a long-term skin disease that occurs when hair follicles are clogged with dead skin cells and oil from the skin. It is characterized by blackheads or whiteheads, pimples, oily skin, and possible scarring. It primarily affects areas of the skin with a relatively high number of oil glands, including the face, upper part of the chest, and back. Acne vulgaris is a common condition extremely prevalent among teenagers and young adults under the age of 24 years. Nearly 85% of adolescents in this age group experience some degree of acne. The prevalence of Acne vulgaris among female secondary school students in Arar city, KSA, during the second semester of the academic year 2017–2018 was 14.3%. It had a considerable impact on their quality of life. Proper dermatological care should be offered in secondary schools. Acne lasts for several years and thus may significantly influence in many ways the lives of those affected. Therefore, early and effective treatment is needed to save these patients from all the possible complications. Successful treatment of acne is significantly affected. The present study was conducted to know the level of Knowledge and beliefs regarding acne vulgaris among governmental secondary school students in Makkah. **Aim of the study:** To determine the knowledge and beliefs of acne vulgaris among the students. **Method:** A cross-sectional study design. The current study was conducted Male and female secondary school students from selected governmental schools in Makkah. The total the sample size calculation will be 284 students (Female and male). **Results:** Total 284 school students. The majority of Participants were female (58.8%) The most Participants common education level was Second grade (36.3%) and the least common was Third grade (31.7%) will the first grade (32.0 %), positive correlations between belief and knowledge Where ($r = 0.120$; $p < 0.043$). **Conclusion:** That misconception of acne is widespread among Saudi youth. A health education program is needed to improve the understanding of the condition. Forty-seven percent of our study believed that treating acne by doctors requires Long-term follow-up.

Keywords: knowledge, acne vulgaris, beliefs, Saudi, Makkah, secondary school students

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1. Introduction

1.1. Background

Acne vulgaris is a very common disorder. Prevalence of acne varies among different populations in several studies from 50% to 80%. There's familial predisposition of severe sorts of acne that support a genetic part. [1]

Acne vulgaris may be a skin problem touching the oil gland unit, it's characterised by comedones, papules, pustules, nodules, cysts, and scarring, totally on the face and trunk. Clinical manifestations vary from gentle to severe to general symptoms. [2]

Acne may be a chronic disease of oil pilosebaceous glands. It is best-known to occur in adolescent age cluster suggesting a hormonal secretion influence. Additionally

the initiation of acne lesions is earlier in females suggesting a hormonal secretion role. It's the foremost common malady of the skin. Recent studies have additionally concerned the role of diet within the pathological process of skin disease. Though a standard malady, it's a best-known reason for distress and depression if left untreated. There are several myths and misconceptions in patients as well as health physicians relating to the causes and treatment of acne [3].

Acne vulgaris is that the commonest connective tissue disorder poignant adolescents and young adults. Patients with acne will endure vital psychological morbidity and, rarely, mortality because of suicide. In one prospective study of 90 cases with skin disease, a notable improvement in self-esteem was determined with treatment of the acne. Thus, it's essential that the lycee students to be accustomed to acne and its treatment. In a study that was conducted by Brajac they found that “Acne was thought-

about as a trivial and short-lived condition by 52% of the Acne patients and 44% of the family physicians [4].

Acne is a multi-factorial condition, unremarkably seen in adolescents all over the world. accumulated sebum excretion, constitution of the pilosebaceous duct with Propionibacterium acnes and resultant inflammation play a crucial role in pathologic process. plenty of misconceptions surround acne. The information regarding acne continues to be lacking with unfavorable perspective and wrong practices. It becomes essential to understand the patient's information regarding acne because it plays a very important half within the management and higher compliance. [5]

Although there's no relation between diet of any kind and skin disease, majority of the respondents in our study were lacking such info and believed that intense chocolates/spicy foods (63%) and oily foods (70%) cause acne. this can be higher than the results found in a very study done by Darwish MA wherever nearly eighty and thirty % opined that intense chocolates or spicy foods caused acne. [1]

Similarly fifty four within the same study conjointly believed that oily foods will cause cause acne, during a study done by Al-Hoqail IA, seventy two believed that diet is an etiologic issue of cause acne. [6]

Su P et al., found that the most typical foods associated with acne were spicy or deep-fried foods whereas chocolate wasn't found to be the cause by many of people. [7]

Research has shown that 85% of youngsters between the ages of twelve and twenty four years have acne, and whereas it's most typical in teenagers, acne affects 8% of adults aged twenty five to thirty four years and three of adults aged thirty five to forty four years, acne is additional common in males than females in adolescence, however the incidence is higher in girls throughout adulthood. Nodulocystic acne has an augmented prevalence in White people compared with black people [2].

These factors will trigger or worsen acne: Hormones. Androgens are hormones that increase in boys and ladies throughout time of life and cause the greasy glands to enlarge and build additional secretion. Hormonal changes related to pregnancy and the use of oral contraceptives also can affect sebum production. [8] Effective treatments are accessible, however acne is persistent. The pimples and bumps heal slowly, and once one begins to go away, others seem to crop up.

