Beliefs, perceptions and psychological impact of Acne vulgaris among patients in the Assir region of Saudi Arabia.

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Summary

Background: There is a paucity of reports in the literature detailing the assessment of the beliefs, perception and psychological impact of acne patients. This is the first study from Saudi Arabia designed to address this issue.

Materials and methods: A voluntary self-completed questionnaire was used to collect data from acne patients visiting a community–based hospital in Assir region of Saudi Arabia.

Data collected, included: patients biodata, duration and severity of the disease before the presentation, source of knowledge, psychological impact, and medication preference. The findings were compared to those of developed countries. *Results:* 130 patients completed the questionnaires. Females were more affected than males (71.5%, 28.5% respectively). The M: F ratio was 1:2.5. Males tend to present with more severe form of the disease. Most patients had the disease for more than 1 year at presentation. Most patients sought medical advice as a self-made decision. Doctors were the most common source of information to patients. Most patients believe that hormonal imbalance and dirt were the major cause of acne while most of them believed that stress and diet were the major exacerbating factors. The most significant psychological impact in acne patients was on their self image which was severe in 49% of the patients, while the most bothering symptom was the spot of acne lesion. Most patients had used skin cleansers and creams before seeking medical advice (46.1%, 31.5% respectively). Retinoids and antibiotics were the most known prescribed medications to acne patients. Most acne patients expressed no preference of medication, but most of those who did so preferred topical medication.

Conclusions: No major differences were found in the beliefs, perception and psychological impact of acne patients from a developing society compared to more developed societies. More community–based and developmental programmes are needed to upgrade the knowledge and common beliefs of acne patients.

Key words: *Acne vulgaris, Psychological impact, Beliefs.*

Résumé

Introduction: Il y a le manque de rapports sur une documentation detaillée basée sur l'évaluation des convictions, perceptions et l' impact psychologique des patients atteints d'acné. Voici la premiere étude d'Arabie saoudite préparée et mis au point pour aborder ce problème.

Matériels et Méthode: Un questionnaire voluntairement rempli a été utilisé pour recueillir les données chez des patients atteints d'acné tout en rendant visit a l'hôpital d'une communauté dans la région d'Assir d'Arabie saoudite.

Des donnéess recuiilliescompris: Bio-données des malades, la duree et la gravité de la maladie avant sa présentation, la source de la connaissance, l'impact psychologique et traitement préféré. Les résultats ont été comparés avec ceux des pays développés.

Résultats: 130 patients ont rempli les questionnaires. Les femmes étaient plus touchés que les hommes, 71,5% et 28,5% respectivement. Le rapport H: F était 1:2,5. Il Parait que les cas des hommes sont plus grave. La pulpart des patients avaient eu la maladie pour plus d'une année avant de venir a l'hôpital. La pulpart des patients avaient essayé de se faire soigner par un médecin comme une décision personnelle. Des médecins étaient la source d'information la plus courante pour des maladies. La plupart des patients croient que le déséquilibre hormonal et la saleté étaient la cause principale de l'acené tandis que la plupart d'entre enx croyaient que le stress et l'alimentation étaient des facteurs les plus aggravantes.

L'impact psychologique le plus sensible chez des patients atteints de l'acné était surtout leur image de soi qui était grave en 49% des patients, tandis que le symptôme le plus inquietant étaient le siége de la lésion de l'acné. La plupart des patients avaient utilisé le demaquillant et la creme de beauté avant daller auprès d'un médecin pour se faire soigner (46,1%, 31,5% respectivement). Les rétinoides et les antibiotiques étaient les médicament les plus connus préscris pour des patients atteints de l'acne. La pulpart des malades atteints de l'acné n'expriment aucune préférence pour un médicament mais la plupart d'entre eux qui s'exprimaient préféraient un médicament tropical.

Conclusion: On n'a pas noté aucume différence principale a l'égard des convictions, perceptions et l'impact psychologique des patients atteints de l'acné dans la sociéte en voie de développement par rapport a la société plus développée.

On a besoin des programmes dévelopmentaux basé sur la communauté afin d'ameliorer la connaissance et les convictions des patients atteints de l'acné.

Introduction

Acne vulgaris is a common disease world wide[1]. It affects 79% of females and 91% of males during adolescence. In adults, it only affects 12% of females and 3% of males[2]. There is a paucity of studies in the literature addressing the beliefs, perceptions and psychological impact among acne patients[3-8]. From current literature, it is evident that patients are not well informed about the causes of acne vulgaris and the modalities of treatment[3,5,8]. The psychological impact of acne has not been given any measure of prominence and patients have to devise their own coping strategies often

based on misconceptions about the disease.

