



University of Kerbala

College of Medicine

Department of Family and Community
Medicine



**Knowledge, Attitude and Practices about Acne
Vulgaris among Secondary School Female Students in
Kerbala City 2024**

A Thesis

**Submitted to the Council of College of Medicine -University
of Kerbala as Partial Fulfilment for the Degree of
Higher Diploma in Family Medicine**

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بِسْمِ اللّٰهِ الرَّحْمٰنِ الرَّحِیْمِ

﴿ وَقُلِ اَعْمَلُوا فَسَيَرَى اللّٰهُ عَمَلَكُمْ وَرَسُولُهُ وَالْمُؤْمِنُونَ ۗ وَسَتُرَدُّونَ
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Knowledge, Attitude and Practices about Acne Vulgaris among Secondary School Female Students in Kerbala City 2024

Was prepared under our supervision as a partial requirement for the
Degree of High Diploma in Family Medicine



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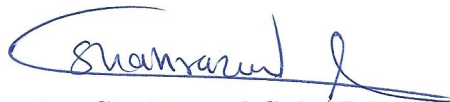


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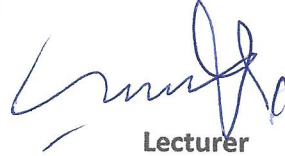


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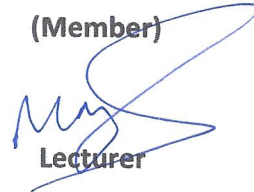


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Dedications

I dedicate this praise to my dear family, whose love; support and constant encouragement has been the cornerstone of my academic career.

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I appreciate the students' cooperation in dedicating their time to completing the questionnaire.

Abstract:

Background:

Acne (Acne vulgaris) is one of the most common skin diseases among teenagers and young adults, as it greatly affects the external appearance and psychological health of those affected. Adolescents, especially high school students, are particularly vulnerable to this problem due to the hormonal and psychological changes they experience during this critical stage of life, there are many myths and misconceptions among teens regarding the causes and treatment of acne. Analyzing the levels of knowledge, attitudes, and practices regarding acne is essential to develop effective health education strategies.

The objectives aimed to evaluate the knowledge, attitudes, and practices of female adolescent students toward acne in secondary schools.

Method:

A cross-sectional study was conducted on 400 female students in secondary schools in the Kerbala Governorate Center for the period from April 2024 to November 2024. The study included female students whose ages ranged from (15 to 19) years , the mean age of the students was (16.87±1.1)years.

Results:

About (61%) of the study participants reported that they suffered from acne. The study showed that (18.5%) of the total participants had good knowledge, (59.2 %) had average knowledge, and (22.3 %) had poor knowledge. The majority of the female students included in the study showed a neutral attitude and poor practices towards acne. The study indicated a statistically significant relationship between the mean knowledge score with age, statistically significant relationship between the mean knowledge score with educational level, statistically significant relationship between the mean knowledge score with and history of acne among the participants.

It also indicated a statistically significant relationship between the mean attitude score and age. Finally, the results indicated a statistically significant relationship between mean practices score and history of acne.

Conclusion:

The study results revealed moderate levels of knowledge and positive attitudes, but weak acne management practices among high school students. These findings underscore the need for comprehensive educational programs to enhance students' understanding and encourage evidence-based acne management practices.

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List of Abbreviations

Subject	Abbreviations
(BMI)	body mass index
(C.I)	confidence interval
(PSU)	pilosebaceous unit
(SD)	Standard deviation

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Chapter One

Introduction

1.1 Definition:

Acne vulgaris is a chronic inflammatory condition of the skin involving the pilosebaceous glands. It is commonly characterized by polymorphic lesions with resulting scarring (Tanet et al., 2025). Its pathology is influenced by various factors such as hormones, certain types of foods, medication intake, pollution, climate, psychological issues, and lifestyle choices, all of which lead to an increased incidence of it (Akl et al., 2024). The pathogenesis of acne is multifactorial; four distinct processes were believed to play critical roles: increased sebum production, alteration of keratinization processes leading to comedone formation, follicular colonization by *Propionibacterium acnes* (*P. acnes*) and inflammatory mediators around pilosebaceous unit (PSU) (Hazarika, 2021). Unique lesions can be described as either non-inflammatory (blackheads/open and closed/whiteheads) or inflammatory (papules, pustules, nodules, and cysts), leading to the development of scarring and pigmentation on the skin, requiring prolonged and ongoing treatment (Conforti et al., 2021). It usually affects areas of the skin with an increased number of sebaceous follicles (such as the face, upper chest, and back) (Luqman et al., 2020). This condition also affects both sexes, and peaks among teenagers and young adults (Alnafisah et al., 2022). Because it is one of the most common inflammatory skin diseases in the world, it affects all races and ethnicities, with its prevalence peaking between the ages of 15 and 20 years (Layton et al., 2023).

The factors influencing acne are classified into four main categories:

- The first category includes individual socioeconomic and biological factors, such as gender, age, economic status, genetics, obesity, skin type, menstrual cycle (for women), diet, smoking, cosmetics, electronic products, sleep quality, and psychological factors.

- The second category includes natural environmental factors such as temperature, humidity, sun exposure, air pollution, and chlorine.
- The third element concerns the social environment, including social networks and social media.
- The last element includes factors of the built environment, such as population density, food stores, and green spaces, in addition to other characteristics of the built environment related to transportation.

Acne can be affected by family history, overweight, obesity, oily or combination skin, irregular menstrual cycle, sugary foods, dairy products, smoking, improper use of cosmetics, long-term use of electronic devices, poor quality of sleep, stress, high temperature, exposure to sunlight, air pollution. Additionally, there are also potential links between the built environment and acne (Yang et al., 2020). Acne vulgaris is associated with high psychological and psychosocial distress and may affect various areas of life, causing social problems and psychological disturbances (Davern et al., 2018). Females feel worse in their appearance and feel more embarrassed and weak in social activities than men when afflicted with it (Singh Poonia et al., 2021). It is a major problem affecting the quality of life of young patients. Its impact is much greater in less educated patients and those with longer disease duration (Alqahtani et al., 2021). In addition to detrimentally impacting an individual's quality of life and self-image and leaving lifelong physical scars, acne has also been linked to higher rates of anxiety, sadness, and suicidal thoughts (Eichenfield et al., 2021). Facial acne is a common disorder and appears to have a considerable impact on quality of life among adolescents; the prevalence of facial acne among the adolescents was 67.5% (Hanisah et al., 2009). Because it is often visible on the face heightening issues of body image and socialization. Therefore, the impact of acne on health-related quality of life increased with increasing facial acne severity (Tan et al., 2021). Therefore,

the psychological effects associated with acne can be severe and last a lifetime. Acne patients are more likely to experience low self-esteem, anxiety, depression, suicidal thoughts, and even unemployment ([Altunay et al., 2020](#)).

1.2 Epidemiology:

Epidemiological studies can be a useful tool to identify risk factors in the community, to measure the burden of acne and other skin diseases and to contribute to health care planning. Acne vulgaris remains the most common inflammatory skin disease treated worldwide, according to estimates from global skin disease prevalence studies ([Layton et al., 2021](#)). It is one of the 10 most common diseases in the world and the most common inflammatory skin disease ([Chilicka et al., 2023](#)). Acne is widespread worldwide, especially among young people. It is estimated that up to 90% of adolescents suffer from acne ([Wolkenstein et al., 2018](#)). It is considered a serious health problem among adolescents and young adults. It affects between 85% and 100% of people at some point in their lives, and usually begins during puberty ([Khaleel, 2022](#)). The estimated global prevalence of acne in 2010 was 9.38%, and acne ranked as the eighth most prevalent skin condition worldwide ([Adah et al., 2023](#)). In another study in Saudi Arabia regarding acne it has a worldwide prevalence of approximately 10%. ([Assiri et al., 2023](#)). The average prevalence of acne among adolescents in Europe is 57.8%. However, prevalence rates vary from one country to another. It ranges between 42.2% in Poland and 73.5% in the Czech Republic and Slovakia ([Delarue et al., 2015](#)). In Saudi Arabia, the incidence of acne among students of health-related science colleges is 78.5%, with 56.0% using self-medications without a prescription ([Alrabiah et al., 2022](#)).

1.3 Literature review:

The results of this study in 2017, conducted on participants aged 15 to 24, showed that 72% of them had good knowledge, while more than 40% had good knowledge of its causes and factors that increase its severity (Hulmani et al., 2017).

In another study in Saudi Arabia, data showed poor knowledge of acne vulgaris, particularly among participants under 21 years of age, with just over half of participants having poor knowledge (50.8%). At the educational level, graduate students had the highest rate of good knowledge (52.3%), while participants with a secondary education had the highest rate of poor knowledge (65.3%). Participants relied on the internet as their primary source of information (58.9%) This study indicates poor knowledge and misconceptions about acne vulgaris among the population of Saudi Arabia (Alnafisah et al., 2022).