Depending on its severity, acne will cause emotional distress and scar the skin. The sooner you begin treatment, the lower your risk of such issues.

Post-adolescent acne preponderantly affects females, in distinction to adolescent acne, that features a male predominance. One survey of over a thousand adults, self-reported acne in male and feminine documented that:

- 20 to 29 years: forty third male and fifty one feminine.
- 30 to 39 years: 20% hundredth male and thirty fifth feminine.
- 40 to 49 years: 12% male and twenty sixth feminine.
- Ages fifty and older: 7 % male and 15% feminine.

Acne lasts for many years and therefore could considerably influence in many ways the lives of these affected. For several teens, the sickness might produce cosmetic, physical, and psychological scarring refueling

anxiety, depression, and different emotional trauma that threaten their quality of life. Therefore, early and effective treatment is required to avoid wasting these patients from all the doable complications. Successful treatment of acne is significantly affected by the level of knowledge of the patients. [9]

1.2. Literature Review

Acne vulgaris could be a common inflammatory pilosebaceous disease defined by comedones; papules; pustules; inflamed nodules; superficial pus-filled cysts; and (in extreme cases) canalising and deep, inflamed, typically infected sacs. Lesions are most typical on the face; however the neck, chest, upper back, and shoulders may additionally be affected. Inflammatory disease will cause scarring and extended psychological distress, it's classified as gentle, moderate, or severe. [10]

Acne vulgaris is one of the most frequent dermatological diseases that affect younger human beings. The etiology of pimples vulgaris is structured on genetic elements and environmental and psychological stressors [11].

Other factors could also additionally contribute to improving the acne development as puberty, menstrual cycles, excessive carbohydrate diet, as properly as contamination [12,13].

Four key elements are related with the pathogenesis of acne like higher production of sebum, agitated cornification of the pilosebaceous unit, pathogenic microbial flora [14,15].

Al Natour S in the study posted in the Journal of Family and Community Medicine 2017, conducted to consider the perceptions and beliefs of Saudi youth on acne. Three hundred twenty-nine male students (aged 13-22 years) from 6 secondary schools in the Eastern Saudi Arabia performed a self-reported questionnaire on knowledge, causes, exacerbating and relieving factors of acne. Results of topics with acne, family records of acne, and parents' instructional degrees had been compared. Differences between the analyzed agencies had been assessed. The study showed (58.9%) of the school's students considered pimples a transient condition now not requiring treatment. (13.1%) Knew that the therapy of zits ought to take a lengthy time (52%) thought acne should be treated from the first or after few visits to the doctor. Accessible sources of statistics had been television/radio (47.7%), buddies (45.6%), and the web (38%). Only (23.4%) indicated school as a source of knowledge. Reported causal elements blanketed scratching (88.5%) and squeezing (82.1%) of pimples, poor hygiene (83.9%), terrible dietary habits (71.5%), and stress (54.1%). Ameliorating elements blanketed normal washing of the face (52.9%), exercise (41.1%), sunbathing (24.1%), and consuming mineral water (21%). two Results of this find out about point out that misconceptions of pimples are good sized among Saudi youth. A health schooling software is wanted to improve the appreciation of the circumstance [9].

Acne is a multi-factorial chronic and inflammatory disorder that have an effect on the pilosebaceous units of the skin. The most common characteristics of acne vulgaris are development of comedones, papules and

pustules. On the different hand, the prevalence of pseudo cysts and nodules are scarce. [16] Acne poses a chief influence on psychological life of affected patients alternatively it's being benign situation that usually remedies spontaneously [17,18]. Although acne vulgaris is common in adolescents, statistics on their understanding of pimples is minimal [19].

Acne vulgaris influences over 80% of teenagers, and persists past the age of 25 years in 3% of guys and 12% of women. Nodules and cysts appear in more extreme pimples and can purpose scarring and psychological misery. [20]

Acne was the offering complaint in 3.1% of humans aged thirteen to 25 years attending important care in a UK population. Overall incidence is comparable in both guys and women, and peaks at 17 years of age. The quantity of adults with acne, inclusive of people over 25 years, is increasing; the motives for this increase are uncertain [21].

The clinical and histological features of acne, a chronic disease of the follicle unit, are well represented. At puberty increased sebum production creates an environment that can sustain the colonization of Propionibacterium acnes. acnes proliferates, inflammatory and chemotactic mediators are created, that successively drive inflammatory [22].

