|| ISSN(online): 2589-8698 || ISSN(print): 2589-868X ||
International Journal of Medical and Biomedical Studies
Available Online at www.ijmbs.info
PubMed (National Library of Medicine ID: 101738825)
Index Copernicus Value 2018: 75.71
IJMBS

Original Research Article
Volume 3, Issue 12; December: 2019; Page No. 201-206

NEED FOR PSYCHOLOGICAL EVALUATION IN THE PATIENTS SUFFERING FROM ACNE: A DESCRIPTIVE STUDY

Dr Sangeeta Hatila[1], Mrs Aastha Dhingra Hasija[2], Dr Vijay Choudhary[3]*

[1]Junior Resident, Dept. of Psychiatry, SMS Medical College, Jaipur

[2]Assistant Professor, SGT University, Gurugram

[3]Senior Resident, Dept. of Psychiatry, SMS Medical College, Jaipur

Article Info: Received 30 November 2019; Accepted 29 December 2019

DOI: https://doi.org/10.32553/ijmbs.v3i12.827

Corresponding author: Dr Vijay Choudhary

Conflict of interest: No conflict of interest.

Abstract

Background: Chronic diseases are known to have impact on quality of life of patients as of the acne. The DLQI (dermatology life quality index) is a scale to assess quality of life of the patients with skin disease.

Objectives: The present study analyses the quality of life patients with acne attending OPD of skin department, SMS hospital.

Methods: A questionnaire-based prospective study was conducted among 150 patients with acne referred from department of dermatology, SMS hospital.

Results: The mean DLQL score was 7.28, the question about how embarrassed or self-conscious have you been because of skin had highest whereas the question about how much has your skin caused any sexual difficulties? had lowest scores.

Conclusion: Acne has moderate effect of quality of life of the patients. There is need for psychological intervention to improve the quality of life of the patients.

Keywords: Acne, dermatology life quality index, quality of life.

Introduction

Quality of life includes social well-being, health, family, enjoyment, wealth, safety, security to freedom and psychosocial relationships. Many things influences the quality of life of a person in which chronic diseases are one of them. As skin diseases like acne, is a chronic disease, has negative impact on subjective wellbeing of a person. Skin diseases do so by restricting someone to involve in social, work, leisure and sexual activities. These things further leads to psychological problems in a person with skin disease and hence have long lasting negative impact on them.

DLQI is one of the questionnaires specially designated to measure the quality of life in the person with skin disease [DLQI make it easy for a clinician to evaluate therapeutic risk benefit as it is very convenient to apply .Acne is a chronic disease of pilosebaceous units of skin mainly involves face.

Acne is also associated with considerable psychological impairment as in other chronic diseases. Psychosocial intervention should be addressed in order to improve the positive mental health of person with acne.

To enhance the compliance to treatment, there should be combined approach- dermatological and psychological as well. Acne has many effects. These are not necessarily related to its clinical severity. Even mild acne can be significantly disabling. Acne can affect people of all ages but it predominantly occurs during the teenage years. Approximately 85% of people between the ages of 12 and 25 develop acne

What psychosocial problems does acne cause?

The psychological and social impacts of acne are a huge concern, especially because acne affects adolescents at a crucial period when they are developing their personalities. During this time, peer acceptance is very important to the teenager and unfortunately it has been found that there are strong links between physical appearance and attractiveness and peer status.

In recent years, open discussions between patients and medical professionals have revealed the impact acne has on the psyche. The following are some of the problems that patients with acne may face.

Self esteem and body image

- Some embarrassed acne patients avoid eye contact.
- Some acne sufferers grow their hair long to cover the face. Girls tend to wear heavy make-up to disguise the pimples, even though they know that this sometimes aggravates their acne. Boys often comment: "Acne is not such a problem for girls because they can wear make-up".
- Truncal acne can reduce participation in sport such as swimming or rugby because of the need to disrobe in public changing rooms.

