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Original Research Article

ACNE AWARENESS AND PERCEPTION AMONG THE GENERAL POPULATION

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ABSTRACT

Background: Acne is one of the most common dermatological conditions worldwide and affects individuals across different age groups. Despite its high prevalence, misconceptions regarding its causes, prevention, and treatment remain common. Inadequate knowledge and inappropriate perceptions may influence treatment-seeking behavior and the use of recommended therapies. The objective is to assess the level of awareness and perceptions regarding acne among the general population.

Materials and Methods: Study Design is cross-sectional study. This study was conducted at Primary Health Care Corporation Doha, Qatar from June 2025 to June 2026. Methodology is after obtaining the required approval, participants were invited to complete a self-administered questionnaire. The questionnaire collected information regarding demographic characteristics, perceived causes and aggravating factors of acne, knowledge about its prevention and treatment, expectations regarding treatment outcomes, and its psychosocial impact. Individuals aged 18 years and above were included in the study. The collected data were analyzed using the Statistical Package for the Social Sciences (SPSS).

Results: A total of 296 participants completed the survey. Among them, 66.2% reported that they were suffering from acne. Females constituted 53.7% of the participants, while males accounted for 46.3%. Diet was the most commonly perceived cause of acne (29.7%), followed by bacteria (22.1%) and poor hygiene (13.9%). However, 27.2% of participants reported that they did not know the cause of acne. Stress was identified as the most commonly perceived aggravating factor (56.8%), followed by certain foods (35.9%). Approximately 56.7% of participants believed that frequent facial washing could help control acne, while 64.8% considered acne to be curable. More than half of the participants (55.4%) perceived acne as a serious health problem, and 78.3% believed that acne could lead to depression.

Conclusion: The study demonstrated significant gaps in public awareness and perceptions regarding acne, particularly concerning its causes, prevention, and treatment. These findings highlight the need for appropriate health education and awareness programs to improve understanding of acne and promote appropriate treatment-seeking behavior.

Keywords: Acne vulgaris; Awareness; Perception; General population; Knowledge; Dermatological diseases.

INTRODUCTION

Acne is one of the most common dermatological conditions worldwide and is associated with significant physical and psychological consequences for affected individuals.[1] Despite its high prevalence, misconceptions regarding the causes, aggravating factors, prevention, and treatment of acne remain common among the general population.[2]

Previous studies have demonstrated considerable gaps in knowledge and misconceptions regarding

acne, particularly among adolescents. One study reported that many adolescents believed that frequent facial washing could improve acne and did not consider factors such as gender, body weight, dairy product consumption, and physical activity to have an influence on acne. In contrast, consumption of fatty and sugary foods, smoking, sweating, manipulation or squeezing of lesions, use of cosmetics, pollution, and menstruation were commonly perceived as factors that could worsen acne.[3] Furthermore, 80.8% of participants did not consider acne to be a disease and regarded it as a normal stage of growth. However, 69.3% of female participants believed that acne should be treated, at least in certain circumstances.[3]

Studies conducted in different geographical regions have reported similar findings, demonstrating limited knowledge regarding the causes, prevention, and potential complications of acne, even in populations where the condition is highly prevalent.[4] Furthermore, research suggests that misconceptions and perceptions regarding acne in developing countries may be comparable to those observed in more developed societies.[5]

Given the high prevalence of acne and its potential psychological and social impact, adequate public awareness is important for promoting appropriate preventive measures, treatment-seeking behavior, and adherence to evidence-based management. Therefore, the present study was conducted to assess the level of awareness and perceptions regarding acne among the general population and to identify areas where community-based health education and awareness may be needed.

MATERIALS AND METHODS

This cross-sectional study was conducted to assess awareness and perceptions regarding acne among the general population. Participants were invited to complete a self-administered questionnaire after providing verbal informed consent. The questionnaire consisted of questions regarding demographic characteristics, knowledge of the causes and development of acne, perceived aggravating factors, treatment methods, preventive measures, prognosis, and the psychosocial impact of acne.

Individuals aged 17 years and above were eligible for participation. Participants were recruited from students enrolled at academic institutions, teachers working at schools, and individuals attending hospital outpatient clinics.

Exclusion Criteria

Individuals younger than 17 years of age and those who declined to provide informed consent were excluded from the study.

A total of 296 participants were enrolled in the study. The collected data were entered and analyzed using the Statistical Package for the Social Sciences (SPSS). Categorical variables were presented as frequencies and percentages.

RESULTS

A total of 296 questionnaires were completed and used in the analysis. Of those respondents, 66.2% reported having acne. Males accounted for 46.3% of the sample and females for 53.7%. When asked if they considered acne a serious health issue, 55.4% said yes. Most respondents, 76.7%, were aged between 17 and 25. The remaining 23.3% were above 25 years of age. [Table 1] shows the demographic characteristics of the study participants.

