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Research Article

**PERCEPTION OF SAUDI POPULATION ABOUT ACNE
VULGARIS IN RIYADH, SAUDI ARABIA.****Abdul Rahman Elemam,¹ Seba Almutairi,² Ibrahim Algosair,³ Maram Alenzi,⁴ Nouf Alqahtani,⁵ Tariq Alharbi,¹ Mariam Suhluli,⁵ Sami Fatehi Abdalla Billal**¹ College of Medicine, Almaarefa Colleges for science and technology, Riyadh, Saudi Arabia.² College of Medicine, King Saud bin Abdulaziz University for Health Sciences, Riyadh, SaudiArabia. ³ College of Medicine, Qassim University, Qassim, Saudi Arabia. ⁴ College of Medicine, Northern Borders University, Arar, Saudi Arabia.⁵ College of Medicine, King Khaled University, Abha, Saudi Arabia.**Abstract**

Introduction: Acne Vulgaris (AV) is a common skin condition which affects people mostly at adolescent's age in both genders of all races. The underlying pathogenesis addressed by blockage of the pilosebaceous canals due to increase sebum production, hyperkeratinization of the hair follicles, inflammatory oedema induced either by chemical irritation due to scape of follicle contents into the dermis or hyperproliferation of Cutibacterium acnes. The affection of self-steaming has been accounted as one of the major impact of AV on AV patients which in many cases related directly to the severity of AV. Furthermore, the severity of AV will affect the type and compliance of the patient to the treatment which in the first place is a direct reflection of how the patient perceives his Acne.

Aim: Evaluation of perception and knowledge of the Saudi population in Riyadh about AV.

Methods: This is a cross-sectional community-based study that was conducted from March to July 2018. Included all patients with any type of AV that their ages were 18 years or more. After participants signed the informed written consent, they filled pre-formed questionnaire consisted of the personal data, perception about the causes and effects of acne on the affected individuals. The perceptive variables were illustrated as percentages. The questionnaire was distributed randomly.

Results: 180 participants were enrolled with a response rate of 95.2%, females were 70.6% and 29.4 were males. 75% of participants believe that the hereditary causes have no role in the acne development, while 77% of them believe that stress has a major role in causing the acne. Also, when they have been asked about the diet, 73.9% of them think that diet can attribute in acne formation. A 53 % of them believe that acne could be age-related. Oily skin participated in the development of AV, 81.1% agreed. A 45% per cent of the participants have no idea whether the bacterial infection has a role in causing the acne and same percentage linked AV development with facial hygiene. 61% don't tie between corticosteroid and 50% of participants think cosmetic has a role in AV development. A 75% of the participants believe that acne results in major facial disfiguring. Psychological impacts ranging from acute depression to frank psychiatric illness.

Conclusion: Despite the increased availability of databases and other sources of information about acne, population awareness and perception about acne need more improvements and corrections

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INTRODUCTION:

Acne Vulgaris (AV) is a common skin condition which affects people mostly at adolescents age in both genders [1,2]. One of the acne's major complications is the scarring which persists for a long time after the acne disappeared as well as the psychological issues [3]. Regarding the psychological aspect, it has a major effect on the individuals' emotions, social activities, work, relationships and even their daily activities [4]. Also, acne may have a role in affecting the individuals' participation in any sports activity in a negative way [5]. Furthermore, in many studies, they have found that acne has a major role in causing both anxiety and depression for the patients [6, 7]. Not only that but also it can lead the patients to have suicidal thoughts [8]. In Saudi Arabia, many studies were conducted in major three provinces to assess the acne prevalence, knowledge and assessing the AV psychological impacts. The Eastern province study found that 58.33% of the participants have poor knowledge about factors that affect acne vulgaris [9]. In Riyadh the middle province they found that more than half of the participants had acne vulgaris, and less than one-third of them being diagnosed by a physician. Female students believed more than male students that stressful environment have a major role in causing acne. Male students believed that acne affects their marriage prospectus more than females [10]. In the western territory, the study reported that 64.5% of their participants suffered from acne. Among those participants, 85.6% think that more information about acne would be helpful and believed that diet, bacteria and poor hygiene may cause the acne [11]. Assessing more specific points in the perception of the general population in the Riyadh region of Saudi Arabia is needed. Thus, our aim in this study is to dig deep in the assessment to improve the general population perception and understanding of some essential facts related to the acne.

METHODS:

This is a cross-sectional community-based study extended from March to July 2018 and enrolled

patients with any type of AV that their ages were 18 years or more. After participants signed the informed written consent, they filled pre-formed randomly distributed questionnaire consisted of the personal data, perception about the causes and effects of acne on the affected individuals. The perceptive variables were illustrated as percentages.