Social withdrawal/relationship building

- Acne, especially when it affects the face, provokes cruel taunts from other teenagers.
- Some find it hard to form new relationships, especially with the opposite sex.
- At a time when teenagers are learning to form relationships, those with acne may lack the self confidence to go out and make these bonds. They become shy and even reclusive. The main concern is a fear of negative appraisal by others. In extreme cases a social phobia can develop.

Education/work

- Some children with acne refuse to go school, leading to poor academic performance.
- Some people with acne take sick days from work, risking their jobs or livelihood.
- Acne may reduce career choices, ruling out occupations such as modelling that depend upon personal appearance.
- Acne patients are less successful in job applications; their lack of confidence being as important as the potential employers' reaction to their spotty skin.
- More people who have acne are unemployed than people who do not have acne.
- Many young adults with acne seek medical help as they enter the workforce, where they perceive that acne is unacceptable and that they "should have grown out of it by now".

Assessment of the impact of acne on the individual

Tools that assess the impact of acne on psychosocial factors and quality of life can be used in clinical practice and in clinical trials. They include:

- APSEA: Assessment of the Psychological and Social Effects of Acne
- ADI: Acne Disability Index
- CADI: Cardiff Acne Disability Index
- AQOL: Acne Quality of Life Scale
- Acne-QoL: Acne Quality of Life and Acne-Q4

Does acne cause depression?

In some patients the distress of acne may result in depression. This must be recognised and managed. Signs of depression include:

- Loss of appetite
- Lethargy
- Mood disturbance
- Behavioural problems
- Wakefulness
- Spontaneous crying
- Feelings of unworthiness.

In teenagers, depression may manifest as social withdrawal (retreat to the bedroom or avoidance of peers) or impaired school performance (lower grades or missed assignments). Severe depression from acne has resulted in attempted suicide and, unfortunately, successful suicide. Worrying statements include: "I don't want to wake up in the morning"; "I'd be better off dead"; "I'm worthless"; "You'd be better off without me". Parents, friends and school counsellors need to take heed when they start to hear these types of comments.

Rarely, depression can be associated with acne treatment, particularly isotretinoin there is much controversy about whether the drug causes depression.
Regardless of the cause, depression must be recognised and managed early.

What is dysmorphophobic acne?

Some patients with only minor acne suffer from disturbed body image. Even in the absence of lesions, they consider they have severe acne and may suffer many of the psychological and social symptoms

described above. They are said to have "dysmorphophobic acne".
If this is their only abnormal behavioural symptom, they respond well to oral isotretinoin therapy because it clears up the spots. A low dose of isotretinoin may be required long-term, as even a slight recurrence of oily skin may unduly concern the patient.
Some severe cases of dysmorphophobia have a more global mental disorder similar to anorexia nervosa. They require expert dermatological and psychiatric assistance

UNIVERSITY OF LIMERACK (2001)- The research, undertaken by scientists at the University of Limerick, Ireland, and published in PLOS One, surveyed 271 people who had acne. Their responses showed an association between assuming negative perceptions from those around them—imagine a taunting voice saying "pizza face" over and over—and higher levels of psychological distress. Those who reported a high level of social stigma (feeling society is grossed out by acne) had higher levels of anxiety and depression, as well. There were physical symptoms, too, including sleep disturbance, headaches, and gastrointestinal problems. Females reported greater impairment in their quality of life, and showed more symptoms than males. Acne severity mattered, as well; those with worse cases reported greater quality of life and psychological distress.

C BLOME AND M. AUGUSTIN (2006)-This study aimed to establish subscales of the PBI on the basis of independent and consistent treatment need dimensions. The PBI was used in a cross-sectional study involving n = 500 patients with ten distinct skin diseases, and in a longitudinal acne therapy study (n = 925). PBI dimensions were extracted by factor analysis and varimax rotation in both studies independently, using the longitudinal study data for replication. Factor analysis revealed largely similar need dimensions in both studies. The five-dimensional solution found in the cross-sectional study explained 63.0% of the variance. The need dimensions were named as reducing psychological impairments, reducing social impairments, reducing impairments due to therapy, reducing physical impairments, and building confidence into therapy. Using this factor solution, different patterns of need were found amongst the ten dermatological diseases. The PBI allows for a differential benefit assessment on five well distinguishable and interpretable subscales. The use of subscales as shown refines the interpretation of needs and benefits in dermatologic treatment.

