

Quality of life among cosmetology patients in Indian patients

Dr. Masarat Jabeen Senior Resident, Dr. Rita Sood Professor, Dr. Sanjay Gupta Professor, Dr. Deepika Kour Sodhi, Dr. Chandni Arora intern

Correspondence Author: Dr. Deepika Kour Sodhi, Acharya Shri Chander College Of Medical Sciences, Jammu, Jammu and Kashmir, India

Type of Publication: Original Research Paper

Conflicts of Interest: Nil

Abstract

Background and Aims: Cosmetic concerns account for a sizeable proportion of dermatology practice. Psychosocial impact of cosmetic concerns on health-related quality of life (QoL) is a common, but under-recognised concern especially in Indian patients. This study was aimed to assess quality of life and its associated factors in cosmetology patients

Materials and Methods: This was a hospital-based, prospective, cross-sectional study done on 299 consenting patients above 16 years of age with cosmetic complaints. QoL was assessed by using Dermatology Life Quality Index (DLQI) questionnaire.

Results: Females (64%) outnumbered males. The patients age ranged between 16-67 years with mean age of 25.76 ± 16.6 years (mean \pm 2S.D). Cosmetic problems like acne (38.2%) was found to be the major disease impairing QOL followed by pigmentation (30.8%), scar (27.3%) and birth marks (20.7%).

Conclusion: This study showed significant impairment of QoL in cosmetology patients. Assurance and counselling along with early treatment are important to reduce disease-related psychosocial sequelae and increase the efficacy of treatment.

Introduction

The World Health Organisation define Quality of life as the “the individuals perception of their position in life, in the context of the cultural and value system in which they live and in relation to their goals, expectations, standards and concerns.”¹

Quality of life represents an important long term outcome for patients having cosmetic problems.² Measurement of QOL entails a multidimensional assessment of patient’s physical, social, psychological and emotional realms.^{3, 4, 5, 6}

Common factors that may influence QOL for a patient with skin problems include acceptance by friends and family, the effect of patient’s appearance on their social and professional life and the patient’s confidence and happiness.^{7,8,9} For these individuals, health or well being is related to the mental, emotional and social consequences of their appearance.¹⁰

Evaluating QOL is a growing concern in this field as cosmetic problems often have a strong impact on social relations, psychological status and daily activities.^{11, 12}

Aims And Objectives

To evaluate the QOL among cosmetology patients in an Indian tertiary care hospital.

Materials and Methods

A pilot cross-sectional survey was conducted among 299 outpatients visiting dermatology outpatient department for cosmetic concerns at a tertiary care referral hospital in North India. Patients aged above 16 were included in the study. The study group comprised of patients with varying ages, occupations and social backgrounds with various cosmetic problems like acne, scars, birth marks, pigmentation etc. Ethical clearance was obtained from the Institutional Review Board of the hospital. Confidentiality was maintained at all levels of study. Demographic and clinical data (including age, gender, education level, employment status, physical activity level, family support, dermatological diagnosis and its duration) was collected from all participants. DQLI Questionnaire was used to assess the quality of life among the participants.

The Dermatology Life Quality Index questionnaire is self explanatory and simple way to approach patients' state of mind. It is used among adults above the age of 16 and takes just one to two minutes to fill the questionnaire.⁴

The DQLI 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. Statistical Package for the Social Sciences (SPSS), Version 22 (IBM Corp., Chicago, Illinois, USA) was used to analyse the data. Descriptive analysis was done for demographic and clinical characteristics. A Chi-squared test was used to analyse associations between categorical variables and poor QOL scores. A P value of ≤ 0.050 was taken as statistically significant and indicated an association through a bivariate analysis. A multivariate logistic regression model was used to study the associations between clinical or sociodemographic variables and poor QoL.

Results and Discussion

The questionnaires were given to total 299 consenting patients attending the cosmetology clinic. 14.7 % of the study population comprised of teenagers while majority of the patients (70.9 %) belonged to age group 21-30 years. Females outnumbered males .90.3 % of patients belonged to urban areas. Most patients were educated patients having college degree (95.3%). Almost half of the patients had duration of illness more than 6 months. It was seen that the quality of life among females (40.1%) was more impaired than in males (34%). The quality of life was impaired most among those suffering from acne (38.2%) followed by those having pigmentation disorders (30.8%), scars (27.3%) and birth marks (20.7%).

Patients who had associated psychiatric conditions were found to have poorer quality of life. Among those patients with depression having poor QOL comprised 45.8% and those with anxiety with poor QOL comprised 44.3%. There was significant female preponderance seen in patients having poor score in QOL data (59.9 %) compared to the male counterparts. However, this was not found to be statistically significant. Impact on quality of life among unemployed was found to be higher than among employed but this was not statistically significant ($p=0.498$). The quality of life was found to be impaired more often among patients having depression ($p=0.016$) and anxiety ($p=0.059$).

Our data corroborated with other similar surveys which reported significant association of poor quality of life with dermatologic disorders. A Brazilian study conducted to assess the effect of dermatological diseases on the quality of life found the highest impact on quality of life in men by psoriasis (median = 17.5) followed by vitiligo (median = 11), non-cicatricial alopecia (median = 12) and atopic dermatitis (median = 10.5).¹¹ In women, the skin diseases with the highest DLQI scores were atopic dermatitis

(median = 20), psoriasis (median = 14), vitiligo (median = 14) and urticaria (median = 12). With respect to factors associated with quality of life, it was found that younger, single patients with a low income, one skin disease and longer disease duration presented poorer quality of life.