Studies on acne carried out in developed countries show that whilst the resources are available for patients' education regarding acne, these are not being fully utilized as patients still rely on non-medical sources for information and advice[5, 8]

The aims of this paper are to analyze the data collected from acne patients regarding their beliefs, perceptions and psychological impact from a developing country and to compare them with data from studies carried out in the developed parts of the world.

Materials and methods

A voluntary self-completed questionnaire was administered to acne patients visiting a community Hospital in Assir region of Saudi Arabia. Patients filled the questionnaires while waiting to be examined by the doctor. Acne grading was carried out by a dermatologist using the Gollick and Orfanos grading system[7] which is as follows: Grade I- Facial acne with comedones and fewer than 10 inflammatory lesions, Grade II- Facial acne with comedones and 10-20 inflammatory lesions; Grade III- Inflammatory lesion of the trunk with or without facial lesion; Grade IV- Inflammatory lesions with nodules and presence of acne on face or trunk. The data collected, included age, sex, duration of the disease, severity of the acne, beliefs and perceptions of patients regarding the causes and aggravating factors of acne, patients' sources of information, the psychological impact on friendship, self image, family, occupation, the medication used before seeking medical advise, and the knowledge of prescribed acne medications. The psychological variables were measured by 4- point Lickert scale (none, mild, moderate, severe).

Results

The 130 patients who completed the questionnaires formed the study group. There were 93 females (71.5%) and 37 males (28.5%). The M:F ratio was 1:2.5.The mean age to the study group 21.3 ± 4.4 years (range: 14-48 years). The mean age for the female was 21.4 ± 4.3 years (range: 14 - 38 years). The mean age of the males was 21.7 ± 3.5 years (range: 16-28

Table 1 Grading of acne among the 130 patients in the study group

Grade	Females N=93	Males N=37	Total n=130
I	35(26.9%)	5(3.9%)	40(30.8%)
II	18(13.9%)	3(2.3%)	21(16.2%)
III	20(15.4%)	6(4.6%)	26(20%)
IV	20(15.4%)	23(17.7%)	43(33.1%)

Table 2 Duration of acne vulgaris before seeking medical advice.

Duration in months	Females (N=93)	Males (N=37)	Total N=130
<3 months	9(6.9%)	3(2.3%)	12(9.2%)
3-6 months	8(6.2%)	3(2.3%)	11(8.5%)
6-12 months	6(4.6%)	2(1.5%)	8(6.2%)
>12 months	70(53.9%)	29(22.3%)	99(76.2%)

Table 3 Patients perception of the causes of acne vulgaris

Cause	Females N=93	Males N=37	Total N=130
Poor Hygiene	18(13.8%)	5(3.8%)	23(17.6%)
Diet	22(16.9%)	12(9.2%)	34(26.1%)
Infection	18(13.8%)	7(5.4%)	25(19.2%)
Hormone	43(33.1%)	17(13%)	60(46.1%)
Genetic	17(13%)	7(5.4%)	24(18.4%)
Others	0	3(2.3%)	3(2.3%)

Table 4 Patients perceptions of factors aggravating acne vulgaris

Factor	Female N=93	Male N=37	Total N=130
Diet	30(23.1%)	11(8.4%)	41(31.5%)
Dirt	9(6.9%)	5(3.8%)	14(10.7%)
Cosmetic	20(15.4%)	4(3%)	24(18.4%)
Moisturizer	5(3.8%)	3(2.3%)	8(6.1%)
Heat/Humidity	23(17.7%)	8(6.1%)	31(23.8)
Season	8(6.1%)	3(2.3%)	11(8.4%)
Exercise/Sweating	0	2(1.5%)	2(1.5%)
Stress	50(38.2%)	15(11.8%)	65(50%)
Drugs	7(5.4%)	2(1.5%)	9(6.9%)