Opinion about the causes of acne: Diet was the most commonly named cause of acne, reported by 29.7% of respondents. Bacteria was named next by 22.1%, followed by poor hygiene at 13.9%. A total of 27.2% said they did not know what causes acne. Among less common responses, 4.0% thought a virus was the cause and 3.1% linked acne to sexual desire. A large majority of 86.7% agreed that hormones have an effect on acne development. About 54.3% believed that acne blackheads form inside the skin pores. [Table 2] shows the distribution of perceived causes and aggravating factors.

Opinion about what makes acne worse: Stress was the most commonly mentioned factor for worsening acne. It was cited by 56.8% of participants. Certain types of food were named by 35.9%. Fizzy drinks were blamed by 6.5% of the respondents. Computer screen exposure was believed to worsen acne by 3.4% of the sample.

Table 1: Demographic Characteristics of Study Participants (n=296)

Characteristic	n	%
Gender		
Male	137	46.3
Female	159	53.7
Age Group		
17-25 years	227	76.7
Above 25 years	69	23.3
History of Acne		
Yes	196	66.2
No	100	33.8
Acne as a Serious Health Problem		
Yes	164	55.4
No	132	44.6

Table 2: Perceived Causes and Aggravating Factors of Acne

Variable	n	%
Perceived Cause of Acne		
Diet	88	29.7
Bacteria	65	22.1
Poor hygiene	41	13.9
Unknown	81	27.2
Virus	12	4.0
Sexual desire	9	3.1
Aggravating Factors (multiple responses)		
Stress	168	56.8
Certain foods	106	35.9
Fizzy drinks	19	6.5
Computer screens	10	3.4
Other Beliefs		
Hormones affect acne (Yes)	257	86.7
Blackheads form in pores (Yes)	161	54.3

*Aggravating factors allowed multiple responses; percentages do not sum to 100.

The perception and attitudes about acne care and treatment: A total of 59.8% agreed that some acne medications can make the condition worse before it improves. When it came to how to treat acne, 44.6% believed the best approach was to apply medication directly on each pimple. A total of 34.5% said they did not know the best way to treat it. Most respondents, 56.7%, believed that washing the face more often would help with acne. A total of 25.9% did not agree with this belief. Treating acne was thought to prevent scarring by 63.4% of participants. On the question of whether acne can be cured, 64.8% said yes and 11.1% said no. Only 9.7% felt that squeezing or picking pimples was helpful. The majority, 78.4%, did not agree with this. A total of 87.2% of all respondents said they would benefit from more information about acne.

The psychological impact of acne as thought by the participants: The most frequently mentioned psychological effect of acne was depression. According to the research, 78.3% of respondents reported suffering from depression complaints. The number was more significant among respondents aged between 17 and 25 years, reaching over 81.6%. In the case of respondents older than 25 years, the percentage was lower: 69.2%. A total of 73.2% of respondents believed that acne negatively affects social relationships. About 54.1% also thought it has an impact on marriage. Suicidal attempts were seen as a potential outcome of acne by 15.6% of respondents. The majority, 59.7%, disagreed with this view. Among respondents aged 17 to 25, 21.8% believed acne could lead to suicidal attempts. This was considerably higher than the 5.6% seen in those above 25 years of age. Table 3 summarizes the treatment perceptions and psychological impact findings.

Table 3: Treatment Perceptions and Psychological Impact of Acne (n=296)

Variable	n	%
Treatment Perceptions		
Medications may worsen acne initially (Agree)	177	59.8
Best approach: apply on individual pimples	132	44.6
Best approach: do not know	102	34.5
Frequent washing helps acne (Agree)	168	56.7
Frequent washing helps acne (Disagree)	77	25.9
Treatment prevents scarring (Yes)	188	63.4
Acne is curable (Yes)	192	64.8
Acne is curable (No)	33	11.1
Squeezing pimples is helpful (Yes)	29	9.7
Squeezing pimples is helpful (No)	232	78.4
Would like more information about acne (Yes)	258	87.2
Psychological Impact		
Depression as a consequence (Overall)	232	78.3
Depression - Age 17-25 years	185	81.6*
Depression - Age above 25 years	48	69.2*
Acne affects social relationships (Yes)	217	73.2
Acne affects marriage (Yes)	160	54.1
Suicidal attempts as possible outcome (Yes)	46	15.6
Suicidal attempts - Age 17-25 years	--	21.8*
Suicidal attempts - Age above 25 years	--	5.6*

*Percentage calculated within the respective age group.

DISCUSSION

Acne is one of the most common dermatological conditions worldwide; however, knowledge regarding its causes, prevention, and treatment remains inadequate in many communities, and misconceptions are widespread.[1] Adequate knowledge about a disease may improve treatment-

seeking behavior, adherence to treatment, and overall disease management.[2] The present study assessed awareness and perceptions regarding acne among the study population. Overall, the findings were consistent with observations reported in previous studies conducted in different settings.[12,13]

In the present study, 87.2% of participants expressed a desire to receive more information about acne, indicating a substantial perceived need for additional health education. Furthermore, 55.4% of participants considered acne to be a serious health problem. Previous studies have reported similar findings. In one study, the majority of participants did not consider acne to be a medical condition, and some individuals therefore sought advice or treatment from beauticians and cosmetic salons rather than dermatologists.[2] Another study reported that both patients and physicians tended to underestimate the clinical importance of acne and emphasized the need for improved education among both patients and healthcare professionals.[6] These findings highlight the importance of improving public understanding of acne as a medical condition requiring appropriate assessment and management.