A cross-sectional study conducted among randomly selected public school students in Podgorica, Montenegro, during October and November 2020, found no statistically significant differences between students with and without acne in perceived factors, with the exception of cosmetic treatment. Many adolescents' beliefs about factors that exacerbate and alleviate acne are largely myths and misconceptions without any evidence-based justification. The study indicated the need for greater efforts to educate students about acne, its health consequences, and the possibilities for treatment (Ražnatović Đurović et al., 2021).

In 2021, a study was conducted, the results of which indicated significant differences in participants' knowledge, practices, and attitudes toward acne. The current study concluded that educational guidelines had a positive impact on participants' performance and attitudes toward acne (Faheim et al., 2021).

In Lebanon, a study found that acne was prevalent at (61.55%) among participants. It also reported that 50.20% of participants self-treated. The study

concluded that Lebanese society lacks sufficient knowledge about the risks of self-treatment. Collaboration among healthcare providers should provide adequate awareness among patients ([Sakr et al., 2020](#)).

Another study examined the relationship between students' knowledge of acne vulgaris and their attitudes toward it. Results indicated a significant relationship between students' knowledge of acne vulgaris and their attitudes toward it, with a p-value of 0.029. These findings highlight the importance of students' knowledge of skin health and accurate information about skin care related to acne vulgaris, which can enhance their positive attitudes and reduce the incidence of the disease ([Situmorang et al., 2020](#)).

In Jordan, a study was conducted and its results showed the presence of common misconceptions among members of their society about acne. The study concluded that the level of knowledge among students was noticeably low, with only 40% of them achieving good grades. In general, students' attitudes and practices were positive, with a few exceptions. It indicated the need for awareness campaigns directed at younger ages, while ensuring education on proper management, including attitudes and practices ([Zrekat, 2023](#)).

In Iraq, Alkhafaji study included 105 participants with a mean age \pm standard deviation of 19.78 years \pm 5.155. The study concluded that hair removal, the use of topical cosmetics, oral herbal remedies, or oral steroids had a positive association with acne ([Alkhafaji et al., 2015](#)).

Also in Iraq, specifically in Mosul, a study was conducted by Khaleel on the risk factors that cause acne. The results indicated that there are several important factors associated with the formation of common acne and play an important role in its appearance, including age, psychological state, irregular menstrual cycle, the location of acne, skin type, family history, and mobile phone use ([Khaleel, 2022](#)).

In Baghdad, a study concluded by Sadiq that women are more susceptible to acne, especially those with oily skin. The most common type of acne is whiteheads, which are most common on the face and chest. The study also reported that about a quarter of students suffer from moderate to severe acne. Diet and stress were among the factors most strongly associated with acne complications (74% and 47%, respectively), facial washing also improved acne (Sadiq et al., 2023).

1.4 Important of study:

This leads us to conclude that acne is no longer just a skin disorder, but needs to be carefully reconsidered. Given its widespread prevalence and psychological and emotional impact on quality of life, it is important to prevent the spread of misconceptions.. Being a very common chronic skin disease worldwide, people's knowledge about acne is still insufficient, with many misconceptions existing. We know that patients' knowledge of their disease is a key part of managing it, leading to improved control and adherence. Knowledge of the environmental factors that contribute to acne could improve the patient's physical and emotional well-being, increase the efficacy of treatment, and minimize the risk of anxiety and depressive disorders (Kostecka et al., 2022). Knowledge of acne plays a crucial role in its treatment and management in individuals. Understanding its causes, symptoms, and appropriate treatment options helps individuals make informed decisions about their skincare routine. Individuals who have good knowledge about acne are more likely to consult dermatologists to properly manage their condition (Tan et al., 2023) . They are also less likely to engage in harmful practices such as squeezing acne lesions, which can lead to complications and scarring (Israel et al., 2022) .Additionally, individuals with good knowledge are more likely to use medically approved medications and preparations for treating acne, such as cleansers, exfoliators, and sunscreens (Perveen et al., 2023). On the other hand, individuals

with poor knowledge may resort to traditional medicine or rely on unreliable sources of information, leading to ineffective management of acne.

Due to the misconceptions and multi-factorial causation, knowledge, attitude and practices regarding acne hold a major significance in the etiology, pathogenesis and outcomes of acne patients.

1.5 Objectives of the Study :

1.The aim of this research is to study the general awareness of females about the disease.

2.To know the attitudes and behavior of female students in dealing with acne.

3.The results may facilitate our understanding of students' needs which will ultimately lead to enhancing treatment strategies and increasing awareness and educational programs in the future for this age group with the aim of reducing and eliminating its physical and psychological effects.

Chapter Two

Subjects and Methods

2.1 Study design and settings:

A cross-sectional study was conducted on secondary schools for girls in Karbala city. A multistage stratified random sampling method adopted to select 7 schools from 20 Secondary School Female Students which are:

- Al-Najah secondary School for Girls
- Ishraqat Al Huda secondary School for Girls
- Al Khalidat secondary School for Girls
- Gaza secondary School for Girls
- Al Thaqafah secondary School for Girls
- Al-Rawdatain secondary School for Girls
- Al-Surur secondary School for Girls

2.2 Sample size and sampling technique:

The sample size estimation was based on the following formula ([Hussain et al .,2020](#)):

$$N= Z^2 P (1-P)/d^2$$

- Where n is the sample size,
- Z is the statistic corresponding to level of confidence (1.96 for 95% CI),
- P is expected prevalence (that can be obtained from same studies or a pilot study conducted by the researchers), p was set as 0.5, because the proportion was not known.
- d is precision (corresponding to effect size).

Based on the above estimation method, the minimum required sample size was 384, the survey ended by gathering 400 females, which exceeded the minimum number required for the study, and the data collection was conducted using a simple random sampling.

2.3 Study tool and data collection:

The data collection was conducted over five month's duration from 1st of April 2024 to 1st of December 2024 through face-to-face interviews with the students using a questionnaire as the data collection instrument.

Data were collected over 2-3 days per week, and each self administer took approximately 10-15 minutes of time for each student. This study was conducted on secondary schools for girls in the center of Karbala Governorate, where the names of all schools within this geographical area were taken and a random sample was conducted for them, and the schools resulting from this sample were chosen to conduct the self administer questionnaire, the educational stages in each school were divided into three stages included in the self administer questionnaire, which are the fourth, fifth and sixth stages, and then a random sample was conducted for each stage to choose one class from it and conduct an interview with each student through pretested, questionnaire. The questionnaire was administered in the local language after obtaining verbal consent from each student before starting to fill out the questionnaire, taking into account their privacy without mentioning names, and providing the student with any information needed to use the questionnaire as a data collection tool.

A questionnaire was prepared for the study and evaluated by experts specialized in community medicine and dermatologists. The questionnaire consisted of the following data:

The first part of the questionnaire consisted of 16 questions regarding the studied variables including female students age, academic year, weight, height, body mass index, place of residence, financial and economic status, father's education, mother's education, and if she has the following; acne vulgaris, other skin diseases, anyone in

the family had acne, stress, regular menstrual cycle, polycystic ovary syndrome, and from where she got information about acne (Mohamed et al., 2018), (Hwee et al., 2022).

The second part consisted of 16 questions on the knowledge about acne vulgaris regarding the type of food , skin type, behavior towards pimples, traditional skin cleansing, effect of cosmetics, personal hygiene, effect of hormones, the type of disease is hereditary, contagious or seasonal, the influence of the menstrual cycle on its appearance, place of its appearance, the possibility of treating it, complications and the impact of the psychological condition on its appearance (Hulmani et al., 2017), (Luqman et al., 2020), (Ražnatović Đurović et al., 2021), (Perveen et al., 2023), (Sundoro et al., 2024), (Oktaviani et al., 2023).

The third part consisted of 12 questions on the attitude about acne vulgaris regarding the dietary behavior, face wash, the role of psychological condition, effect of cosmetics, self-treatment, medical advice and follow-up (Luqman et al., 2020), (Tunçer Vural et al., 2022).

The fourth part consisted of 12 questions on the practices about acne vulgaris including eating a healthy diet, reducing weight, acting when pimples appear and ways to hide them, visiting a doctor, using treatment, its type and importance, prevention methods followed (Luqman et al., 2020), (Faheim et al., 2021), (Alnafisah et al., 2022).

The questionnaire was designed in English according to the research sources used in it. It was designed and translated into Arabic using Google Translate to be compatible with the local language of the female students (**Appendices 1, 2**).

2.4 Inclusion criteria:

Female students whose ages range from 15 to 19 years and within the 4th, 5th, and 6th grades in girls' secondary schools. This study included all female students, whether suffering from acne vulgaris or not.