Indian studies on acne patients found significant impairment of QoL in acne patients.^{13, 14} It reported that DLQI scores were statistically influenced by the age of the patient, duration and grade of acne, acne scar, and post acne hyperpigmentation.

Majority of the patients in the current study were educated and resided in cities. This finding corroborates with the fact that the concern regarding physical appearance leading to medical consultation increases with education and awareness.

The QOL was found to be poor among females as they are more conscious about their looks as compared to males. From an early age women are exposed to vast amount of gender prejudiced media like television, movies, magazines, advertisements, social media etc and most importantly they are judged on the basis of their looks. Due to this, females feel a lot of pressure towards looking attractive and likeable to prospective suitors.

The limitations of our study included absence of a control group and cross-sectional design of the study. As no extensive studies have been conducted so far comparing among all these cosmetic problems except acne and melasma therefore it was difficult to compare all the conditions included in the present study.

Conclusions

The present study demonstrated the effect of various skin conditions and demographic variables on quality of life. Female gender especially those suffering from acne, pigmentation, scars and birth marks had poor quality of life. Also patients with concomitant anxiety or depression had poor quality of life.

Table 1: Table showing correlation of QOL with various variables like Gender, Occupation and Age

Demographic variable		Quality of life	Quality of life	Chi square	Df	p value
		No Impact	Some Impact			
Gender	Male	66 (66%)	34 (34%)	1.005	1	0.316
	Female	103 (59.9%)	69 (40.1%)			
Occupation	Employed	66 (64.7%)	36 (35.3%)	0.459	1	0.498
	Unemployed	103 (60.6%)	67 (39.4%)			
Age (in completed years)	< 20	23 (52.3%)	21 (47.7%)	2.543	3	0.468
	21-30	129 (63.5%)	74 (36.5%)			
	31-40	8 (72.7%)	3 (27.3%)			
	>40	9 (64.3%)	5 (35.7%)			

Table 2: Table showing correlation between QOL and various skin conditions

Cosmetic concern	Quality of life		Chi-square	Df	p value
	No impact	Some impact			
Acne	42 (61.8%)	26 (38.2%)	11.040	4	0.026
Nevi	23 (79.3%)	6 (20.7%)			
Pigmentation	27 (69.2%)	12 (30.8%)			
Scar	24 (72.7%)	9 (27.3%)			
Others	53 (51.5%)	50 (48.5%)			

Table 3: Table showing correlation of QOL with psychological morbidity psychiatric conditions

Psychological morbidity		Quality of life		Chi-square	Df	p value
		No impact	Some impact			
Depression	Absent	104 (68.4%)	48 (31.6%)	5.791	1	0.016
	Present	65 (54.2%)	55 (45.8%)			
Anxiety	Absent	105 (66.9%)	52 (33.1%)	3.556	1	0.059
	Present	64 (55.7%)	51 (44.3%)			

References

1. Shuster S, Fisher GH, Harris E, Binnell D. The effect of skin disease on self image [proceedings]. *Br J Dermatol* 1978; 99 Suppl 16:18-9.2.
2. Kulthanan K, Jiamton S, Kittisarapong R. Dermatology Life Quality Index in Thai patients with acne. *Siriraj Med J* 2007;59:3-73.
3. Aktan S, Ozmen E, Sanli B. Anxiety, depression, and nature of acne vulgaris in adolescents. *Int J Dermatol* 2000; 39:354-7.4
4. Saitta P, Grekin SK. A Four-question Approach to Determining the Impact of Acne Treatment on Quality of Life. *J Clin Aesthet Dermatol* 2012; 5:51-7.5.
5. Finlay AY, Khan GK. Dermatology Life Quality Index (DLQI) – A simple practical measure for routine clinical use. *Clin Exp Dermatol* 1994; 19:210-6.6.
6. Barnes LE, Levender MM, Fleischer AB Jr, Feldman SR. Quality of life measures for acne patients. *Dermatol Clin* 2012; 30:293-300.7.
7. Rapp SR, Feldman SR, Graham G, Fleischer AB, Brenes G, Dailey M. The Acne Quality of Life Index (Acne-QOLI): Development and validation of a brief instrument. *Am J Clin Dermatol* 2006; 7:185-92.8.
8. Rapp DA, Brenes GA, Feldman SR, Fleischer AB Jr, Graham GF, Dailey M, et al. Anger and acne: Implications for quality of life, patient satisfaction and clinical care. *Br J Dermatol* 2004; 151:183-9.12.
9. Walker N, Lewis-Jones MS. Quality of life and acne in Scottish adolescent school children: Use of the Children's Dermatology Life Quality Index (CDLQI) and the Cardiff Acne Disability Index (CADI). *J Eur Acad Dermatol Venereol* 2006; 20:45-50.9.
10. Jones-Caballero M, Chren MM, Soler B, Pedrosa E, Peñas PF. Quality of life in mild to moderate acne: Relationship to clinical severity and factors influencing change with treatment. *J Eur Acad Dermatol Venereol* 2007;21:219-26.10.
11. 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;86:1113-21.11.
12. Tasoula E, Gregoriou S, Chalikias J, Lazarou D, Danopoulou I, Katsambas A, et al. The impact of acne vulgaris on quality of life and psychic health in young adolescents in Greece. Results of a population survey. *An Bras Dermatol* 2012;87:862-9.12.
13. Durai PC, Nair DG. Acne vulgaris and quality of life among young adults in South India. *Indian J Dermatol* 2015; 60:33-40.
14. Hazarika N, Rajaprabha RK. Assessment of life quality index among patients with acne vulgaris in a suburban population. *Indian J Dermatol* 2016;61:163-8.