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Awareness, Perceptions and Practices towards Acne Vulgaris among Acne Patients in Saudi Arabia.

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ABSTRACT

Background: Acne vulgaris is a chronic inflammatory skin disease that is highly prevalent among adolescent age group. Aim: The main objective of the study was to assess awareness, perceptions and practices towards acne vulgaris among acne patients attending dermatology clinics in a tertiary health care center in Jeddah, Saudi Arabia. **Methods:** we conducted a cross-sectional study, on 193 acne patients attending the dermatology outpatient clinics of King Fahad Hospital in Jeddah, for a period of 3 months, commencing from 2nd December 2016 to 27th February 2017. All included acne patients interviewed using a pre-tested, semi-structured questionnaire containing questions about patients' demographic information, knowledge and practices about acne vulgaris. **Result:** The study showed that 46.2% of acne patients had poor knowledge about acne vulgaris. More than half of the study population had wrong practices and perceptions on acne. Education level was found significantly associated with good knowledge and practices regarding acne vulgaris. **Conclusion:** We found that awareness on acne vulgaris is insufficient among acne patients in Saudi Arabia. Community-based health awareness programs on acne are needed to increase the awareness and to prevent the malpractices done by acne patients.

Keywords: Acne vulgaris, Awareness, Skin Diseases, Saudi Arabia.

INTRODUCTION

Acne vulgaris is a chronic inflammatory skin disease that is highly prevalent among adolescent age group.[1-5] It is the most common chronic inflammatory disease of skin.[6] It results from inflammation in pilosebaceous glands, characterized by seborrhea, comedones, papules, pustules, nodules, cysts and in some cases scars and keloids. The etiology of acne vulgaris is attributed to genetic, hormonal and environmental factors. It occurs commonly in adolescent age group, which suggests the hormonal influence of the disease. Also there is familial predisposition of severe forms of acne that support a genetic component in the etiology of acne vulgaris. In addition to that, many recent studies have implicated the role of psychological factors and diet in the pathogenesis of acne.[7]

Although many studies had explored the basic science, clinical features, psychosocial impact and Treatment of acne, there is still lack of information on the awareness and knowledge by the patients about acne vulgaris. A review of recent literature shows that there are many myths and misconceptions among acne patients as well as health physicians regarding acne vulgaris.[8]

Since it has many misconceptions and multi-factorial causation, the knowledge, perceptions, and practices of acne patients regarding their skin condition is necessary in establishing educational programs about their condition and in creating awareness about availability of effective treatment. Thus our study was conducted to assess the knowledge, perceptions and practices towards acne vulgaris among acne patients attending dermatology outpatient department in a tertiary health care center in Saudi Arabia.

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MATERIALS AND METHODS

A cross-sectional study was conducted on 193 acne patients attending the dermatology outpatient clinics of King Fahad Hospital in Jeddah, for a period of 3 months, commencing from 2nd December 2016 to 27th February 2017. All included acne patients were interviewed using a pre-tested, semi-structured questionnaire. Questionnaire was verbally translated

to Arabic language to ensure that all patients fully understand each question. It consisted of questions on socio-demographic data (i.e. age, gender, socio economic status, religion, and marital status) and questions to assess knowledge, perception and practice towards acne. A pilot study was conducted on 15 patients - different from the target group - to check the understanding and clarity of the questionnaire. We excluded from the study any patients younger than 15 years, patients with drug-induced and other acneiform eruptions, and patients who were not willing to participate in the study. All collected data was entered in excel sheet and represented in frequency and percentage. Statistical package for social sciences (SPSS) software version 20.0 was used to analyses data. Chi-square test was used to determine the associations. A p-value of <0.05 was considered statistically significant.

RESULTS

193 acne patients completed the questionnaire. There were 78 (40.4%) males and 115 (62.2%) females. Age range of males was from 18 to 45 years (mean 23.16 years) and in females was 16 to 50 years (mean 22.80 years). Table 1 illustrates the socio-demographic characteristics of the participants and Table 2 showed the knowledge and perceptions about causes and exacerbating factors of acne vulgaris among the study population. Table 3 shows participants' sources of information and Table 4 illustrates the attitude and practices of the participants towards acne vulgaris. We observed that education is significantly associated with good knowledge on acne vulgaris (p-value <0.05). But other patients' characteristics had no significant correlation with their level of awareness on acne vulgaris.

Table 1: Socio-demographic characteristics of the participants (n=193).

Variable	Number	Percent (%)
Gender		
Male	78	40.4%
Female	115	59.6%
Age		
15-19	53	27.5%
20-24	79	40.9%
25-30	42	21.8%
>30	19	9.8%
Marital status		
Single	77	39.9%
Married	89	46.1%
Divorced	18	9.3%
Widowed	9	4.7%
Education		
Illiterate	2	1%
Primary school	10	5.2%
Intermediate school	17	8.8%
Secondary school	86	44.6%
Bachelor or more	78	40.4%

Table 2: Knowledge about causes and exacerbating factors among participants (n=193).