2.5 Exclusion criteria:

Female students not willing to participate in the study and female with drug-induced and other acne form eruptions were exclude.

6.2 Pilot study:

A pilot study was done on 25students in a 2-week duration starting from 1st of April 2024, to find out if there are any linguistic problems or modifications to the questionnaire during this period in order to adopt a scientific and acceptable questionnaire for this study. The questionnaire was approved for the remaining students.

7.2 Scoring system:

The knowledge questionnaire items was scored for each item (true answer=1, false or don't know answer=0). Then the sum of the scores were obtained and divided by the number of items (16) to develop the Mean Knowledge Score.

The Overall Knowledge Level was calculated for each item of the questionnaire throughout considering good knowledge > 70%, moderate knowledge = 50 -70% and poor knowledge < 50%. Depending on the source.

The Overall Attitude Level: The 12 attitude questions in the questionnaire form were considered to obtain the overall attitude score. For each question, if answer was "agree" it given 3 points while the "neutral" given 2 points and "disagree" given 1 point. The total score ranged from 12 to 36 points. For each participant, positive attitude was considered when the total scores of the participants reached 29 points and above, whereas a score of 19 or 28 points was considered as neutral and a score between 12-18 points regarded as negative attitude.

The practice questionnaire items was scored for each item (true answer=1, false or don't know answer=0). Then the sum of the scores were obtained and divided by the number of items (11) to develop the Mean Practice Score.

2.8 Statistical analysis:

The data of the present study were entered and analyzed throughout using the Statistical Package for the Social sciences (SPSS 24.0 for Windows). The descriptive statistics were used in term of frequency and percentage and mean \pm SD in appropriate tables and graphs. Possible association between variables was made through the independent t-test or ANOVA test and post hoc test. Significance level was considered when $p < 0.05$.

2.9 Ethical approval:

- Ethical approval was taken from the Medical Research Bioethical Committee at the University of Karbala – College of Medicine. (**Appendix3**)
- Approval was obtained from the General Directorate of Education in Karbala Governorate. (**Appendix4**)
- Verbal consent was taken from the participants.

Chapter Three

Results

Results:

The present study included 400 secondary school female students in Kerbala City. Slightly more than two thirds of them were less than 18 years. Rural residence accounted for less than one fifth of study participants. Good economic status reported by 63% of study participants whereas weak economic status reported by only 3.5%. History of acne in the family was reported by 62.2% of the study females. Stress was reported by more than two thirds of study participants, mainly because of daily life or the because of their academic study as described in table 1.

Table 1: Socio-demographic characteristics of the study participants

Variables	Categories	Total No. 400 (%)
Educational level	Class 4	133 (33.3)
	Class 5	133 (33.3)
	Class 6	134 (33.4)
Age in years	<18	271 (67.7)
	18 and more	129 (32.3)
	mean \pm SD	16.87 \pm 1.14
Residence	Urban	328 (82)
	Rural	72 (18)
Economic status	Good	252 (63)
	Average	134 (33.5)
	Weak	14 (3.5)
Father education	Not read and write	11 (2.8)
	Primary education	43 (10.8)
	Secondary education	152 (38)
	College and higher	194 (48.4)
Mother education	Not read and write	10 (2.5)
	Primary education	59 (14.8)
	Secondary education	173 (43.3)
	College and higher	158 (39.5)
History of acne in the family	Yes	249 (62.2)
	No	151 (37.8)
Stress	Yes	274 (68.5)
	No	126 (31.5)
Causes of stress (n=274)	Because of daily life	129 (47.1)
	Because of the study	109 (39.8)
	Because of exams	36 (13.1)
Regular menstrual cycle	Yes	273 (68.2)
	No	127 (31.8)

The source of information of the study participants about acne was mainly throughout social media (60%) followed by doctor advice and family members (36% and 32% respectively) as shown in figure 1 below.

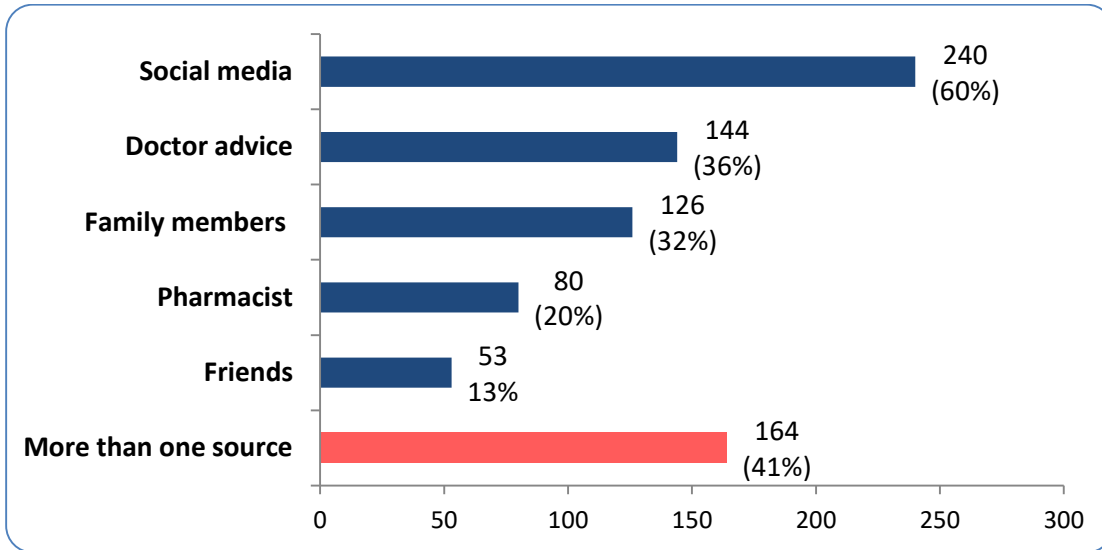


Figure 1: Source of information of the study participants about acne

The study revealed that 61% of the study participants reported that they suffered from acne. Other than acne, skin allergy was the highest skin disease reported by the study females followed by fungal infection and psoriasis (figure 2 and figure 3).

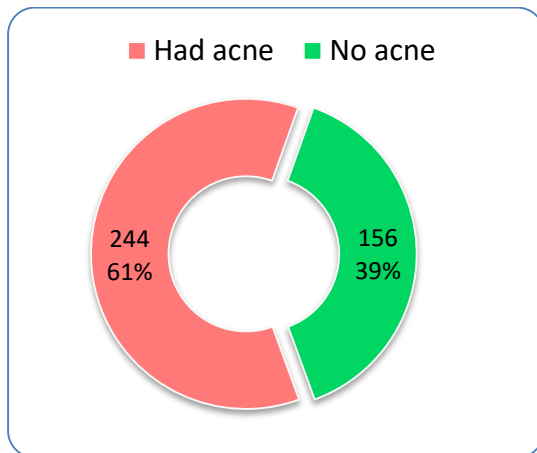


Figure 2: Proportion of acne among study participants

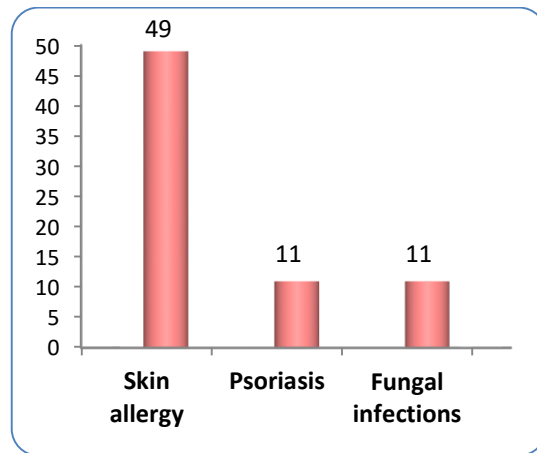


Figure 3: Frequency of other skin diseases among study participants

In regard to the 16 knowledge questions of the questionnaire form about acne, 83.2% of the study participants respond correctly to the question " Do you think that

psychological stress and tension increase the appearance of acne ", and 78.2% to the question " Is it possible to treat acne?", and 75.2% to the question " Does popping and squeezing pimples worsen the condition and increase the appearance of pimples?". When only 9.3% of the study participants respond correctly to the question "Do you think that eating spicy food causes acne?" and 16.7% of the study participants respond correctly to the question "Acne is considered a contagious disease ". The overall knowledge score concluded that good knowledge represented less than one fifth (18.5%) of the total participants, moderate knowledge was 59.2% and poor knowledge was 22.3% as shown in table 2 and figure 4 below.