Table 5 General sources of information about acne

Sources of information	Females N=93	Males N=37	Total pt N=130
Magazine	4(3.1%)	3(2.3%)	7(5.3%)
TV	3(2.3%)	1(0.7%)	4(3%)
News paper	1(0.7%)	4(3.1%)	5(3.8%)
Radio	0	0	0
Internet	0	0	0
School	3(2.3%)	1(0.7%)	4(3%)
Parent	1(0.7%)	1(0.7%)	2(1.4%)
Relatives	3(2.3%)	6(4.6%)	9(6.9%)
Friends	11(8.5%)	2(1.5%)	13(10%)
Pharmacist	4(3.1%)	6(4.6%)	10(7.6%)
Doctor	47(36.2%)	13(10%)	60(46.2%)
Library	3(2.3%)	1(0.7%)	4(3%)
Beauty Salon	3(2.3%)	1(0.7%)	4(3%)
Other	0	2(1.5%)	2(1.5%)

Table 6 Psychological impact

Area of psychological impact	None	Mild	Moderate	Severe
On Friendship	44(33.8%)	16(12.3%)	43(33%)	28(21.5%)
On Self image	7(5.3%)	15(11.5%)	44(33.8%)	64(49%)
On Family	45(34.6%)	21(16%)	34(26%)	28(21.5%)
On Occupation	58(44.6%)	16(44.6%)	33(25.3%)	25(19%)

years). Males presented with more severe grades of the disease compared to females (p value <0.001)(Table 1). Most patients had the disease for more than 1 year with no statistically significant difference between males and females (Table 2). Both males and females sought medical advice as a self-made decision (88.1%, 83.3% respectively).The next important influencing factor for females were parents (7.5%), while males were more influenced by their friends(8.11%). Hormonal imbalance and diet were the most commonly incriminated causes of acne (46.1%-26.1% respectively)(Table 3). Diet and stress were the most incriminated factors for exacerbating acne (50%, 31.5% respectively) (Table 4).

Doctors were the most common source of information followed by family and friends (Table 5). The greatest psychological impact in acne patients was on self-image (49.1%) (Table 6). In this study, 68.4% of acne patients were bothered by acne spots, followed by the shape and the scars (46.1%, 31.5% respectively).

The most common acne medications used before seeking medical advice were cleansers and creams (44.6, 31.5% respectively). The most commonly known medications to acne patients were retinoids and antibiotics (43.8%, 38.4% respectively). Most acne patients had no preference for any particular type of acne treatments (40.7%), but most of those who did so preferred topical medication.

Discussion

Only a few studies were found in the literature regarding the beliefs and perceptions of acne patients[3-8]. Regarding the acne grade at presentation, the current study showed that 53% of our patients had the severe grade compared to 49.3% in a Canadian study[8]. Seventy six percent of our patients had the disease for more than 12 months compared to 65% in the Canadian study[8]. The decision by our Saudi patients to seek medical advice was a self-made decision while in the report from the Canadian study, the decision was made by parents[8]. Most patients in the current study (60%) believed that acne was caused by hormonal imbalance. This was similar to the findings in Canadian[8] and New Zealand[5] studies where 64% of their patients respectively had the same perceptions. Regarding the aggravating factors, the current study revealed that stress, diet and heat were the most commonly incriminated factors compared to diet, dirt, and sweating in the Canadian patients[8]. Pearl and co-workers[5] showed that diet, dirt, and stress were perceived to be the most aggravating factors[5]. Rasmussen and Smith[3] reported that stress, anxiety, and poor hygiene were the most frequently identified aggravating factors by their patients.

As to the source of information about acne vulgaris, doctors and friends were the most important sources, compared to doctors and magazines in the Canadian population[8]. The current study revealed that the psychological impact on self-image was similar to the finding in the Canadian study[8]. Lyton, et al.,[9] observed a correlation between psychological impact and social effects in acne patients. Krowchuk, et al.,[10] found a significant level of personal and social dissatisfaction among acne patients. Lasek and Chren[11] found no association between the levels of distress in acne patients and the appearance and the severity of the acne.

Most patients in this study and the Canadian studies were bothered by the acne spots[8].

Cleansers were the most commonly used non-prescribed acne medication in the current study (44.6%) while in the Canadian study, 87% of their acne patients used non-prescribed cleansers [8]. Retin–A, antibiotics and Dalacin-T were the most known prescribed medications to our acne patients, compared to Roaccutane, antibiotics and Dalacin T in the Canadian study[8]. Patients in both the current and Canadian studies showed no preference to either topical or systemic treatment modality of acne[8].

The conclusion from this study is that more community-based programmes are needed to inform and educate acne patients in both developed and developing countries. No major differences in beliefs and perceptions about acne in patients in a developing country as compared to those in the developed countries were found.

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