Causes and exacerbating factors	Yes	No	Don't know
Family history (genetics)	40 (20.7%)	71 (36.8%)	82 (42.5%)
Hormonal changes	25 (12.9%)	56 (29%)	112 (58%)
Diet (chocolate, spicy food, fatty food)	89 (46.1%)	31 (16%)	72 (37.3%)
Stress and tension	56 (29%)	35 (18.1%)	102 (52.8%)
Use of cosmetic products	30 (15.5%)	21 (10.9%)	142 (73.6%)
Using some drugs/medication	59 (30.6%)	41 (21.2%)	93 (48.2%)
Infection and poor hygiene	40 (20.7%)	36 (18.6%)	117 (60.6%)
Hot weather, sweat, exercise and dirt	50 (25.9%)	40 (20.7%)	103 (53.4%)
Worsen with squeezing/picking/rubbing	133 (68.9%)	28 (14.5%)	52 (26.9%)

Table 3. Sources of information (n=188).

Source	N (%)
Doctor/other medical staff	81(43%)
Friend/family member	55 (29.3%)
Social Media/TV/Magazine	62 (32.9%)

Table 4: Practices and perceptions of acne patients towards acne vulgaris.

Practice/attitude	N (%)
What do you do when you get acne?	
Consult a doctor	22 (11.4%)
Put self-prescribed medication	127 (65.8%)
Put home remedies	51 (26.4%)
Do nothing	42 (21.7%)
Do you feel sad/depressed when you get acne?	
Yes	163 (84.4%)
No	30 (15.5%)
What Skin care routine do you practice when you have acne?	
Regular face wash with Cleansers	82 (42.5%)
Drinking plenty of water	60 (31%)
Eating Healthy diet	34 (17.6%)
Put/take medications on lesions	109 (56.5%)
Put home remedies on lesions	77 (39.9%)
Do nothing	45 (23.3%)
Do you try to remove the acne pimples by squeezing them?	
Yes	111 (57.5%)
No	82 (42.5%)
Do you think acne is curable disease?	
Yes	106 (54.9%)
No	34 (17.6%)
Don't know	53 (27.5%)

DISCUSSION

The present study was conducted to explore the awareness and practices of acne patients towards their skin condition as these findings have impact on their attitude towards treatment seeking and compliance.

Regarding knowledge about causes and exacerbating factors, 40 (20.7%) of our studied population believed that acne can be inherited. These findings were better than other studies; for example, in Magdy et al. study 32% perceived acne to be

inherited from parents,[9] while it was 25.2% in Poli et al. study,[10] and it was 18% in Tallab study.[11] More than half of our patients thought bad diet is a causative or an exacerbating factor of acne. This is better than the results of other similar studies. For example; a study done by Darwish MA showed that 80% of their studied sample believed that consuming chocolates or spicy foods causes acne and 54% believed that oily foods can cause acne.[9] In another study done by Al-Hoqail IA, 72% believed that diet is a causative factor of acne.[12] Hulmani M et al., found that 63% of acne patients thought that consuming chocolates/spicy foods causes acne.[13]

68.9% of our study population knew that acne lesions worsened by squeezing, picking or rubbing. This is similar to the result of a study done by Hulmani M et al. and Poli F et al., where 83% and 75% (respectively) acne patients knew that acne lesions worsen by squeezing.[13,14] These findings are in contrast to that found in the study done by P Ganga where only 37% knew that acne worsened by aqueezing.[15]

Regarding infection and poor skin hygiene as causative factors of acne, only 20.7% of our participants believed it can lead to acne, while in another similar studies by Al Hoqail et al., Yahya et al.,[16] Jerry et al.,[17] Rigopopulos et al.,[18] poor skin hygiene was thought to be a causative factor of acne by 15%, 26.3%, 29%, and 42.4% (respectively) of acne patients.

Stress was believed to have a role in the etiology of acne by 29% of our patients. Higher result was found in Tallab study, Al-Hoqail study and Amado et al.[19] study 65%, 80% and 71% of acne patients (respectively) believed that acne is related to stress.

Only 15% of our studied sample believed that acne is associated with the use of cosmetic products. Similarly, CM Tahir found only 16% considered cosmetics as an aggravating factor for acne in his study.[20] where as 53% and 58% of the study sample in a study done by Darwish MA and Poli F knew that use of cosmetic products exacerbated acne.

Regarding knowledge score, more than half of patients had good knowledge about the causes and exacerbating factors of acne. There was significant association between knowledge score and education, ($p < 0.05$). This study shows a better knowledge score compared to other studies.[12,16,17]

Doctors and medical staff were the main source of information in our study population. Similarly, doctor/general practitioners were the main source by three-fourth of patients in study by Jerry et al. while it was a source of information by only 1.1% of patients in study by Rigopoulos et al. 32.9 % of our patients and 44%of patients by Jerry et al. got information from T.V/ social media while it was 17.5% in the study by Rigopoulos et al.

In this study 54.9% believed acne is a curable disease while 49% of patients agreed to this in study by Jerry et al. and 96% thought acne to be curable in study by Brajaca et al.[21] and 41.9% by Yahya et al.

Over the counter medications were practiced by 65.8% of our patients to treat acne and only 11.4% would consult a doctor regarding their skin condition. Similar results were observed in other study where most of studied cases used over the counter medication to treat acne and 46% preferred consulting a dermatologist when they had acne.[21]

CONCLUSION

This study concludes that poor knowledge, false perceptions, and malpractices regarding acne vulgaris are quite prevalent among Saudi acne patients in comparison to previous studies in other populations. This may reflect deficient acne patient education during their follow-up in dermatology clinics. Community-based health awareness programs on acne are needed to increase the awareness and to prevent the malpractices done by acne patients.

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