Table2: Knowledge questions and their answers of the 400 study participants

Knowledge Questions	True answer	False answer	Do not know
1. Do you think that eating spicy food causes acne? *	37 (9.3)	339 (84.7)	24 (6)
2. Do you think eating fatty foods not causes acne?	247 (61.7)	83 (20.8)	70 (17.5)
3. Do you think oily skin helps acne appear?	253 (63.2)	78 (19.5)	69 (17.3)
4. Does popping and squeezing pimples worsen the condition and increase the appearance of pimples?	301 (75.2)	58 (14.5)	41 (10.3)
5. Do you think that cleaning the skin using traditional methods increases the appearance of pimples?	142 (35.5)	163 (40.8)	95 (23.8)
6. Does using cosmetics help acne break out?	214 (53.3)	106 (40.7)	95 (23.8)
7. Is lack and poor personal hygiene related to the appearance of acne?	296 (74)	47 (11.8)	57 (14.2)
8. Do you think that hormonal imbalance causes acne?	293 (73.2)	69 (17.3)	38 (9.5)
9. Acne is considered a contagious disease.*	67 (16.7)	280 (70)	53 (13.3)
10. Is acne a hereditary disease?*	101 (25.3)	218 (54.4)	81 (20.3)

11. Is acne seasonal and affected by the change of seasons?	170 (42.5)	142 (35.5)	88 (22)
12. Is the appearance of acne related to or affected by the menstrual cycle?	293 (73.2)	47 (11.8)	60 (15)
13. Does acne cause serious scarring if left untreated?	263 (65.7)	75 (18.8)	62 (15.5)
14. Is it possible to treat acne?	313 (78.2)	33 (8.3)	54 (13.5)
15. Do you think that psychological stress and tension increase the appearance of acne?	333 (83.2)	33 (8.3)	34 (8.5)
16. Does acne appear only on the face?*	290 (72.5)	74 (18.5)	36 (9)
Overall mean knowledge score and confidence interval	9.32±2.46 (C.I= 9.08 – 9.56)		
* Reverse questions			

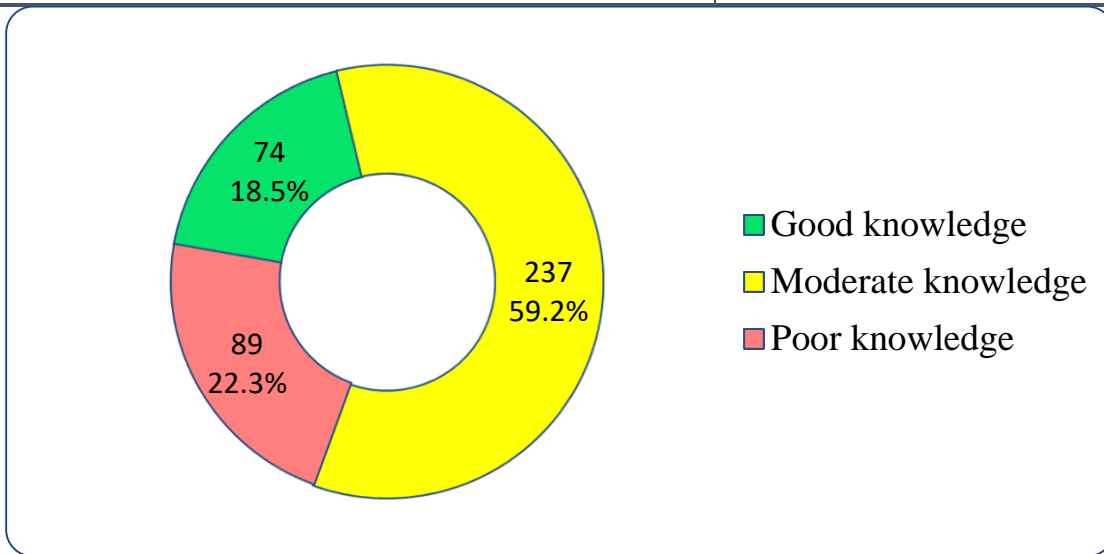


Figure 4: level of knowledge among study participants

In regard to the 12 attitude questions of the questionnaire form about acne, the overall attitude score concluded that Positive Attitude represented 30% of the total participants, Neutral 66% and Negative Attitude was only 4% as showed in table 3 and figure 5 below.

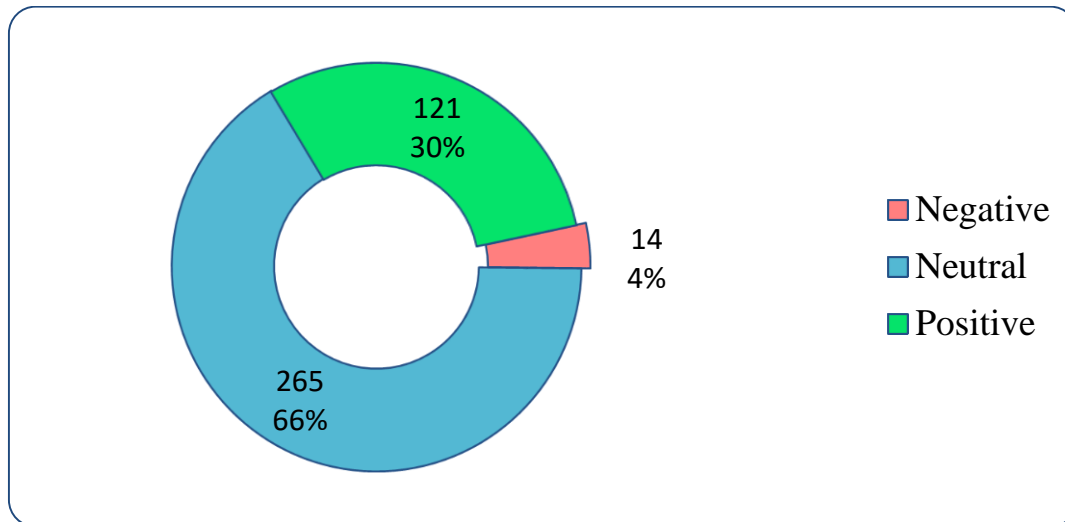


Figure 5: level of attitude among study participants

Table3: Attitude questions and their answers of the 400 study participants

Attitude questions	Agree No. (%)	Neutral No. (%)	Disagree No. (%)
1. Avoiding fast food and oily foods an important preventive measure to control acne.	269 (67.2)	49 (12.3)	82 (20.5)
2. If you wash your face frequently, you are less likely to get acne.	312 (78)	34 (8.5)	54 (13.5)
3. If you suffer from acne, this will affect your personality.	132 (33)	36 (9)	232 (58)
4. Stress and anxiety caused or worsened your acne.	265 (66.2)	59 (14.8)	76 (19)
5. Cosmetics and makeup cause you to have acne.	186 (46.5)	84 (21)	130 (32.5)
6. Self-medication is part of personal skin care.	126 (31.5)	84 (21)	190 (47.5)
7. Offering advice on some acne treatments to your friend or family member.	205 (51.2)	33 (8.3)	162 (40.5)
8. Consulting a doctor important to treat acne.	314 (78.4)	35 (8.8)	51 (12.8)
9. It is necessary to follow up the acne condition with the doctor during the treatment period.	222 (55.4)	73 (18.3)	105 (26.3)
10. Acne, if present, can negatively affect the way you interact with others.	109 (27.3)	50 (12.5)	241 (60.2)
11. You feel depressed when acne appears.	229 (57.2)	41 (10.3)	130 (32.5)
12. Feel embarrassed by your family and friends because of pimples on your face.	190 (47.4)	33 (8.3)	177 (44.3)
Overall mean attitude score and confidence interval	26.32±4.15 (C.I= 25.91 – 26.73)		

The results of the current study revealed that 30.5% of the study participants reported that they consulted a doctor the last time had acne. The use of medications for acne without consulting a doctor reported by 27.8% of the study participants and 29.3% of the study females preferred traditional treatments to control acne if it appears. The results revealed that 32% of the study females followed a healthy diet to avoid acne breakouts and 33.7% of the study participants reported the use of cosmetics to hide pimples and acne if they appear. More than one half (58%) reported squeezing and removing pimples when it appear, and 46.7% of them wash face with facial cleansing products regularly. The study revealed that 28% of the study females reported the use of preventive measures to control acne and prevent its reappearance, most frequent measures were face wash, eat healthy, avoid touching the pimples and doctor as described in table 4 and figure 6 below.