Mild acne is defined as non-inflammatory lesions (comedones), many inflammatory (papulopustular) lesions, or both. Moderate Mild acne is outlined as additional inflammatory lesions, occasional nodules, or both, and delicate scarring. Severe acne is outlined as widespread inflammatory lesions, nodules, or both, and scarring, moderate skin disorder that has not settled with six months of treatment, or acne of any "severity" with serious psychological upset. This review doesn't cowl acne, skin disorder secondary to industrial occupations, and treatment of acne in folks beneath thirteen years older. [23]. Acne is that the most typical skin disorder of adolescence, moving over 80% of teenagers (aged 13-18 years) at some purpose. Estimates of prevalence vary counting on study populations and therefore the technique of assessment used. [24]

Prevalence of acne in a very community sample of 14- to 16-year-olds within the Great Britain has been recorded as 50% . In a very sample of adolescents from schools in New Zealand, acne was present in 91%of males and seventy nine of females, and in a very similar population in European nation the prevalence was eighty two%. [25] It has been calculable that up to 30% of teenagers have acne of adequate severity to want medical treatment. [26]

Risk factors for acne include:

- Age. People of all ages can get acne, but it's most common in teenagers.
- Hormonal changes. Such changes are common in teenagers, women and girls, and people using certain medications, including those containing corticosteroids, androgens or lithium.
- Family history. Genetics plays a role in acne. If both parents had acne, you're likely to develop it, too.
- Greasy or oily substances. You may develop acne where your skin comes into contact with oily lotions and creams or with grease in a work area, such as a kitchen with fry vats.
- Friction or pressure on your skin. This can be caused by items such as telephones, cellphones, helmets, tight collars and backpacks.

- Stress. Stress doesn't cause acne, but if you have acne already, it may make it worse. [27]

Rigopoulos D et al. within the study printed in Journal of the European Academy of medical speciality and Venereology 2007, mentioned the perceptions of Greek high school students concerning acne etiology, intensifying factors, sources of data, and impact on their life and school performance. 347 students (aged 13-18) of 4 Athenian high school answered a self-reported form. Self-reported acne was in fifty nine.2% (187/316). Sources of data were folks (31.6%), dermatologists (26.7%), magazines and tv (17.5%), pharmacists (16.2%), friends (5.3%), beauticians (1.6%) and alternative doctors (1.1%). (52%) thought of the data received as inadequate. according intensifying factors included: diet (62.3%), hormones (55.1%), poor hygiene (42.4%), stress (31.9%), infection (14.9%) and biology (5.7%). according relieving factors enclosed frequent laundry (80.7%), sunbathing (38.6%) and adequate sleep (32%). These notions failed to disagree among students with and while not acne or among students receiving info from completely different sources (P < 0.05 altogether comparisons). Among students with skin disorder, 48.6% believed that skin disorder was moving social relations whereas sixty four. 4% believed that acne was compromising their self-image. V-day of adolescents according itchiness related to their acne lesions. Therefore, beliefs of Greek adolescents regarding acne were shown to be just like those of scholars in alternative developed countries [28,29].

1.3. Rationale

- Acne vulgaris is one of the most common dermatological problems in our society.
- It has a physical, psychological and social impact on people.
- Personal interest in this topic because of family history of acne vulgaris.
- Up to the researcher knowledge, no similar study has been conducted among secondary school students in Makkah Al-Mukarramah city.

1.4. Aim of the Study

To determine the knowledge and beliefs of acne vulgaris among the students.

1.5. Objectives

- To assess the level of knowledge of governmental secondary school students regarding acne vulgaris in Makkah Al-Mukarramah, 2018.
- To evaluate the beliefs of secondary school students regarding acne vulgaris in Makkah Al-Mukarramah, 2018.

2. Methodology

2.1. Study Design

A cross-sectional study design has been adopted.

2.2. Study Area

Makkah Al-mokarramah. It contains 278 secondary schools (private and governmental) .142 secondary schools for girls and 136 secondary schools for boys.

2.3. Study Population

Male and female secondary school students from selected governmental schools in Makkah city.

Inclusion criteria

Secondary school students (male and female) attending the selected governmental schools during the study period will be eligible for inclusion in the study.

2.4. Sample Size

The total number of students attending governmental secondary schools in Makkah is 42507 students (25073 girls and 17434 boys), the knowledge of the students about acne vulgaris as average as 50%. Setting the confidence interval of 95% and sample error of 5%, Raosoft sample size calculator program was used, the sample size calculation will be 284 students.

2.5. Sampling Technique

By simple random sampling technique. Each governmental secondary school in Makkah given a random number by using random number generator site to select the sample. Girls governmental secondary schools numbers from 1 to 116, number 11 was selected. Boys governmental secondary schools numbers from 1 to 103, number 87 was selected.

2.6. Data Collection Tool (Instrument)

A questionnaire from previous regional study has been utilized for data collection in the Arabic language. It has been previously used in a study conducted by Husain Yahya in Kaduna, Nigeria. Will be distributed to selected study sample in PHCCs. The questionnaire includes fifth main parts, the first part is concerned with the sociodemographic variables and characteristics, the second part involves knowledge students' regarding acne. Third part involves the beliefs and attitude towards acne, four part involves attitudes towards acne to prevent acne and fifth part is about the practice of treatment.

2.7. Socio-demographic Variables

The Socio-demograprding data includes questioner gender, age, student level of education.

