

Knowledge, attitude and practices about acne vulgaris among acne patients

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Abstract

Objective To assess the awareness, perceptions and practices towards acne vulgaris among acne patients.

Methods The cross-sectional study was conducted on 100 patients of acne vulgaris visiting Dermatology outpatient department of Bahawal Victoria Hospital, Bahawalpur.

Results In this study conducted on 100 patients, 72% were females and 28% were males. Out of 100 patients, only 10% were married. 30% belonged to rural areas and 70% had urban background. 53% of the participants having acne were students. Eighty-six (86%) had good knowledge and 14 (14%) had poor knowledge. Forty-eight percent participants were in favor of using traditional medicine on acne and 86% consulted doctor. Majority of patients 52% did not answer self-care questionnaire.

Conclusion The present study showed that patients suffering from acne had poor practice and unfavorable attitude inspite of good knowledge.

Key words

Acne vulgaris, knowledge, attitude, practice.

Introduction

Acne vulgaris is a chronic skin disorder that commonly affects the teenager population of the world. It is caused by blockage and/ or inflammation of pilosebaceous units. It can present as non-inflammatory lesions, inflammatory lesions or a mixture of both and later with significant scarring.¹ It is the most common condition occurring in adolescents. Globally, it ranks 8th in overall disease prevalence.² It nearly affects 85 percent of people aged 12-25 years.³ It commonly affects

the areas of skin with increased number of sebaceous follicles (e.g. face, upper chest, back). Studies involving twins have shown that acne is highly heritable; with genetic factors attributing 81 percent of the population variance.⁴ Apart from genetics, four other factors also play an important role in pathophysiology of acne that includes follicular epidermal hyper proliferation, increased sebum formation, colonization of follicles by Cutibacterium acnes (formerly known as propionibacterium acnes) and inflammatory responses.

Acne vulgaris is associated with many physiological co-morbidities in late adolescence e.g. depression, anxiety, diminished self-esteem, and in severe cases suicide. Studies have also shown that female patients are more likely to have emotional and behavioral problems than

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male patients. It has been observed that, the South Asian population tends to think that diet and poor hygiene play an important part in the pathogenesis of acne and tends to be self-treated through excessive scrubbing or face washing.⁵ A study conducted in Saudi Arabia on medical students showed that almost two third male students have poor knowledge about acne while more than 50% of female students have good knowledge of acne. Majority of students with acne have poor practice and unfavorable attitude towards acne.⁶ Since acne has been affiliated with many myths, misperceptions and multi-factorial causation, such patients' knowledge, attitudes and practices related to their skin condition are needed to establish through instructional programs and develop awareness of the accessibility of efficient therapy. To the best of our knowledge, no such study exists in our region that depicts the gravity of the situation. Thus, the current study was conducted to assess the knowledge, attitude and practices towards acne vulgaris among acne patients attending skin outpatient department in Bahawalpur.

Material and Methods

This was a cross-sectional study conducted during September to December, 2019 in outpatient department of Dermatology at Bahawal Victoria Hospital, Bahawalpur. Hundred patients having acne lesions were included in the study. Patients suffering from Acneiform drug eruptions were not included in the study. Also, the patients taking systemic steroids for various connective tissue diseases and dermatological diseases were not included in the study. Informed verbal consent was taken from the study participants. Data was collected through predesigned and pretested questionnaire.⁵ The questionnaire had two parts, the first consisted of a demographic portion and the second part comprised of questions regarding knowledge, attitude and practice

towards acne. Results were reported as frequencies and percentages. Data was entered and analyzed using SPSS 23.0. Confidentiality of results obtained was maintained.

Operational Definitions

Scoring for knowledge

Score < 8: Poor knowledge.

Score > 8: Good knowledge about acne vulgaris.

Yes: 1 ; No: 2

Ethical Considerations

We have taken care of the following ethical points throughout the conduct of the study. We have submitted our request for its Ethical Review from our institutional review committee and obtained informed consent for our study subject before administering the study Questionnaire. We gave autonomy to our study participants and taken care of that there should not be any harm during the conduct of the study, rather they were provided with some beneficial effect in the form of health education as awareness. There is no conflict of interest among the study authors and we have first take care of data confidentiality of the study and its important study results have been disseminated as our study results to the study participants. There was no need of any referral nor any drug used for the study participants, hence no any such harm or side effect nor need for any referral of the study subjects anywhere. The study cost was bear by the principal investigator as no any out source for its funding.