Table 4: Practice questions and their answers of the 400 study participants

Practice questions	Yes	No	Don't know
	No. (%)	No. (%)	No. (%)
1. Did you consult a doctor the last time you had it?	122 (30.5)	246 (61.5)	32 (8)
2. Do you use medications if you suffer from it without consulting a doctor?	111 (27.8)	270 (67.4)	19 (4.8)
3. Do antibiotic drugs have an important role in treating acne vulgaris if you have it?	119 (29.8)	96 (24)	185 (46.2)
4. Do you follow a healthy diet to avoid acne breakouts?	128 (32)	237 (59.2)	35 (8.8)
5. Does reducing your weight contribute to reducing the appearance of acne if you suffer from it?	93 (23.3)	171 (42.7)	136 (34)
6. Do you prefer traditional treatments to control acne if it appears?	117 (29.3)	221 (55.2)	62 (15.5)
7. Do you use cosmetics to hide pimples and acne if they appear?	135 (33.7)	232 (58)	33 (8.3)
8. If pimples appear, do you squeezing and removing them?	232 (58)	145 (36.2)	23 (5.8)
9. Do you prefer to use herbs to treat pimples and acne?	101 (25.3)	214 (53.4)	85 (21.3)
10. Do you wash your face with facial cleansing products regularly?	259 (46.7)	119 (29.8)	22 (5.5)
11. Have you taken any preventive measures to control acne and prevent its reappearance?	112 (28)	238 (59.5)	50 (12.5)
Overall mean Practice score and confidence interval	3.82±1.85 (C.I= 3.64 – 4.01)		

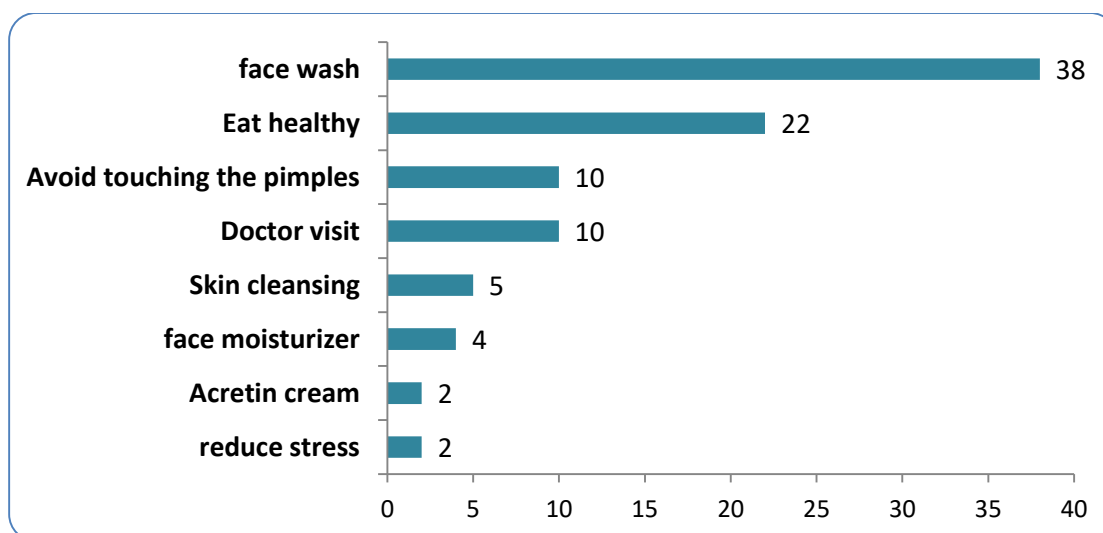


Figure 6: Frequency of preventive and control measures of acne among study participants

The analysis of data of the current study revealed that there was significant difference in Mean Knowledge Score among the three classes of the secondary schools (class 4, class 5 and class 6); ANOVA test and post hoc test concluded that class 6 revealed significantly lower Mean Knowledge Score than class 4 and class 5 ($p < 0.001$). The Mean Knowledge Score of females under 18 years was significantly higher than that of 18 years and higher ($p = 0.004$). The study concluded that participants who reported the presence of acne had significantly higher Mean Knowledge Score ($p = 0.016$) as shown in table 5 below.

Table 5: Association of the socio-demographic characteristics of participants and the Mean Knowledge Score

Characteristics	Categories	Mean Knowledge Score	P value
Educational level	Class 4	9.69±2.27	< 0.001*
	Class 5	9.91±2.32	
	Class 6	8.36±2.50	
Age in years	<18	9.56±2.38	0.004*
	18 and more	8.81±2.55	
Residence	Urban	9.35±2.41	0.531
	Rural	9.15±2.67	
Economic status	Good	9.32±2.50	0.763
	Average	9.37±2.38	
	Weak	8.86±2.51	
Presence of acne	Yes	9.55±2.49	0.016*
	No	8.95±2.37	
History of acne in the family	Yes	9.42±2.52	0.277
	No	9.15±2.34	

* Significant P value of less than 0.05. Independent t-test or ANOVA test were used for comparison

In regard to Mean Attitude Score, analysis of data of the current study revealed that the Mean Attitude Score of females under 18 years was significantly lower than that of 18 years and higher ($p = 0.018$) as shown in table 6 below.

Table 6: Association of the socio-demographic characteristics of participants and the Mean Attitude Score

Characteristics	Categories	Mean Attitude Score	P value
Educational level	Class 4	25.77±4.19	0.139
	Class 5	26.42±4.34	
	Class 6	26.77±3.88	
Age in years	<18	25.99±4.26	0.018*
	18 and more	27.03±3.83	
Residence	Urban	26.25±4.14	0.476
	Rural	26.64±4.21	
Economic status	Good	26.44±4.15	0.713
	Average	26.08±4.02	
	Weak	26.50±5.45	
Presence of acne	Yes	26.50±4.13	0.274
	No	26.04±4.18	
History of acne in the family	Yes	26.64±4.12	0.050
	No	25.80±4.16	

* Significant P value of less than 0.05. Independent t-test or ANOVA test were used for comparison

Regarding Mean Practice Score, the study concluded that participants who reported the presence of acne had significantly higher Mean Practice Score ($p < 0.001$) as shown in table 7 below.

Table 7: Association of the socio-demographic characteristics of participants and the Mean Practice Score

Characteristics	Categories	Mean Practice Score	P value
Educational level	Class 4	3.80±1.96	0.056
	Class 5	3.56±1.83	
	Class 6	4.11±1.73	
Age in years	<18	3.76±1.91	0.301
	18 and more	3.96±1.71	
	18.5 - 24.9	3.83±1.85	
	25 and more	4.06±1.82	
Residence	Urban	3.84±1.82	0.662
	Rural	3.74±1.98	
Economic status	Good	3.96±1.89	0.066
	Average	3.52±1.74	
	Weak	4.14±1.83	
Presence of acne	Yes	4.09±1.86	< 0.001*
	No	3.40±1.76	
History of acne in the family	Yes	3.80±1.77	0.705
	No	3.87±1.98	

* Significant P value of less than 0.05. Independent t-test or ANOVA test were used for comparison

Chapter Four

Discussion

Discussion:

Acne is no longer just a skin condition; it needs more attention. Given its widespread prevalence and psychological and emotional impact on quality of life, it is essential to prevent the spread of misconceptions. We know that patients' knowledge of their condition is a key part of managing it, leading to improved control and adherence to treatment, and reducing the psychological and physical impacts for those affected.

Results of this study showed that the most common source of information about acne, with more than half of the study participants citing social media, was similar to the results of these studies ([Ražnatović Đurović et al., 2021](#)), ([Alnafisah et al., 2022](#)), which reported that the internet was the most commonly used source by participants. However, our results contradict the results of current study, which reported that family was the primary source of information for participants ([Pasqual et al., 2023](#)), ([Machiwala et al., 2019](#)), in this research, the most frequently chosen source among participants was the doctor ([Jaber et al., 2020](#)), while, ([Faheim et al., 2021](#)) mentioned that friends were the most preferred source of information by the participants.

The differences in research results among participants on this item could be due to several factors, including the participant's age, culture, educational level of both themselves and their parents, and access to healthcare services. Some also resort to easier and faster, but less reliable, options, such as the internet.

About more than (60%) of the study participants reported that they suffer from acne and this is close to the results of ([CAM et al., 2024](#)). These studies ([Al-Bahlol et al., 2017](#)), ([Saeed et al., 2018](#)), and in Egypt ([Jabr et al., 2021](#)), reported different results from current our results, the percentage was lower .

There are several factors that cause results to vary between studies regarding participants' medical history of acne. This discrepancy is due to the different design

of studies, as some research relies on participants' self-answers while others rely on direct clinical assessment, which leads to variation in the accuracy of diagnosing cases, studies also vary in their definition of medical history; some include mild acne, while others focus only on moderate and severe cases. In addition, geographical and cultural factors, such as diet, pollution levels, and skincare habits, influence outcomes. Genetic and hormonal differences among individuals also vary from country to country. The effect of self-reporting among adolescents cannot be overlooked, as it may lead to under- or over-reporting of symptoms, thus affecting the reliability of the data obtained.

Regarding students' knowledge about acne, results of current study showed that the question that was answered most correctly by them was: do you think that psychological stress and tension increase the appearance of acne? And most wrongly answered question by them was do you think that eating spicy food causes acne? was similar to the results of these studies ([Alnafisah et al., 2022](#)) ([Luqman et al., 2020](#)).