2.8. Knowledge of the Students' Regarding Acne

The second part involves knowledge of the students' regarding acne and third part involves the beliefs towards acne consisting of 5 questions about the knowledge of students regarding acne and beliefs to ward acne.

2.9. Self-care Practices Done to Prevent Acne

Four parts involves attitudes towards acne to prevent acne consisting of 9 questions about self-care practices done to prevent acne.

2.10. Treatment and Practices done to Prevent Acne

Fifth part of questionnaire is consist of 10 regarding practices treatment and prevent

2.11. Validity of Questionnaires/Tools

Content validity of the Arabic version of the questionnaire was assessed by a panel of experts in the field to evaluate the items reliability, language simplicity and suitability and to evaluate the relationship of each item to the questionnaire. The panel composed of three consultants of community and family medicine, dermatology based on their comments changes were made.

Reliability analysis was carried out on the knowledge part of the questionnaire comprising 5 items.

2.12. Data Collection Technique

- The researcher will visit the selected governmental secondary schools on Sunday morning (Al-Fudail Ibn Eyadh school for boys and Al-Thamina school for girls) after getting approval from the Ministry of Education. Permission will be taken from the directors of the schools and will explain the purpose of the study to all students.

- The questionnaires has be delivered to Al-Thamina school by the researcher herself and was be distributed to girls students by the school directors and teachers during their class. The questionnaires was be delivered to Al-Fudail Ibn Eyadh school by a well-trained male personnel and has be distributed to boys students by the school directors and teachers during their class.

- The researcher has been in contact by mobile phone with the boys school director to answer any questions. Care was being taken not to disturb the students. After that, questionnaires has been collected in the same way either immediately or after a period with follow up through the phone to those who did not respond immediately.

2.13. Study Variables

a. Dependent variables

Knowledge and beliefs of secondary school students regarding acne vulgaris.

b. Independent variables

Socio demographic variables (age, gender, nationality, education, source of information).

2.14. Data Entry and Analysis

Statistical Package for the Social Sciences (SPSS) software version 20.0 has been used for data has been entered and analysis. Descriptive statistics (e.g . number, percentage) and analytic statistics using Ghi Square tests (X^2) to test for the association and/or. Significance has been determined at P –value < 0.05. The statistical

analysis has been done with the assistance of the statistical advisor.

2.15. Pilot Study

A pilot study has been conducted in one governmental secondary school to test the methodology of the study.

2.16. Ethical Considerations

- Permission was been obtained from Makkah Joint Program of Family &Community medicine.
- Approval was been received from concerned authority in Ministry of education.
- Individual verbal consent for data collection has been obtained from each participant.
- All information has been kept confidential.

2.17. Relevance & Expectations Limitations Budget

It was been self-funded.

3. Result

Table 1. The distribution of Socio-demographic data in study group

	N	%
Gender		
Female	167	58.8
Male	117	41.2
Age		
Range	16-20.	
Mean±SD	17.10±0.878	
Student level		
First grade	91	32.0
Second grade	103	36.3
Third grade	90	31.7

In our study total 284 school students during the year 2018 in study group. The majority of gender (58.8%) of students were female and male students were (41.2%), The Range of the age group was the (16-20) year's group Mean±SD (17.10±0.878). The most common education level was Second grade (36.3%) and the least common was Third grade (31.7%) will the first grade (32.0 %). (Table 1)

The (67.6%) majority of our study were answer YES have pimples now were present, About (32.4%) of students answer NO, represents (36.5 %)who had pimples more than a year, less than 3 months were reported (34.4%), have the pimples since 3-6months were (17.7) while have had pimples since 7-12 months were (11.5%). for a visit to the clinic or hospital or chemist specializes in your pimples the answer YES were (33.6%) but the majority of our study answer NO were (66.2%). Those you have pimples for before seeing a health worker within less than 3 months, 3–6 months, and 7–12 months, (40.1%) percent, (20.3%), (12.5%), respectively of sample. (Table 2)

Table 2. The Describe students' beliefs and knowledge regarding acne

	N	%
Do you have pimples now, or in the last year?		
Yes	192	67.6
No	92	32.4
How long have you had the pimples for?		
less than 3 months	66	34.4
3-6 months	34	17.7
7-12 months	22	11.5
more than 1 year	70	36.5
Have you ever visited a clinic or hospital or chemist concerning your pimples		
Yes	96	33.8
No	188	66.2
What health worker has treated your pimples?		
Pharmacist	32	33.0
Nurse	3	3.1
Doctor	55	56.7
Traditional medicine	7	7.2
How long did you have pimples for before seeing a health worker?		
less than 3 months	77	40.1
3-6 months	39	20.3
7-12 months	24	12.5
More than 1 year	52	27.1

Table 3. Distribution of the self-care practices done to prevent acne before seeing a health worker

What treatments had you tried on your own before seeing a health worker?		
	N	%
Cleansers	56	29.2
Facial scrubs	59	30.7
Medicated soap	56	29.2
Cosmetics	11	5.7
Retin A cream	26	13.5
Cortisone Cream	15	7.8
Herbs	26	13.5
Tablets	5	2.6
Roaccutan	4	2.1

Majority of our study answer about the self-care practices done to prevent acne before seeing a health worker. (30.7 %) of them told that their facial scrubs to prevent from acne. Followed by the counter medications were practiced by (29.2 %) Similar results were observed where most of them used medical soap as over the counter medication to treat acne observed most of them used Cleansers (29.2 %) while the (13.5%) used Retin A cream, also used Herbs (13.5%).