D Purvis, E Robinson, (2008)-Five hundred and sixty-three questionnaires out of 600 were answered and 550 adolescents who gave permission for examination were evaluated. The study population consisted of 303 girls and 260 boys between the ages 13 and 19, and the mean age was 15.24 ± 1.05 years. Acne prevalence was 63.6% with 29.2% non-inflammatory and 34.4% inflammatory acne. It was more prevalent and severe in boys than in girls. Not the objective but the subjective severity of acne and opinion that one could benefit from acne treatment was found to be related to anxiety, depression and self-esteem. Factors implicated among causes of acne were food, skin hygiene and hormones in decreasing frequency. Forty-eight per cent of adolescents expect a maximum duration of 4 weeks for treatment.

MATERIALS AND METHODS:

The study was conducted among 150 patients of age more than 18 years suffering from acne attending the OPD of dermatology department, SMS hospital, Jaipur from 1st January, 2019 to 31st march, 2019.
After the formal approval from ethical committee, SMS hospital we took the written consent for study. Than we applied the DLQI scale on the same subjects.

Instruments: The Dermatology Life Quality Index questionnaire is designed for use in adults, i.e. patients over the age of 16. It is self-explanatory and can be simply handed to the patient who is asked to fill it in without the need for detailed explanation. It is usually completed in one or two minutes. The DLQI is calculated by summing the score of each question resulting in a maximum of 30 and a minimum of 0. The higher the score, the more quality of life is impaired.

The scoring of each question is as follows:

Very much was scored 3, a lot was scored 2, and a little was scored 1, not at all was scored 0, not relevant was scored 0, and Question 7, 'prevented work or studying' was scored 3.

HOW TO INTERPRET MEANING OF DLQI SCORES

0 – 1 no effect at all on patient's life, 2 – 5 small effect on patient's life, 6 – 10 moderate effect on patient's life, 11 – 20 very large effect on patient's life, 21 – 30 extremely large effect on patient's life [4,5 and 6]

Table 1: Questions of DLQI:

1. Over the last week, how itchy, sore, painful or stinging has your skin been?
2. Over the last week, how embarrassed or self conscious have you been because of your skin?
3. Over the last week, how much has your skin interfered with you going shopping or looking after your home or garden?
4. Over the last week, how much has your skin influenced the clothes you wear?
5. Over the last week, how much has your skin affected any social or leisure activities?
6. Over the last week, how much has your skin made it difficult for you to do any sport?
7. Over the last week, has your skin prevented you from working or studying? If "No", over the last week how much has your skin been a problem at work or studying?
8. Over the last week, how much has your skin created problems with your partner or any of your close friends or relatives?
9. Over the last week, how much has your skin caused any sexual difficulties?
10. Over the last week, how much of a problem has the treatment for your skin been, for example by making your home messy, or by taking up time?

RESULTS:

Table 2: Mean scores of each DLQI question in patients with acne:

Question Number	Mean Score
Q1	1.19
Q2	1.44
Q3	0.72
Q4	0.36
Q5	0.69
Q6	0.59
Q7	0.42
Q8	0.44
Q9	0.31
Q10	1.12

Mean score was 7.28 whereas Question concerned with social embarrassment had highest DQLI score (1.44) whereas question about sexual activities has lowest DQLI score (0.31).

DISCUSSION:

As the present study shows acne has moderate effect on patient's life which affect their work, social life, leisure and psychological well-being as well.