Current study found that the overall knowledge score (9.32 ± 2.46) and knowledge level was moderate in majority (59.2%). A study conducted in Jeddah supported this finding, which reported a similar result, with moderate knowledge being around (59%) ([Albahlool et al., 2017](#)), and it is close to the results of this search ([Qamarina et al., 2023](#)), ([Ansari et al., 2023](#)). Current results were more than what was reported in ([Ganga et al., 2014](#)). As they reached average knowledge (48%), it was much lower than that of ([Rafati et al., 2021](#)), where the average knowledge rate reached (87%). The results were different from a study conducted in Egypt, where the percentage of poor knowledge was about 91%, which is much higher than our research ([Mohammed et al., 2018](#)), and ([Yurlmaz et al., 2020](#)) research reported poor knowledge as the highest percentage of its participants.

Knowledge regarding acne among adolescents inconsistent in different studies due to several influencing factors. Most notable are the cultural and social differences that affect individuals' perceptions of skin health and skin care methods. Furthermore, the sources of information adolescents rely on vary from one environment to another. Some may rely on reliable medical sources such as doctors or school awareness programs, others rely on social media or peers, leading to disparities in knowledge levels. Additionally, the level of education and health literacy is an important factor, as schools that offer effective awareness programs contribute to raising awareness among students. The age group and educational level of adolescents may also influence their level of knowledge. Finally, differences in research tools and methods used, such as questionnaire design or data analysis methods, may also contribute to disparities in results between studies.

The overall attitude score in current study was (26.32 ± 4.15), Based on this score, most of the participants had neutral attitude (66%), which is close to the results of this research (Rafati et al., 2021). The results of our study are inconsistent with (Alnafisah et al., 2022), (Lal et al., 2021), where the attitudes of their participants were poor.

The results of adolescents' attitudes toward acne vary across studies and research due to a number of influencing factors. The most important of these factors are differences in social and cultural environments that shape individuals' perceptions of appearance and the importance of skin care, which in turn influences their attitudes toward acne. Also, adolescents' personal experiences vary, such as the severity of the condition and its impact on self-confidence. Some may treat acne as a normal condition associated with adolescence, while others may feel anxious or embarrassed as a result. In addition, family, social media, and the surrounding community play a significant role in shaping attitudes, as some cultures promote the ideal image of clear skin, which increases psychological stress. Research methods

also differ among studies, in terms of the nature of the questions and the methods for measuring attitudes, leading to variability in results. Finally, the level of awareness and knowledge related to acne also influences attitudes. The greater the knowledge, the more positive and realistic the attitude toward the condition

Overall Practice score(3.82 ± 1.85) in current study the practice was poor for the majority of female students, and these results were close to what this research reported (Perveen et al., 2023), (Lal et al., 2021), (Hulmani et al., 2017). While the results of this research conflict with current results, practices were good, (Ansari et al., 2023).

The results of studies on adolescents' practices regarding acne vary due to several influential factors. The most prominent of these are cultural and social differences between societies, which play a significant role in individuals' attitudes toward treatment, whether medical or traditional. Furthermore, the varying levels of knowledge and health awareness among adolescents are a key factor affecting the nature of practices, as the use of appropriate treatments increases in environments with high health literacy. Additionally, differences in the research tools used in studies, such as the type of questionnaires or data collection methods, may lead to discrepancies in results. The impact of economic factors, which may limit some individuals' ability to access appropriate healthcare, cannot be overlooked, as can the influence of the media and social networking sites, which sometimes promote scientifically unproven products or practices. All of these factors combined contribute to explaining the marked variation in research findings related to adolescents' practices regarding acne.

Analysis of the data of the current study showed a statistically significant relationship between the level of knowledge and awareness and the educational level of the participants. The results also showed that the younger educational levels had better knowledge than the rest of the educational levels. In another study, similar

results were also indicated (Albahlool et al., 2017). However, current results did not align with what this research reported (Israel et al., 2022).

Analysis of current data showed a statistically significant relationship between the age of the participants and the level of knowledge. It was noted that those under 18 years of age were more aware and knowledgeable about acne, this is explained by the fact that younger teenagers have more knowledge about acne due to several factors: awareness in some schools, trying to obtain information more than others because their interest in their external appearance in this age group is high and they are influenced by some of their friends and perhaps they have enough time to research and learn about the subject. This study contradicts current results, as it denied the existence of a statistical relationship between them within its results (Hulmani et al., 2017). Research results vary due to several factors, such as hormonal changes and educational level, personal experience with acne, social awareness of appearance, and exposure to diverse information sources also contribute to older adults' greater knowledge than younger adults.

Current study concluded that participants who reported experiencing acne had significantly higher average knowledge scores. This finding may be due to the fact that those with acne research their condition and seek information from various sources. These studies support our findings (Hulmani et al., 2017), (Luqman et al., 2020) .

Current data showed that the average attitude scores of females under the age of 18 were significantly lower than those of older participants. This statistical relationship can be explained by the fact that an individual's perception of acne is affected by several factors, including age, younger adolescents, with a number of them expressing feelings of anxiety, embarrassment, low self-confidence and socially rejected due to their skin appearance. This is due to the sensitivity of this age group from a psychological and social perspective, as they are more affected by the

opinions of others and their social appearance. On the other hand, these attitudes may change with age and the acquisition of greater experience, or due to preoccupation with other factors that are more important at this stage, such as the academic future or more mature social relationships. These studies support our findings (Alnafisah et al., 2022), (de et al., 2024).

Our study results showed that the average score on acne-related health practices was higher among adolescent girls with acne than among those without acne. This suggests that acne patients were more likely to adhere to proper skincare practices than those without acne. This may be explained by the psychological and social impact of acne on adolescent girls, which leads them to seek solutions and experiment with various methods to improve the appearance of their skin. Current research results did not agree with the research that mentioned that acne sufferers have less healthy practices among its results (Perveen et al., 2023), (Luqman et al., 2020), (Hulmani et al., 2017).

The results of studies on acne-related practices among adolescents vary due to several factors. Prominent among these factors are cultural and social differences that influence the quality of health and beauty practices followed, in addition to the diversity of information sources adolescents rely on, whether from the internet, friends, family, or doctors. Awareness and knowledge also play a pivotal role in determining individuals' behaviors toward acne, with some studies showing that higher levels of health literacy are associated with healthier and more effective practices. Furthermore, the research tools and questionnaires used vary from one study to another, leading to discrepancies in results. The impact of psychological and personal factors, such as appearance concerns or low self-esteem, cannot be overlooked, as these may push some adolescents to adopt unhealthy or excessive practices. Finally, the availability and accessibility of health services are a factor influencing the quality of practices adolescents follow when dealing with acne.

Limitations of the study:

A limitation of this study is that it was conducted in only one city. The students' self-response to the questionnaire and the type of study. Additionally, the focus on adolescent girls may limit the generalizability of the findings to other populations or regions.

Despite this limitation, this study makes an important contribution by offering insights into adolescent girls' knowledge, attitudes, and practices. It also assesses their level of knowledge, attitudes, and practices and identifies the variables that influence this level. Moreover highlights the role of educational and awareness programs. Overall, the study provides information to improve the knowledge of this important age group and enhance their therapeutic practices.

Chapter Five

Conclusions and

Recommendations

Conclusions:

- As indicated by this study, most participants were found to have average levels of knowledge (59%) ,good knowledge (18%), poor knowledge (22%), neutral attitudes(66%), and poor practices (34%) .
- Although the level of knowledge in this study was average, many myths are widespread among students , such as type of food, and most participants also indicated that it is a contagious disease.
- Despite their prevalence and good response to treatment they are a major cause of depression among patients.
- Most female students rely on social media as a source of information.

Recommendations:

- School health professionals are involved in acne education programs, given their ongoing interaction with students. This would enhance teens' knowledge and improve their attitudes toward effective acne management.
- It is necessary to formulate an awareness program to improve knowledge, attitudes, and practices related to acne among adolescents, address identified gaps in understanding, and promote better treatment practices influenced by educational, financial, and cultural factors.
- Focus on the importance of social media in combating misinformation and spreading health awareness.

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Appendices

Appendices 1:

**Questionnaire on Knowledge, Attitude and Practices about Acne
Vulgaris among secondary school female students in Kerbala City center
2024.**

Dear Student, We are conducting a study on acne vulgaris to assess students' knowledge, attitudes, and practices regarding this condition. This study will help us understand the information needs of our participants and enhance future awareness and educational programs among this age group to reduce and eliminate their physical and psychological effects. Your name will not be printed on this form. We greatly appreciate your assistance in completing this survey.