Have you ever been completely cleared of pimples?

Regarding the completely cleared of pimples, study have shown over half (55.6%) of the student believed that NO completely cleared. while the answer YES complete cleared of pimples (44.4%).

Table 4. Describe the treatment and practices done to prevent acne

	N	%
Have you ever been completely cleared of pimples?		
Yes	126	44.4
No	158	55.6
What treatments have you used that cleared the pimples?		
Cleansers	30	23.8
Facial scrubs	25	19.8
Medicated soap (tetmosol, delta)	29	23.0
Cosmetics (e.g. shelly, clear essence, etc.)	5	4.0
Retin A cream	29	23.0
Dalacin T	26	20.6
c.cortisone.cream	8	6.3
Herbs	14	11.1
c.AB.tab	0	0.0
c.roaccutan	8	6.3

Regarding the treatments has you used that cleared the pimples?

The majority of our study answer about used the Cleansers, Medicated soap (tetmosol, delta), Retin A cream to treatment Their proportions were respectively (23.8%, 23.0%, 23.0%) followed by used treatment by Dalacin T, Facial scrubs, Herbs Their proportions were respectively (20.6%, 19.8%, 11.1%).

Table 5. Distribution of the factors that make pimples worse

Which of the following makes your pimples worse?		
	N	%
Dirty skin	86	30.5
Eating too much fat or butter or margarine	80	28.4
Eating sweets and chocolate	89	31.6
Cosmetics	57	20.2
Hair products	6	2.1
Excessive heat and humidity	84	29.8
Rainy season	2	0.7
Exercise/excessive sweating	27	9.6
Stress	68	24.1
Drugs (state types)	8	2.8
NOTA. worse	30	10.6

Although there is no relation between diet of any kind and acne, majority of the respondents in our study were lacking such information and believed that eating sweets and chocolate (31.6%) and eating too much fat or butter or margarine (28.5%).

Table 6. Describe you feel when you have a pimple of your own

	N	%
How does your pimple make you feel?		
Very unhappy/sad	36	12.7
Frequently worried	34	12.0
Occasionally worried	80	28.2
Not worried at all	134	47.2
What makes you most unhappy or sad or worried about your pimples?		
Small painful lesions	75	26.4
Large painful lesions (cysts)	40	14.1
Dark spots	90	31.7
Scars	36	12.7
None of the above	107	37.7

Regarding the feel when you have a pimple of your own The majority of our study proportions answer not worried at all (47.2%), while occasionally worried , very unhappy/sad, frequently worried Their proportions were respectively (28.2%, 12.7%, 12.0%). Although unhappy or sad or worried about your pimples the majority of our study proportions answer none of the above at all (37.7%), while proportions dark spots (31.7%) while proportions small painful lesions(26.4%) but proportions the large painful lesions (cysts), scars their proportions were respectively (14.1%, 12.7%).

Table 7. Described the effect of pimples on your relationships with others

	N	%
Have your pimples affected your relationship with your friends?		
severely	7	2.5
moderately	9	3.2
only sometimes	37	13.0
never	231	81.3
Are pimples affecting your ability to make friends?		
severely	5	1.8
moderately	13	4.6
only sometimes	35	12.3
never	231	81.3
Have your pimples affected your relationship with your family?		
severely	6	2.1
moderately	10	3.5
only sometimes	26	9.2
never	242	85.2
Have your pimples affected your school work?		
severely	8	2.8
Moderately	10	3.5
Only sometimes	28	9.9
Never	238	83.8
How serious are your pimples?		
Mild	100	51.8
Moderate	74	38.3
Severe	19	9.8
Do you think pimples represent a condition that can be permanently cured (cleared never to return?)		
Yes	153	53.9
No	33	11.6
don't know	98	34.5
How long do you expect treatment for pimples to take?		
Days	32	11.3
2-4 weeks	68	23.9
1-6 months	48	16.9
More than 6 months	36	12.7
Don't know	100	35.2

Regarding the effect of pimples on your relationships your friends The majority of our study proportions (81.3%) answer never effect at all, while sometimes effect proportions (13%), but moderately ,and severely their proportions were respectively (3.2 % , 2.5%).

Regarding do you pimples affect your ability to make friends The majority of our study proportions (81.3 %) answer never effect at all, while sometimes effect proportions (12.3%), but moderately, and severely their proportions were respectively (4.6 % , 1.8%) regarding do your pimples affected your school work. The majority of

our study proportions (83.8 %) answer never effect at all, while sometimes effect proportions (9.9 %), but moderately, and severely their proportions were respectively (3.5 %, 2.8%) the proportions (12.7%) Only knew that the treatment of acne could take a long time more than 6 months, Moreover, the belief that acne was could be treated on the days the proportions (11.3 %).