It was found in study that DQLI scores are directly related to clinical severity of acne. More score of DQLI questionnaire is indicative of more severe illness, which should be further managed actively from psychological point of view too. This hospital-based study included 150 self-reported cases of acne vulgaris in 6 months. However, some school-based studies had a much higher number of participants as in these studies acne was actively searched for in the study population and not self-reported.

Lesions of acne start around 15 years of age and may persist even into the thirties and forties. This study included cases 15 years and above. The mean age of the study population was 19.39.

Mean DLQI scores in this study increased with increasing age: 10.12 in (>25) year old compared to 7.00 among 15–20 year olds. Severity of acne worsens as age advances. A possible explanation could be that in late adolescents and early adult life, peer and romantic relationships form an important component and thus appearance has significant weight age; comparatively, in early adolescence, family is still the key and appearance does not matter much. Study found that 60.04% had acne for more than 1-year, while the majority (42%) in this study had acne for <6 months meaning patients presented early for treatment. Association between duration of acne and DLQI scores was statistically significant in this study ($P < 0.05$).

Facial acne alone constituted 61.4% cases though site of acne did not influence DLQI scores in this study. Study reported facial acne as most common (99.3%); site of acne did not show any significant association with the QoL. Increased sebum secretion is a major concurrent event associated with the development of acne. Study also found two-thirds of acne patients to have oily skin. In this study, 61.4% had oily skin, and the relation between severity of acne and oiliness was statistically significant ($P < 0.001$).

The highest prevalence of grade II acne (67.5%) was encountered in this study No statistical association was noted between gender and grade of acne in this study.

A significant correlation between DLQI scores and grade of acne ($P < 0.001$) was observed in this study.

The differences in the findings of various studies highlight the social, behavioral, and cultural factors, differences in population characteristics, individual perception, plus the study design, and assessment tool used. Though the study population in this research was Suburban, both genders did identify

even mild acne as a significant problem and reported early for treatment.

Acne has been shown to negatively impact self-esteem and identity formation in a majority of the adolescent population suffering from it. Of the literature reviewed, the psychosocial consequences were found to be focused on the patients' social interaction, such as relationships with friends and hobbies. long-term, serious relationships were not discussed, most likely due to the prevalence of the disease in a younger age group and the temporary nature of acne. Race and sex also played a role, with females suffering from a more negative psychosocial impact and

Since the age of adolescence is often a time of identity formation and vulnerability to peer acceptance and opinions, patients' social interactions are more impaired as symptom severity increases. Social phobia was found to be significantly higher in patients with acne, yet it was not mentioned in the literature for patients with vitiligo or psoriasis. Likewise, family and marriage were common themes in vitiligo and psoriasis, respectively, but they were not found to be relevant in studies on acne. This difference can be explained by a greater focus on oneself during adolescence. Social interaction during the years of adolescence can be said to be self-centered when compared to the priorities of a more mature age group, where family and marriage are of greater concern. The impact of acne on the self-centered psyche of adolescence can be demonstrated through severe cases of acne excoriée, in which patients are more likely to suffer from psychiatric conditions such as eating disorders. Furthermore, the severity of acne does not always correlate with the severity of emotional impact; even mild cases of acne have been reported to have significant emotional impact on the patients. This highlights the importance of the dermatologist to modify and adjust medical therapy to meet the patient's individual needs on QOL. Psychotherapy may complement treatment for acne well Thus, the recognition of the psychosocial impact of acne will create a platform for health care providers to guide treatment goals and connect to patients, especially those who are suffering in silence.

CONCLUSION:

As acne has moderate effect on patient's life, this should be managed in integrative manner. We should offer active psychological measures to improve the quality of life of the patients suffering from acne. Psychological interventions for sure will improve the compliance to treatment which would further decrease the burden of disease in society.