1. Questionnaire Number :

2. Interview place:

3. Educational level:

4. Age:

5. Weight:

6. Height

7. Residence: Urban

Rural

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8. Economic Status:

Weak

Average

Good

9. Fathers' education:

Not read and write

Primary education

Secondary education

College and higher

10. Mothers' education:

Not read and write

Primary education

Secondary education

College and higher

11. Do you suffer from acne vulgaris?

No	<input type="text"/>
----	----------------------

Yes	<input type="text"/>
-----	----------------------

12. You have or ever had any of the skin diseases?

No	<input type="text"/>
----	----------------------

Yes	<input type="text"/>
-----	----------------------

What is it please?	<input type="text"/>
--------------------	----------------------

13. Do you have a family member who has acne now or previously?

No	<input type="text"/>
----	----------------------

Yes	<input type="text"/>
-----	----------------------

14. Do you suffer from stress due to any reason (daily life, studying ...etc)?

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No	
----	--

Yes	
-----	--

15. Is your menstrual cycle regular?

No	
----	--

Yes	
-----	--

16. What Sources of information about acne?

		Doctor		A family member		friend
		Pharmacy		Social media		Other, please specify

Knowledge about Acne Vulgaris among secondary school female in Kerbala City 2024

Knowledge about causes and aggravating factors in study subjects.

Factors :	Yes	No	Don't know
1.Do you think that eating spicy food causes acne?			
2.Do you think eating fatty foods not causes acne ?			
3.Do you think oily skin helps acne appear?			
4.Does popping and squeezing pimples worsen the condition and increase the appearance of pimples?			
5.Do you think that cleaning the skin using traditional methods increases the appearance of pimples?			
6.Does using cosmetics help acne break out?			

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7.Is lack and poor personal hygiene related to the appearance of acne?			
8.Do you think that hormonal imbalance causes acne?			
9.Acne is considered a contagious disease.			
10.Is acne a hereditary disease?			
11.Is acne seasonal and affected by the change of seasons?			
12.Is the appearance of acne related to or affected by the menstrual cycle?			
13.Does acne cause serious scarring if left untreated?			
14.Is it possible to treat acne?			
15.Do you think that psychological stress and tension increase the appearance of acne?			
16.Does acne appear only on the face?			

Attitude about Acne Vulgaris among secondary school female in Kerbala City 2024

Attitude questions	Agree	Neutral	Disagree
1. Avoiding fast food and oily foods an important preventive measure to control acne.			
2. If you wash your face frequently, you are less likely to get acne.			
3. If you suffer from acne, this will affect your personality.			
4. Stress and anxiety caused or worsened your acne.			
5. Cosmetics and makeup cause you to have acne.			

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6. Self-medication is part of personal skin care.			
7. Offering advice on some acne treatments to your friend or family member			
8. Consulting a doctor important to treat acne.			
9. It is necessary to follow up the acne condition with the doctor during the treatment period.			
10. Acne, if present, can negatively affect the way you interact with others.			
11. You feel depressed when acne appears.			
12. Feel embarrassed by your family and friends because of pimples on your face.			

Practice about Acne Vulgaris among secondary school female in Kerbala City 2024

Practice questions	Yes	No	Don't know
1. Did you consult a doctor the last time you had it?			
2. Do you use medications if you suffer from it without consulting a doctor?			
3. Do antibiotic drugs have an important role in treating acne vulgaris if you have it?			
4. Do you follow a healthy diet to avoid acne breakouts?			
5. Does reducing your weight contribute to reducing the appearance of acne if you suffer from it?			
6. Do you prefer traditional treatments to control acne if it appears?			
7. Do you use cosmetics to hide pimples and acne if they appear?			
8. If pimples appear, do you squeezing and removing them?			

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9. Do you prefer to use herbs to treat pimples and acne?			
10. Do you wash your face with facial cleansing products regularly?			
11. Have you taken any preventive measures to control acne and prevent its reappearance? If the answer is yes, please mention it (...)			

We have completed our interview. Thank you for your cooperation and patience.

Appendices 2:

استبيان حول المعارف والمواقف والممارسات حول حب الشباب الشائع بين طالبات المدارس الثانوية في مدينة كربلاء 2024.

عزيزتي الطالبة نحن نجري بحثاً حول حب الشباب الشائع من أجل تقييم معرفة الطالبات ومواقفهن وممارساتهن فيما يتعلق بهذا المرض. سيساعدنا هذا البحث على فهم الاحتياجات المعلوماتية للمشاركات من أجل زيادة البرامج التوعوية والتنقيفية مستقبلاً بين هذه الفئة

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العمرية بغرض تقليل والقضاء على آثارهم الجسدية والنفسية. لن يتم كتابة اسمك في هذا النموذج. نحن نقدر بشدة مساعدتكم في الرد على هذا الاستبيان .

1. رقم الإستبيان :

2. مكان إجراء المقابلة (أسم المدرسه):

3.المرحلة الدراسي

4.العمر:

5.الوزن:

6.الطول

7.مكان الاقامه : المدينه

الريف

8.الحاله الماديه : جيده () متوسطه () ضعيفه ()

9.المستوى التعليمي للأب

التعليم الابتدائي	لا يقرأ ولا يكتب
الكلية او الدراسات العليا	التعليم الثانوي
التعليم الابتدائي	لا تقرأ ولا تكتب
الكلية او الدراسات العليا	التعليم الثانوي

10.المستوى التعليمي للأم

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11. هل اصيبت بحب الشباب ؟ نعم

لا

12. هل لديك أمراض جلديه اخرى ؟ (أذكرها ان وجدت) : نعم

--

لا

--

13. هل لديك أحد من أفراد العائلة لديه حب الشباب الان او سابقا ؟ نعم () لا ()

14. هل تعاني من التوتر لأي سبب من الأسباب (الحياة اليومية، الدراسة..الخ) ؟

نعم أعاني من التوتر () السبب لطفاً ()

لا أعاني من التوتر ()

15. هل الدورة الشهرية لديك منتظمة؟ نعم ... ()

غير منتظمة ... ()

16. من أين تحصلين على النصائح والمعلومات بخصوص حب الشباب (يمكنك إختيار أكثر من إجابة) :

طبيب الصيدليه	أحد أفراد العائلة	صديق	
وسائل التواصل الاجتماعي	أخرى حددتها لطفاً		

استبيان حول المعارف بمرض حب الشباب الشائع لدى طالبات المرحلة الثانوية في مدينة كربلاء 2024

لا أعرف	لا	نعم	
			هل تعتقدين ان تناول الحلويات والاكل الحار يسبب حب الشباب؟
			هل تعتقدين ان تناول الاطعمه الدهنيه والزيتيه لايسبب حب الشباب؟
			هل تعتقدين ان البشره الزيتيه والدهنيه تساعد على ظهور حب الشباب؟
			هل يؤدي فقع الحبوب والضغط عليها الى تفاقم حاله وزيادة ظهور الحبوب؟
			هل تعتقدين ان تنظيف البشره بلطرق التقليديه في المنزل وصالون التجميل يزيد من ظهور حب الشباب؟
			هل استخدام مستحضرات التجميل يساعد على ظهور حب الشباب؟
			هل قلّه وسوءالنظافه الشخصيه لهاعلاقه في ظهور حب الشباب؟
			هل تعتقدين ان الخلل الهرموني يسبب حب الشباب؟
			هل حب الشباب يعتبر عدوى؟
			هل حب الشباب مرض وراثي؟
			هل حب الشباب معدي؟
			هل يعتبر ظهور حب الشباب موسمي يتأثر بتغيير فصول السنه؟
			هل ظهور حب الشباب له علاقة (يتأثر) بفترة الدورة الشهرية؟
			هل يمكن أن يسبب حب الشباب ندبات خطيرة في الوجه إذا ترك دون علاج؟

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			هل من الممكن علاج حب الشباب الشائع؟
			هل تعتقد ان التوتر النفسي والاجهاد يزيد من ظهور حب الشباب؟
			هل الوجه هو اكثر الاماكن التي يظهر فيها حب الشباب لدى الطالبات؟

استبيان حول المواقف نحو حب الشباب الشائع لدى طالبات المرحلة الثانوية في مدينة كربلاء 2024