Table 8. Distribution any family member (brother, sister, father, mother, uncle, aunt) who has or has had pimples?

Is there any family member (brother, sister, father, mother, uncle, aunt) who has or has had pimples?		
	N	%
Yes	179	63.0
No	105	37.0
Total	284	100.0

The majority of our study there any family member who had pimples of acne answer YES proportions (63.0%), while answer NO proportions (37.0%).

Table 9. Distribution the causes pimples you think

What do you think causes pimples?		
	N	%
Poor skin hygiene	103	36.3
Eating too much fat	79	27.8
Eating too much butter or margarine (Blue Band)	27	9.5
Eating too much sweets and chocolate	87	30.6
Obesity or too much body oil	47	16.5
Too many body hormones	79	27.8
Inheritance (genetics)	60	21.1
Blocked skin pores	55	19.4
Infection by germs	29	10.2
Drugs	18	6.3
Evil spirits	33	11.6

More than (36.3%) of all respondents of this study poor skin hygiene most frequent aggravating factor of acne, reported food as either a cause or an aggravating factor in the majority of their study group , eating too much sweets and chocolate, eating too much fatty food, and Too many body hormones accounting for (30.6%, 27.8%, and 27.8%) respectively. Inheritance (genetics) thought to be a cause or an aggravating factor of acne (21.1%) of respondents in this study. also blocked skin pores, Obesity or too much body oil, Don't know, evil spirits, Infection by germs, eating too much butter or margarine (Blue Band), Drugs accounting for (19.4 %, 16.5 %, 16.5%, 11.6%, 10.2%, 9.5 %, 6.3%) respectively.

Table 13. Distribute of you have now pimples, or in the last year according to student level

		Do you have pimples now, or in the last year?				Total	
		Yes		No			
		N	%	N	%	N	%
Student level	First grade	64	33.3%	27	29.3%	91	32.0%
	Second grade	61	31.8%	42	45.7%	103	36.3%
	Third grade	67	34.9%	23	25.0%	90	31.7%
Total		192	100.0%	92	100.0%	284	100.0%
Chi-square	X ²	5.498					
	P-value	0.064					

Table 10. Distribution of the knowledge regarding acne

Knowledge		
	N	%
Poor	279	98.2
Average	5	1.8
Total	284	100.0
Range	2-15	
Mean±SD	4.228±2.504	

Regarding knowledge these study results showed that poor knowledge proportions (98.2%), and many misconceptions are prevalent among acne patients on the other hand the Average proportions (1.8 %) will The Range (5 - 12) Mean +SD (4.228±2.504).

Table 11. Distribution of the Belief regarding acne

Belief		
	N	%
Positive belief	237	83.5
Negative belief	47	16.5
Total	284	100.0
Range	6-25	
Mean±SD	11.663±3.764	

Regarding belief these study results showed that Positive belief proportions (98.2%), and many Negative belief proportions (16.5%) will The Range (6-25) Mean +SD (11.663±3.764).

Table 12. Correlations analysis between the Belief and Knowledge

Correlations		
	Knowledge	
	r	P-value
Belief	0.120	0.043

Showed positive correlations between belief and knowledge Where (r = 0.120; p < 0.043).

There was no statistically significant P-value (0.064) , X² (5.498) the majority of our study were answer YES have pimples now, or in the last year they were in the third grade the proportions (34.9 %) while they answered NO in the same grade the proportions (25.0%) follow by first grade were answer YES have pimples now, or in the last year they were the proportions (33.3 %) while they answered NO in the same grade the proportions (29.3 %) on other hand second grade were answer YES have pimples now, or in the last year they were the proportions (31.%) while they answered NO in the same grade the proportions (45.7 %). (Table 13)

Table 14. Distribute the pimples now, or in the last year according to gender

		Do you have pimples now, or in the last year?				Total	
		Yes		No			
		N	%	N	%	N	%
Gender	Female	116	60.4%	51	55.4%	167	58.8%
	Male	76	39.6%	41	44.6%	117	41.2%
Total		192	100.0%	92	100.0%	284	100.0%
Chi-square	X ²	0.635					
	P-value	0.426					

Table 15. Distribute of the relation between the knowledge and demographic data (gender , Student level and Duration of the acne)

		N	Knowledge			ANOVA or T-test	
			Mean	±	SD	test value	P-value
Gender	Female	167	4.102	±	2.488	-1.022	0.308
	Male	117	4.410	±	2.526		
Student level	First grade	91	4.154	±	2.435	1.583	0.207
	Second grade	103	3.971	±	2.358		
	Third grade	90	4.600	±	2.710		
Duration	less than 3 mnths	66	3.985	±	2.270	3.794	0.011
	3-6 mnths	34	4.912	±	2.712		
	7-12 mnths	22	3.955	±	1.214		
	more than 1 yr	70	5.286	±	2.829		