1. There is a significant impact of acne on psychological symptoms, emotions, daily and social activities, study/work, and overall health. In conclusion, light must be put on the numbers; teenagers are affected by acne/prevalence of acne among teenagers. As seen in my research more girls were more vulnerable to acne. About 70% of incidence of acne for the first time occurred at the age of 14 years. In addition, this age is more vulnerable to psychological indices related to acne as we discussed earlier in the survey.

2. There were symptoms seen in teenagers of Jaipur city, such as low self-esteem, worry about their physical appearance, and to some extent depression. Around 33% of teenagers, felt upset and emotionally distressed when they suffered from acne, and about 5% were depressed about the mark acne had left on their appearance. This has led these 5% of depressed teens to socially isolate themselves and avoid meeting people.

3. As there is a decent association between acne and psychological issues among teenagers in Jaipur city, both schools and parents/guardians should provide proper counseling.

The more severe the acne was, the deeper they had psychological worries. About 4% of teenagers felt the severity of acne they had had led them to believe that this problem will never solve and it will worsen over time, and 3 % had left hope on acne scars to fade which has led to permanent scar on their mental wellbeing.

References:

1. Cestari TF, Balkrishann R, Weber MB, Prati C, Menegon DB, Mazzotti NG, et al. Translation and cultural adaptation to Portuguese of a quality of life questionnaire for patients with melisma. Med Cutan Ibero Lat Am. 2006;34(6):270-4.
2. Zuberbier T, Maurer M. Urticaria: Current opinions about etiology, diagnosis and therapy. Acta Derm Venereol. 2007;87(3):196-205.
3. Jowett S, Ryan T. Skin disease and handicap: An analysis of the impact of skin conditions. Soc Sci Med. 1985;20(4):425-9.
4. Finlay AY and Khan GK. Dermatology Life Quality Index (DLQI): a simple practical measure for routine clinical use. Clin Exp Dermatol 1994; 19:210-216.

5. Basra MK, Fenech R, Gatt RM, Salek MS and Finlay AY. The Dermatology Life Quality Index 1994-2007: a comprehensive review of validation data and clinical results. Br J Dermatol 2008; 159:997-1035.
6. Hongbo Y, Thomas CL, Harrison MA, Salek MS and Finlay AY. Translating the science of quality of life into practice: What do dermatology life quality index scores mean? J Invest Dermatol 2005; 125:659-64.
7. Ling TC, Richards HL, Janssens AS, Anastassopoulou L, Antoniou C, Aubin F, et al. Seasonal and latitudinal impact of polymorphic light eruption on quality of life. J Invest Dermatol. 2006;126(7):1648-51.
8. Mallon E, Newton JN, Klassen A, Stewart-Brown SL, Ryan TJ, Finlay AY. The quality of life in acne: A comparison with general medical conditions using generic questionnaires. Br J Dermatol. 1999; 140 (4): 672-6
9. Chia CY, Lane W, Chibnall J, Allen A, Siegfried E. Isotretinoin therapy and mood changes in adolescents with moderate to severe acne: A cohort study. Arch Dermatol. 2005;141(5):557-60.
10. Dréno B. Assessing quality of life in patients with acne vulgaris: Implications for treatment. Am J Clin Dermatol. 2006;7(2):99-106.
11. Finlay AY, Khan GK. Dermatology Life Quality Index (DLQI) - A simple practical measure for routine clinical use. Clin Exp Dermatol. 1994;19(3):210-6.
12. Tejada Cdos S, Mendoza-Sassi RA, Almeida HL Jr, Figueiredo PN, Tejada VF. Impact on the quality of life of dermatological patients in southern Brazil. An Bras Dermatol. 2011;86(6):1113-21.
13. Lasek RJ, Chren MM. Acne vulgaris and the quality of life of adult dermatology patients. Arch Dermatol. 1998;134(4):454-8.
14. Mabuchi T, Yamaoka H, Kojima T, Ikoma N, Akasaka E, Ozawa A. Psoriasis affects patient’s quality of life more seriously in female than in male in Japan. Tokai J Exp Clin Med. 2012;37(3):84-8.