لا أوافق	محايدة	وافق	
			هل تجنب الأطعمة السريعة والأطعمة الزيتية من الإجراءات الوقائية المهمة للسيطرة على حب الشباب؟
			إذا كنتي تغسلين وجهك بانتظام هل تقل احتمالية الإصابة بحب الشباب الشائع؟
			إذا كنتي تعانين من حب الشباب فهل يؤثر ذلك على شخصيتك؟
			هل التوتر والقلق ادى الى ظهور او زياده تفاقم حب الشباب لديك؟
			هل مساحيق التجميل والمكياج سببت لكي ظهور حب الشباب؟
			هل تعتمدين على العلاج الذاتي ك جزء من الرعاية الذاتية لك؟ (العلاج الذاتي الاستهلاك الذاتي للدواء دون الحصول على استشارة الطبيب سواء في التشخيص أو العلاج.)
			هل تقدمين المشورة والنصيحة لبعض علاجات حب الشباب لصديقاتك او احد افراد الاسره
			هل استشارة الطبيب مهمة لعلاج حب الشباب؟
			هل من الضروري متابعة حاله حب الشباب مع الطبيب خلال فترة العلاج؟ إذا كانت الإجابة بنعم لماذا(.....)
			هل تعتقدين أن حب الشباب في حال وجوده يمكن أن يؤثر سلباً على طريقة تعاملك مع الآخرين؟
			هل تشعرين بالاكئاب عند ظهور حب الشباب؟
			هل تشعرين بالحرج من الأهل والأصدقاء بسبب البثور إذا كانت موجودة في وجهك؟

استبيان حول الممارسات نحو حب الشباب الشائع لدى طالبات المرحلة الثانوية في مدينة كربلاء 2024

لا أعرف	لا	نعم	
			هل استشرتي الطبيب في المرة الأخيرة عندما أصبت بحب الشباب؟ أو إذا كنت تعانين من حب الشباب في أي وقت؟
			هل تستخدمين الأدوية العلاجية إذا كنت تعاني من حب الشباب؟ دون استشارة طبيب
			هل الأدوية المضادة للالتهابات لها دورًا مهمًا في علاج حب الشباب الشائع اذا كان لديك؟
			هل تتبعين نظامًا غذائيًا صحيًا لتجنب ظهور حب الشباب؟
			هل تقليل وزنك يساهم بتقليل ظهور حب الشباب اذا كنتي تعانين منه؟
			هل تفضلين العلاجات الطبيعية (المواد المنزلية التقليدية) للسيطرة على حب الشباب اذا ظهر لديك؟
			هل تستخدمين مستحضرات التجميل لإخفاء البثور وحب الشباب إذا كنت تعانين منها؟
			في حالة ظهور البثور لديك، هل تتجنبين عصرها أو إزالتها؟
			هل تفضلين استخدام الأعشاب لعلاج البثور وحب الشباب؟

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			هل تقومين بغسل وجهك بمنتجات تنظيف الوجه بانتظام؟
			هل اتخذتي أي إجراءات وقائية للسيطرة على حب الشباب وعدم ظهوره؟ إذا كانت الإجابة بنعم اذكرها من فضلك(.....)

لقد انتهينا من مقابلتنا. شكرا لكي على حسن تعاونك وصبرك معنا .

Appendices 3:

University of Kerbala
College of Medicine
Medical Research Bioethical Committee
No: 24-20
Date: 23/4/2024



ETHICAL APPROVAL LETTER

Nabaa Murtadha Abed
Family & Community Medicine dept. \ College of Medicine \ University of
Kerbala

Title of Project: "Knowledge, Attitude and Practices about Acne Vulgaris among secondary school female students in Kerbala City center 2024"

This is to certify that proposal provided have satisfactorily addressed the research bioethical guidelines.

Please consider the following requirements of approval:

1. Approval will be valid for one year. By the end of this period, if the project has been completed, abandoned, altered, discontinued or not commenced for any reason, you are required to announce to the Committee. And you should inform the committee if the study extends over one year.
2. You must notify the Committee immediately in the event of any adverse effects on participants or of any unforeseen events that might affect continued ethical acceptability of the project.
3. All participants must be informed about the research issue and objective, taking their consent to participate. Always consider the confidentiality of personal information and/or opinions, and they must never be obligated to participate and explaining the value and benefits of their participation.
4. At all times you are responsible for the ethical conduct of your research in accordance with the standard bioethical guidelines. In agreement with WMA Declaration of Helsinki – Ethical Principles for Medical Research Involving Human Participants.
5. The Committee should be notified if you will be applying for or have applied for internal or external funding for the above project.
6. This document does not compensate administrative or ethical approval might be required from directorate of Education in Karbala or other bodies

Professor Dr. Ali A. Abutiheen
Chair, Medical Research Bioethical Committee
College of Medicine – University of Kerbala

Appendices 4:

Republic of Iraq
Ministry of Education
Directorate General of Education
in Holy Karbala Province

جمهورية العراق
وزارة التربية
المديرية العامة للتربية
في محافظة كربلاء المقدسة
قسم الاعداد والتدريب/البحوث والدراسات

العدد / التاريخ
٢٠٢٤ /

الى / إدارات المدارس الإعدادية للبنات في مركز المحافظة
م/ تسهيل مهمة

تحية طيبة....
إشارة الى كتاب جامعة كربلاء/كلية الطب ذي العدد د/٤٩٨/٦ في ٢٥/١/٢٠٢٤
يرجى تسهيل مهمة طالبة الدراسات العليا /دبلوم عالي /طب الاسرة (نبأ مرتضى عيد) لغرض اتجاز
متطلبات بحثها الموسوم (knowledge ,attitude and practices about acne vulgaris among secondary school female students in kerbla city center,2024)
على ان تتضمن متطلبات البحث القيام بأي معالجة او فحص طبي والاكتفاء بملئ الاستبانة المطلوبة فقط.
خدمة للعلم والمعرفة مع التقدير.

د. علي حسين محمد
ع / المدير العام
٢٠٢٤/٢/١٢

بموجبها
بنات في مركز المحافظة

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العنوان / كربلاء المقدسة - حي الاسكان - تقاطع الاصلاح

نسخة منه الى :-
• مكتب السيد المدير العام/ للتفضل بالعلم.....مع التقدير.
• السيد معاون الاداري/ للتفضل بالعلم.....مع التقدير.
• السيد معاون الفني/ للتفضل بالعلم.....مع التقدير.
• قسم التخطيط التربوي/ لنفس الغرض اعلاه.....مع التقدير.
• قسم الاعداد والتدريب / شعبة البحوث والدراسات/ ب ٢ نسخ مع المرفق.
• الملفة العامة.

الملخص:

الخلفية:

يُعد حب الشباب (Acne vulgaris) من أكثر الأمراض الجلدية شيوعاً بين المراهقين والشباب, إذ يؤثر بشكل كبير على المظهر الخارجي والصحة النفسية للمصابين به. يُعد المراهقون, وخاصة طلاب المدارس الثانوية, أكثر عرضة لهذه المشكلة نظراً للتغيرات الهرمونية والنفسية التي يمرون بها خلال هذه المرحلة الحرجة من حياتهم. وهناك العديد من الخرافات والمفاهيم الخاطئة بين المراهقين حول أسباب حب الشباب وعلاجه. يُعد تحليل مستويات المعرفة والمواقف والممارسات المتعلقة بحب الشباب أمراً ضرورياً لتطوير استراتيجيات تثقيف صحي فعالة.

الأهداف:

هدفت الدراسة إلى تقييم معارف ومواقف وممارسات الطالبات المراهقات تجاه حب الشباب في المدارس الثانوية .

الطريقة:

أُجريت دراسة مقطعية على 400 طالبة في المدارس الثانوية في محافظة كربلاء للفترة من أبريل 2024 إلى نوفمبر 2024. شملت الدراسة طالبات تراوحت أعمارهن بين (15 و19) عاماً, وكان متوسط أعمارهن (1.1 ± 87.16) عاماً.

النتائج:

أفادت حوالي (61%) من المشاركات في الدراسة بأنهن يعانين من حب الشباب. أظهرت الدراسة أن (18.5%) من إجمالي المشاركين لديهم معرفة جيدة, و(59.2%) لديهم معرفة متوسطة, و(22.3%) لديهم معرفة ضعيفة. أظهرت غالبية الطالبات المشمولات في الدراسة موقفاً محايداً وممارسات ضعيفة تجاه حب الشباب. أشارت الدراسة إلى وجود علاقة ذات دلالة إحصائية بين متوسط درجة المعرفة والعمر, وعلاقة ذات دلالة إحصائية بين متوسط درجة المعرفة والمستوى التعليمي, وعلاقة ذات دلالة إحصائية بين متوسط درجة المعرفة وتاريخ حب الشباب بين المشاركات. كما أشارت إلى وجود علاقة ذات دلالة

إحصائية بين متوسط درجة الموقف والعمر. وأخيرًا, أشارت النتائج إلى وجود علاقة ذات دلالة إحصائية بين متوسط درجة الممارسات وتاريخ حب الشباب.

الخلاصة:

كشفت نتائج الدراسة عن مستويات معتدلة من المعرفة والمواقف الإيجابية, ولكن ممارسات إدارة حب الشباب ضعيفة بين طلاب المدارس الثانوية. تؤكد هذه النتائج على الحاجة إلى برامج تعليمية شاملة لتعزيز فهم الطلاب وتشجيع ممارسات إدارة حب الشباب القائمة على الأدلة.