Table 16. Distribute of the relation between the Belief and demographic data (gender , Student level and Duration of the acne)

		N	Belief			ANOVA or T-test	
			Mean	±	SD	test value	P-value
Gender	Female	167	11.892	±	3.601	1.233	0.219
	Male	117	11.333	±	3.978		
Student level	First grade	91	11.264	±	3.293	1.632	0.197
	Second grade	103	11.515	±	3.575		
	Third grade	90	12.233	±	4.350		
Duration	less than 3 mnths	66	10.576	±	3.464	7.625	0.000
	3-6 mnths	34	12.294	±	4.373		
	7-12 mnths	22	13.636	±	4.435		
	more than 1 yr	70	13.586	±	3.921		

There was no significant correlation between gender and have pimples now (where increasing pimples now in the females more than male) (60.4% and 39.6%) but the answer NO also the females more than male) (55.4% and 44.6%) (P = 0.426) and X² (0.635). (Table 14)

Show that is no significant relation between Knowledge and gender were T= (-1.022) and p-value <0.308 and Mean ± SD (4.410 ±2.526) in male but female (4.102 ± 2.488), while in the student level show that is no significant relation between Knowledge and student level were T= (1.583) and p-value <0.207 and Mean ± SD (4.154 ±2.435) in first grade but second grade (3.971±2.358) and third grade (4.600±2.710). (Table 15)

Show that is no significant relation between belief and gender were T= (1.233) and p-value <0.219 and Mean ± SD (11.333±3.978) in male but female (11.892±3.601), while in the student level show that is no significant relation between belief and student level were T= (1.632) and p-value <0.197 and Mean ± SD (11.264±3.293) in first grade but second grade (11.515±3.575) and third grade (12.233±4.350) .while duration show that is no significant relation between belief and duration were T= (7.625) and p-value <0.000 and Mean ± SD (13.586±3.921) in more than 1 year but 3-6 months (12.294±4.373) , less than 3 months (12.294±4.373) and 7-12 months (13.636±4.435). (Table 16)

4. Discussion

Acne is a multi-factorial condition, normally seen in adolescents all over the world. The information concerning skin condition remains lacking with unfavorable angle and wrong practices. It becomes essential to understand the students' information concerning skin condition because it plays a very important half within the management and higher compliance. In this study, (284) questionnaires were distributed, (284) students completed the questionnaire about the acne, females accounted for (58.8%) of the students and male were (41.2%), the most percentage in the education level was Second grade (36.3%) see Table 1.

Regarding seeking medical advice, (56.7%) percent visited their doctors agreed that acne does need to be treated by physicians, which is consistent with Poli et al. study, where 70.9% subjects in their study believed that acne should be treated by physicians . [30]

Regarding seeking medical advice, before seeing within less than 3 months (40.1%) percent and after 1 year from symptoms appearance, in which (27.1%) of patients waited more than 1 year before seeking medical attention for acne. Similar results were found in [30] in contrast to Al Robaee study (2005) in which, majority of his sample (40.3%) sought medical advice in the first three months. [31] different result was found in Tallab study (2004),

where the vast majority of his sample (76.2%) started more than one year. [32] which is consistent with Tan et al. study (2001) in which 74% of patients waited more than 1 year before seeking medical attention for acne [33]. see [Table 2](#)

These study results showed majority of our study answer about the self-care practices done to prevent acne before seeing a health worker. (30.7 %) of them told that their facial scrubs to prevent from acne. see [Table 3](#).

That poor knowledge, false beliefs, and many misconceptions are prevalent among acne patients in a way comparable to previous studies in other populations which include acne patients and/or normal populations of different cultures. This may reflect deficient acne patient education during their follow-up in their dermatology clinics. In our study also regarding the completely cleared of pimples, study have shown over half (55.6%) of the student believed that NO completely cleared. [30]

The majority of our study answer about used the Cleansers, Medicated soap (tetmosol, delta), Retin A cream to treatment Their proportions were respectively (23.8%, 23.0%, 23.0%) self-care practices done to prevent acne. This is in contrast to other study findings where frequent face washing was practiced to ameliorate acne. [1] Similar results were observed by Brajac I where most of them used medical creams as over the counter medication to treat acne [4], see [Table 4](#).

Although there is no relation between diet of any kind and acne, majority of the respondents in our study were lacking such information and believed that eating sweets and chocolate (31.6%) and eating too much fat or butter or margarine (28.5%) .(30.5%) knew that dirty skin is prone for acne also showed that (29.8%) knew that acne occurs in excessive heat and humidity. (24.1%) knew that acne worsen by Stress, (20.1%) told that acne is associated with use of cosmetics. In comparison to the previous studies conducted on Saudi youths, the author's proportions is akin to that of Al-Hoqail. Al-Hoqail IA. (2003). Who also found diet (72.1%) the most frequently named cause or aggravating factor of acne by Saudi youth in the Central region, and that of Tallab [32,33].