In our study, diet was the most commonly perceived cause of acne (29.7%), followed by bacteria (22.1%) and poor hygiene (13.9%), while 27.2% of participants reported that they did not know the cause of acne. Stress was the most frequently perceived aggravating factor (56.8%), followed by certain foods (35.9%). These findings are broadly consistent with previous studies reporting that diet, stress, hormonal factors, and infection are commonly perceived causes or aggravating factors of acne.[14,15] Similar misconceptions have also been reported regarding the role of frequent facial washing and sun exposure in improving acne.[7] These findings demonstrate that although some participants had an understanding of potential factors associated with acne, considerable misconceptions remained.

The study also identified gaps in knowledge regarding acne treatment. More than half of the participants (56.7%) believed that frequent facial washing could improve acne, while 64.8% considered acne to be curable. In a previous study, only 49% of participants believed that acne could be cured.[8] Most participants in that study also expected remission within six months. Differences between the findings of the present study and previous research may reflect variations in access to health information, cultural beliefs, educational levels, and healthcare practices across different populations.[16,17] The high proportion of participants who expressed a desire for additional information in our study further supports the need for accessible and evidence-based public education regarding acne management.

The psychological and social consequences of acne were also explored in the present study. Younger participants aged 17–25 years were more likely to perceive acne as being associated with depression and suicidal attempts than participants older than 25 years. This may reflect the greater importance placed on appearance, self-image, and social acceptance during adolescence and young adulthood.[18,19] In our study, 78.3% of participants believed that acne could lead to depression, while 73.2% believed that acne could negatively affect social relationships and 54.1% believed that it could affect marriage. However, these figures represent participants' perceptions regarding the possible psychological and social consequences of acne and should not be interpreted as evidence that these participants themselves experienced depression or suicidal behavior.

Overall, 15.6% of participants believed that acne could lead to suicidal attempts. This perception was more common among participants aged 17–25 years (21.8%) than among those older than 25 years (5.6%). Previous studies have also reported an association between acne and reduced self-confidence, social difficulties, and concerns regarding marriage.[2,20] However, findings have not been consistent across all populations. Other studies have reported that most participants experienced little impact of acne on their social lives,[9] while another study found that only a small proportion of respondents reported substantial effects on friendships, family relationships, or school performance.[10] Such differences may be explained by variations in cultural background, social expectations, disease severity, age, and individual coping mechanisms.

Previous research has also suggested that moderate acne may negatively influence social relationships among younger individuals, not only because of personal anxiety or concerns regarding appearance but also because of perceived or actual social prejudice related to the condition.[11] Therefore, the psychosocial burden of acne should not be overlooked, particularly among adolescents and young adults.

Taken together, the findings of the present study indicate that misconceptions regarding acne remain common, particularly concerning its causes, aggravating factors, treatment, and psychosocial consequences. The high proportion of participants who expressed a need for further information suggests an important opportunity for targeted health education. Improving public awareness through healthcare professionals, educational institutions, and reliable health information sources may help promote appropriate treatment-seeking behavior and reduce misconceptions regarding acne.

CONCLUSION

The present study demonstrated substantial gaps in public awareness and perceptions regarding acne, despite its high prevalence worldwide. Misconceptions were particularly evident regarding the causes, aggravating factors, treatment, and

potential psychosocial consequences of acne. The majority of participants expressed a desire to receive additional information about acne, suggesting a clear need for improved public education. Given the potential impact of acne on social relationships, self-image, and perceived psychological well-being, targeted health education initiatives are warranted to improve knowledge, correct misconceptions, and encourage appropriate treatment-seeking behavior.

Recommendations

1. Improve patient education: Healthcare professionals should provide clear and evidence-based information about the causes, aggravating factors, prevention, and treatment of acne during patient consultations.
2. Use educational materials: Simple, easy-to-understand educational leaflets, brochures, and posters can be made available in outpatient clinics, hospitals, schools, and other community settings.
3. Strengthen awareness among young people: Since the majority of participants were young adults, acne awareness programs should particularly target adolescents and young adults through schools, colleges, universities, and community-based initiatives.
4. Use digital platforms: Social media, educational videos, and other digital platforms should be used to provide reliable information about acne and to address common misconceptions. These approaches may be particularly effective among younger populations who frequently seek health-related information online.
5. Promote appropriate treatment-seeking behavior: Public awareness campaigns should emphasize that acne is a treatable dermatological condition and encourage individuals with persistent or significant acne to seek advice from qualified healthcare professionals rather than relying solely on cosmetic products or unverified remedies.

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