Results

In this study conducted on 100 patients with acne visiting dermatology outdoor of BVH, Bahawalpur, 72 (72%) were females. Majority

Table 1 Factors affecting total knowledge score about causes and aggravating factors.

Factors	Knowledge score		Total
	Poor	Good	
<i>Age group</i>			
15-20	7	57	64
21-25	3	23	26
26-30	1	3	4
31-35	2	2	4
>35	1	1	2
<i>Sex</i>			
Males	4	24 (33%)	28
Females	10	62 (67%)	72
<i>Education</i>			
Uneducated	4	9	13
Middle	8	7	15
Matric	2	53	55
Graduate	0	17	17
<i>Residence</i>			
Rural	10	12	22
Urban	4	74	78
<i>Marital status</i>			
Married	2	10	12
Unmarried	14	76	88

Table 2 Knowledge about causes and aggravating factors in study subjects.

Factors	Yes	No	Don't know
Oily skin	74	20	06
Seasonal Occurrence	54	38	08
Consuming spicy food*	52	40	08
Eating oily food*	64	28	08
Worsening by squeezing/picking/rubbing	62	32	06
Use of cosmetics	56	38	06
After facial/parlor treatment	30	66	04
Aggravated by stress	30	56	14
Associated with hormonal changes			
Associated with premenstrual flare	24	52	24
Aggravated in pregnancy	10	56	34
Common site - face	78	12	10

*indicates wrong answer

Table 3 Attitude of acne patients towards acne vulgaris.

Attitude variables	Yes	No	Don't know
<i>If you get acne lesions, what will you do?</i>			
Put traditional medicine	48	40	12
Consult doctor	86	10	4
Do nothing	28	62	4
Do you feel depressed when you get acne?	80	15	5

of them (64%) belonged to age group 15-20 years. Out of 100 patients of the study, only 10% were married. Thirty percent of the participants belonged to rural areas and 70 % had urban background. Regarding educational status, 53% of the participants having acne were students.

Assessment of knowledge about causes and aggravating factors among study participants showed that out of 100 participants 86 (86%) had good knowledge and 14 (14%) had poor knowledge (**Table 1**). Out of those 14 having poor knowledge about acne 7 (50%) belonged to age group 15-20 (**Table 1**). Out of 86 having good knowledge 66% was also of 15-20 years age group.

Seventy-four percent of the patients had knowledge that acne is caused by oily skin 54% related it to seasonal occurrence. Regarding knowledge about causes and aggravating factors, majority 52 (52%) of acne patients had misconception that consuming spicy food caused acne. Sixty-four percent of acne patients related acne to eating oily foods (**Table 2**). 62% said it is worsened by squeezing/picking and rubbing and 56% said that it is aggravated by stress. Seventy-eight percent of the acne patients reported common site of acne is face. (**Table 2**).

In my study, 48% of the participants were in favor of using traditional medicine on acne lesions (**Table 3**) and 86% were in favor of consulting a doctor/ dermatologist. Approximately, 12% did not answer the questions about what they would do when they get acne (**Table 3**). Eighty percent of the study participants feel depressed when they get acne (**Table 3**). Majority of participants (52%) did not answer the self care questionnaire (**Table 4**). Thirty six percent of the acne patients took over the counter medication and 18% of the participants reported to apply herbal medication on lesions (**Table 4**).

Table 4 Practice of acne patients towards acne vulgaris.

Practice variables	Yes	No
<i>Self-care</i>		
Face wash	46	52
Drinking water	68	32
Did you consult a dermatologist when you had acne last time?		
Do you take over the counter medication?	36	64
Do you apply herbal medication on the lesion?	18	82