Among students in Asir region. However, Al Robaee's study reported that only 19.4% of Saudi youths in Central Riyadh mentioned the role of diet in acne. [30] Al Mashat et al., on the other hand, indicated that in the study population in Jeddah, Saudi Arabia 28.4% cited diet as a cause and 34.1% as an aggravating factor. [34] The higher percentages found in the majority of Saudi male youth could be explained by the proliferation of fast food chains in Saudi Arabia over the past decade and a half, with more and more teens changing to a more Westernized diet. Among the notoriously reported exacerbating dietary factors reported, fatty foods (71.5%) were believed to be the most common followed by chocolates (64.2%) and the consumption of carbonated soft drinks (40.4%), which is in agreement with the findings from other studies [35], see [Table 5](#).

Regarding the feel when you have a pimple of your own The majority of our study proportions answer not worried at all (47.2%), while occasionally worried, very unhappy/sad, frequently worried Their proportions were respectively (28.2%, 12.7%, 12.0%). This is expected since females are more health conscious and sensitive

regarding their skin and their health seeking behavior to reflect this consciousness. The effect of acne on school performance was reported by 13.3% compared to only 6.4% of [36].

This is in contrast to Al-Hoqail study results, where 39% of his sample reported affected school performance due to acne. [6] Work performance was thought to be affected by 10.6% of our sample that is contrary to Al-Hoqail study in which 39% of his sample felt an affected work achievement. [6] more than (36.3%) of all respondents of this study poor skin hygiene most frequent aggravating factor of acne, reported food as either a cause or an aggravating factor in the majority of their study group , eating too much sweets and chocolate , eating too much fatty food, and Too many body hormones accounting for (30.6%, 27.8%, and 27.8%) respectively. Inheritance (genetics) thought to be a cause or an aggravating factor of acne (21.1%) of respondents in this study. also blocked skin pores, Obesity or too much body oil, Don't know , evil spirits, Infection by germs, eating too much butter or margarine (Blue Band), Drugs accounting. Similar finding (38%) was reported by Tan JK but CM Tahir and Uslu G found only 12% and 10 % of their study subjects relating acne to inheritance [37,38,39].

Regarding knowledge these study results showed that poor knowledge proportions (98.2%), and many misconceptions are prevalent among acne. Regarding belief these study results showed that Positive belief proportions (98.2%) also Showed positive correlations between belief and knowledge Where ($r = 0.120$; $p < 0.043$), see [Table 11](#).

There was no statistically significant P-value (0.064), X² (5.498) the majority of our study were answer YES have pimples now, or in the last year they were in the third grade the proportions (34.9 %). There was no significant correlation between gender and have pimples now (where increasing pimples now in the females more than male) (60.4% and 39.6%). Show that is no significant relation between Knowledge and gender were T= (-1.022) and p-value <0.308 and Mean \pm SD (4.410 \pm 2.526) in male but female (4.102 \pm 2.488). Also Show that is no significant relation between belief and gender were T= (1.233) and p-value <0.219 and Mean \pm SD (11.333 \pm 3.978) in male but female (11.892 \pm 3.601). Present study concludes that the acne patients had poor practice and unfavorable attitude in and poor knowledge. Many myths exist among patients. Despite being so common and very well responsive to treatment, it is a major cause of depression among students.

5. Conclusion

Acne critically impacts the social behavior, increased depression among patients .Lifestyle change-related stress, sensitive skin, conclusion of oral contraceptives and mistreatment full-coverage foundations increase severity of AA. Acne had massive impact on quality of life. Students should be recommended and educated on a way to handle this dermatological problem. Results of this study show that misconceptions of skin problem are widespread among Saudi youth. A health education program is required to boost the understanding of the

condition. The prevalence of acne among feminine middle school students in these study results showed that poor data proportions (98.2%) It had a substantial impact on their quality of life. Correct medicine care should be offered in .Acne is perceived as a big ill health by nearly one in seven adolescents. For those with 'problem Acne,' effective treatment is accessible however not essentially accessible. There are disparities in access to treatment, significantly for females, Maori, and Pacific ethnic teams. This vital youth health issue has to be self-addressed. This study showed that data concerning Acne continues is still insufficient among acne patients

6. Recommendations

These study results showed that poor data, false beliefs, and plenty of misconceptions are prevailing among Saudi acne condition patients during a approach equivalent to the previous studies in different populations and cultures. This in spite of the very fact that our study population consisted solely of acne condition patients followed up in medical specialty clinics. Seeking medical recommendation behavior and expectation from treatment modalities among acne condition patients during this study also are just like different studies and seem to mirror the poor data and misconceptions regarding the disease. a lot of effort for health education generally and selective patient education especially is required to enhance patients' data regarding skin condition and its modalities of treatment and to encourage early medical consultation behavior and improve patient adherence to treatment. Considering psychological impact, it seems to be high because it has been evidenced in different cultures and wishes continually to be thought of and addressed early within the course of patient management

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