RESULTS:

The questionnaire was widely distributed, but as Table 1 shows that the responders were 180 participants (response rate was 95.2 %) 53 participants were males (29.4%) and 127 (70.6%) were females. The age of most of the participants ranging from 18 – 23 years (64.4%), followed by those 24 – 30 years (25.6%) and more than 30 (10.0%). Students made the majority (58.3%). Regarding the perception of causes of AV, we found that 39.4% believe that the sunlight exposure causes AV. A 39.4% think that hereditary have no role in causing the acne, whereas 25% of them believe that acne can have a hereditary factor. Furthermore, 77% of all participants believe that stress has a major role in causing the acne. Also, when they have been asked about the diet, 73.9% of them think that diet can attribute in acne development. A 53% of them believe that acne could be age-related. Moreover, 81.1% united in the opinion that acne is more with those who have oily skin. A 45% of the participants have no idea whether the bacterial infection has a role in causing the acne. Also, in regarding skin hygiene, 45% of them reported it to have a role in acne formation. 61% of the sample reported that they do not know if the drug-containing corticosteroids would cause acne. 50% agreed that cosmetics may induce acne (Table 2). Table 3 illustrated that 75% of the participants believe that acne has a major effect in causing facial deformities and 52.8% agreed that acne can affect the individuals' psychological aspects in causing depression or psychiatric illnesses (see Table 3). Only three participants (1.7%) answered all the questions in the right way. The vast majority of them which account for 45 participants (25%) got half of the questions right (Table 4)

Table 1: demographics of participants

Variables		N	%
Gender	Male	53	29.4
	Female	127	70.6
Age	18-23	116	64.4
	24-30	46	25.6
	>30	18	10.0
Job status	Unemployed	42	23.3
	Student	105	58.3
	Employee	33	18.3

Table 2: causes of Acne

Variables		N	%
Sunlight exposure	No	65	36.1
	Maybe	71	39.4
	Yes	44	24.4
Hereditary	No	79	43.9
	Maybe	56	31.1
	Yes	45	25.0
Stress	No	18	10.0
	Maybe	22	12.2
	Yes	140	77.8
Food type	No	12	6.7
	Maybe	35	19.4
	Yes	133	73.9
Related to age	No	46	25.6
	Maybe	38	21.1
	Yes	96	53.3
Oily skins	No	8	4.4
	Maybe	26	14.4
	Yes	146	81.1
Bacterial infection	No	57	31.7
	Maybe	81	45.0
	Yes	42	23.3
Skin hygiene	No	57	31.7
	Maybe	57	31.7
	Yes	66	36.7
corticosteroids	No	53	29.4
	Maybe	110	61.1
	Yes	17	9.4
cosmetics	No	18	10.0
	Maybe	72	40.0
	Yes	90	50.0

Table 3: effects of acne

Variables		N	%
Facial deformities	No	6	3.3
	Maybe	39	21.7
	Yes	135	75.0
Depression or psychiatric illness	No	20	11.1
	Maybe	65	36.1
	Yes	95	52.8

Table 4 : number of participants with the right answers

N of right answer	N of participants	%
0	1	0.6
1	1	0.6
2	11	6.1
3	14	7.8
4	21	11.7
5	23	12.8
6	45	25
7	26	14.4
8	19	10.6
9	12	6.7
10	4	2.2
11	3	1.7
Total	100	100

DISCUSSION:

Acne vulgaris topped the list of common skin diseases among a very important and wide sector of the population the teenagers and adolescents, because of it is relative chronicity and possible disfiguring effects of AV it may have a psychological implication that will reduce their normal and social activities. Patient education about AV is crucial in the treatment but in order to educate patients, we must start from launching point that only we can achieve by knowing their awareness and perception. It appears that knowledge of different population, internationally, is very poor regarding the acne despite the huge data available in all illustration media. In the current study, we assessed our local population awareness and perception about acne at Riyadh city. A French study with a sample size of 852 adolescents, reported that most of their sample believe that acne is considered a normal phase in an adolescent life [12]. In another study conducted at Croatia, the authors concluded that acne education is needed for both acne patients and family physician as

both beliefs that acne is only a transitory condition with percentages of 52% and 44% respectively [13]. In our study, we found that only 1.7% of our sample has a good knowledge about acne raised to 25% who of moderate knowledge about the acne causes and its effect supported the opinion of 85.6% of the population of Jeddah who believed that more information about acne would be helpful and needed [11]. In many previous studies, diet and poor skin hygiene believed to be the commonest cause for the acne which accorded with our finding, as 23.3% and 36.7% of our participants believed that bacterial infection and skin hygiene, respectively, have a role in acne development. Most of our population think that oily skin 81.1% has the major role in causing the acne followed by the believe that stress 77.8% is also a reason and 73.9% of them think that acne is related to the food type, in the same line with Jeddah study where they reported that 34.1% and 58.4% of population were believed that stress and certain foods are the most important aggravators of acne [11].