Discussion

Acne is a very common skin condition that affects adolescents throughout the world. There are many factors causing this condition but increased excretion of sebum, the colonization of sebaceous ducts with propionibacterium acne leads to inflammation and causes acne. There are a lot of misconceptions about acne. There is still lack of knowledge among people regarding acne. In this study conducted on 100 acne patients to assess the knowledge of acne patients showed that out of 100 patients, 72% were females. These results were similar to a study conducted in Rawalpindi, Pakistan where 70% acne patients were females in contrast to a study conducted in India where equal numbers of both genders suffered from acne.⁷ Majority of the patients 64% were between 15-20 years of age which was similar to a study conducted in Rawalpindi, Pakistan where the mean age of patients was 21.2±1.9 years. This was in contrast to a study conducted in India where 44% of the acne patients were of age 15-19 years.⁵ Regarding educational status, it was found in our study that 53% of the patients were students and 17% of them were graduates and this was quite different from a study in India where 49% were graduates.⁵

Regarding assessment of knowledge about causes and aggravating factors of acne in our study, majority of the patients 74% considered oily food and 52% spicy food to be the cause of

acne which was nearly similar to a study in India where 70% believed oily food and 63% spicy food to be the cause of acne.⁵ This was in contrast to a study conducted in Saudi Arabia where 52% considered oily food and 30% spicy food to be responsible for acne⁸ and 80% reported chocolate to be the cause of acne.⁸ These findings were similar to another study conducted in Saudi Arabia where 72% of the acne patients considered diet to be the most important factor responsible for acne.⁹ These findings coincide with a study conducted in Singapore where most common factor associated with acne was consumption of oily and spicy food.¹⁰

It was proved in our study that 74% of the acne patients believed that oily skin is the cause of acne which is similar to the study of India where (67%)⁵ and Singapore (67%)¹⁰ of patients with acne held oily skin responsible for it and in contrast to study of Nepal where 96% held oily skin responsible for acne.¹¹

Regarding aggravating factors of acne it was revealed that 62% believed that squeezing/picking/rubbing aggravated acne which was very different from studies conducted in India (83%),⁵ Nepal (37%)¹¹ and France (75%).¹²

Studies have shown that chronic stress might be a cause of acne as stress leads to increased secretion of androgens and cortisol. Our study showed that 56% of the patients considered stress to be a cause of acne as in study of India (51%).⁵ Similar findings of aggravation of acne by stress were found in 50% of subjects in a study conducted in Saudi Arabia.⁸ This was in contrast to a study conducted in Nepal where 82% felt that stress caused acne.¹¹

As far as increase in acne by use of cosmetics is concerned, our study showed that 56% of the

patients considered cosmetic use as aggravating factor which is similar to the study done in Saudia Arabia where 53% patients reported aggravation of acne by cosmetic use.⁸ On the contrary, a study conducted in India (41%)⁵ and in Pakistan (16%)¹³ showed lesser number of participants considering cosmetic use as an aggravating factor in Acne.

Regarding knowledge of common site of acne, it was proved in our study that 78% of acne patients knew that face is the common site of acne quite similar to study in Saudi Arabia where 80% reported face to be the common site of acne.⁶ In contrast, an Indian study (87%)⁵ considered face to be the common site of acne.

Regarding knowledge score, our study showed good knowledge about acne in 86% of the patients whereas 14% had poor knowledge. This coincided with results of Indian study where 72% of acne patients had good knowledge about causes and aggravating factors of acne.⁵

As far as attitude and practice towards acne is concerned, 86% of our study participants were in favor of consulting doctor and who consulted a dermatologist. This was in contrast to a study in India where 46% were in favor of consulting a doctor and regarding its practice 45% consulted a dermatologist.⁵ Our study results were similar to study conducted in Rawalpindi, Pakistan where 89.4% consulted dermatologist for acne treatment.⁷

Majority, 80%, of study participants felt depressed when they developed acne similar to finding of Indian study where 81% felt depressed.⁵

Regarding self-care, our study showed that 52% did not answer which was similar to Indian study where 62% did not answer questions about self-care⁵ and in contrast to study of Rawalpindi,

Pakistan where 1.2 % did not answer.⁷

Regarding use of herbal medicine, our study showed that 18% applied herbal medicine contrasting to Indian study where 44% used traditional medicine⁵ and the study in Rawalpindi where 4.4% used herbal medicine.⁷ These results were also in contrast to another study in India where 56% used ayurvedic medicine.¹⁴

Conclusion

In conclusion, the present study showed that the patients suffering from acne had poor practice and unfavorable attitude in spite of good knowledge. Educational programmes and community based health awareness programmes should be arranged to reduce the false beliefs and malpractices done by acne patients.

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