In another study that conducted in Greece, only 5.7%

of participants linked the genetic factors with acne too far less than our participants as 25% claim that acne can appear as a hereditary disease. Our study shows that 50% of the participants think that cosmetics have a major role in the process of acne formation. Not only that but also they have believed that drugs containing corticosteroids 9.4% can contribute to the formation of acne.

Two-thirds of the participants agreed that acne would cause facial deformities and scarring which have a great cosmetic problem for patients more than Alhoqail who found that 56.7% of his patients agreed that acne is considered as both a cosmetic and health problem as it affects the patients' appearance [15]. A 52% of the participants thought that acne has a deep effect in causing depression or psychiatric illnesses for acne patients less than Jeddah study population in which it raised to 79.7% [11].

CONCLUSION:

Despite the increased availability of databases and other sources of information about acne, population awareness and perception about acne need more improvements and corrections. For this reason, we emphasize the importance of receiving well-prepared education about the causes of acne, its effect and its treatment. We recommend that that information would be presented to the community by any means including campaign, patients' education brochure, social media and at the physicians' clinic.

REFERENCES:

1. Lello J, Pearl A, Arroll B, Yallop J, Birchall N. Prevalence of acne vulgaris in Auckland senior high school students. *N Z Med J*. 1995;108(1004):287-9.
2. Goulden V, Stables G, Cunliffe W. Prevalence of facial acne in adults. *Journal of the American Academy of Dermatology*. 1999;41(4):577-580.
3. Kulthanan K, Jiamton S, Kittisarapong R. Dermatology life quality index in Thai patients with acne. *Siriraj Medical Journal*. 2017;59(1):3-7.
4. Hazarika N, Archana M. The psychosocial impact of acne vulgaris. *Indian Journal of Dermatology*. 2016;61(5):515.
5. Loney T, Standage M, Lewis S. Not Just 'Skin Deep'. *Journal of Health Psychology*. 2008;13(1):47-54.
6. Yazici K, Baz K, Yazici A, Kokturk A, Tot S, Demirseren D et al. Disease-specific quality of life is associated with anxiety and depression in patients with acne. *Journal of the European Academy of Dermatology and Venereology*. 2004;18(4):435-439.
7. Sayar K, Ugurad I, Kural Y, Acar B. The Psychometric Assessment of Acne Vulgaris Patients. *Dermatology and Psychosomatics / Dermatologie und Psychosomatik*. 2000;1(2):62-65.
8. Picardi A, Mazzotti E, Pasquini P. Prevalence and correlates of suicidal ideation among patients with skin disease. *Journal of the American Academy of Dermatology*. 2006;54(3):420-426.
9. Darwish M, Al-Rubaya A. Knowledge, Beliefs, and Psychosocial Effect of Acne Vulgaris among Saudi Acne Patients. *ISRN Dermatology*. 2013;2013:1-6.
10. Alajlan A, Al Turki Y, AlHazzani Y, Alhowsaish N, AlEid N, Alhozaimi Z et al. Prevalence, level of knowledge and lifestyle association with acne vulgaris among medical students. *Journal of Dermatology & Dermatologic Surgery*. 2017;21(2):58-61.
11. Al Mashat S, Al Sharif N, Zimmo S. Acne awareness and perception among population in Jeddah, Saudi Arabia. *Journal of the Saudi Society of Dermatology & Dermatologic Surgery*. 2013;17(2):47-49.
12. Poli F, Auffret N, Beylot C, Chivot M, Faure M, Moysé D et al. Acne as Seen by Adolescents: Results of Questionnaire Study in 852 French Individuals. *Acta Dermato Venereologica*. 2011;91(5):531-536.
13. Brajac I, Bilić-Zulle L, Tkalčić M, Lončarek K, Gruber F. Acne vulgaris: myths and misconceptions among patients and family physicians. *Patient Education and Counseling*. 2004;54(1):21-25.
14. Rigopoulos D, Gregoriou S, Ifandi A, Efstathiou G, Georgala S, Chalkias J et al. Coping with acne: beliefs and perceptions in a sample of secondary school Greek pupils. *Journal of the European Academy of Dermatology and Venereology*. 2007;21(6):806-810.
15. Al-Hoqail I. Knowledge, beliefs and perception of youth toward acne vulgaris. *Saudi Med J*. 2003;24(7):765-8.