

Original Research Article

A Cross-Sectional Study On Quality Of Life Among Vitiligo Patients In A Tertiary Care Hospital A Study Of 300 Cases

Dr.Shivangi sharma^{1*}

ABSTRACT

Objectives; vitiligo is an autoimmune disease affecting all the genders in all decades of life, It has considerable psycho-social impact on Health Related Quality of Life (HRQOL).The aim of our study is to assess the impact of vitiligo on Quality of Life.

Methods: The current cross sectional study sample includes 300 patients having vitiligo vulgaris who are diagnosed as vitiligo vulgaris attending OPD of PIMS Umarda Ambua Udaipur Rajasthan (India) in department of dermatology for a period of 21 months (November 2022 – july 2024).300 patients attending the Dermatology OPD with diagnosis of vitiligo were taken for the study. Patients aged 16 -35 years were included in our study. A detailed history was taken from all the participants of study. Dermatology life quality index (DLQI) were administered on patients to determine the impact of vitiligo on quality of life (QOL). Data was analyzed to compare the quality of life index(DLQI) for duration and severity of vitiligo.

Results: Mean age of study population was 20.69 years. There was a male preponderance with ratio of 1.04:1 (M:F). According to this study 49% of patients had vitiligo for less than 1year. In present study maximum number 63.7% of patients presented with lesions over face followed by 14.7% of patients having lesions over face and back. According to DLQI scores of vitiligo showed no effect in 4.3% of the patients, small effect in 26.3% of the patients, moderate effect in 38.7% of patients, very large effect in 29% of patients and extremely large effects on 1.7% of patients

Conclusions: This study depicts that quality of life is significantly affected in patients of vitiligo Application of QOL[Quality of life] measures and facilitates better treatment and prognosis in patients of vitiligo.

Keywords: Quality of life, vitiligo DLQI

INTRODUCTION

Vitiligo is a chronic autoimmune of the melanocytes that affects at least 1.5 percent of people¹ In India, prevalence data from dermatology clinic in a tertiary care hospital in PIMS Udaipur reported vitiligo in 50.6% of boys and 38.13% of girls in the age group 5yrs-45 years. Vitiligo affects 80% of individuals between puberty and 30 years of age. It was also recorded in 54% of women and 40% of men over 19years of age .

Though it is considered to be merely a cosmetic problem, it is associated with considerable psychological impairment which is comparable with certain chronic diseases like asthma, epilepsy, diabetes and arthritis. Vitiligo patients are prone to low self-esteem, low self- confidence and social dysfunction which may lead to anxiety, depression, obsessive compulsiveness and sometimes suicidal ideation. Vitiligo affects the functional abilities of individuals and patients have higher rate of unemployment when compared to those without vitiligo.⁴

Vitiligo is the common problem that presents to dermatologists. Vitiligo when involves face. Facial appearance represents an important aspect of one's perception of body image. Therefore it is not surprising that a susceptible individual with facial vitiligo may develop significant psychosocial disability. As a part of emotional impact increased level of anxiety, anger, depression and frustration are observed in patients with vitiligo. The majority of studies on psychosocial impact of vitiligo have been conducted among patients groups in US and Europe, but there is poor understanding of this among the Indian population.⁵

Vitiligo also may have negative impact on personal relationships, sports activities and employment opportunities in teens and young adults. The management of vitiligo must take into account the impact of vitiligo on the patient's quality of life. This is important in particular, because there are effective therapies of vitiligo available and administration of these agents can cause an improvement in quality of life and psychological health.

Increased awareness and early intervention for the psychological and psychiatric sequel of vitiligo can benefit patients. Measurement of quality of life changes gives insight into the impact of vitiligo from a patient's perspective and can also measure treatment success.^{6,7} This study was carried out to determine the impact of vitiligo and its clinical severity on quality of life among patients of different grades of vitiligo patients in various age groups Dermatology life quality index (DLQI).

METHODS

The current cross sectional study was conducted in Patients diagnosed as vitiligo vulgaris attending OPD of PIMS Udaipur Rajasthan (India) in department of dermatology for a period of 21 months (November 2022 – July 2024)

Study tools

- *Case record form to record clinical data
- *Lab investigations: thyroid profile if required to rule out hormonal vitiligo
- *Vitiligo severity will be assessed by grading system on clinical grounds.
- *All patients will be asked to respond to 2 questionnaire (scales) DLQI.

Inclusion criteria

Patients diagnosed as vitiligo vulgaris (more than 1 month duration) above 16 years of age and below 35 yrs of age coming to dermatology OPD in PIMS Udaipur.

Exclusion criteria

- Patients below 16 years of age.
- Patients above 35 years of age.
- All other types of vitiligo except vitiligo vulgaris will be excluded.

300 patients attending the Dermatology OPD with diagnosis of vitiligo vulgaris were taken for the study. Patients aged 16-35 yrs were included in our study.

The procedure of the study started with identifying the participants for the study. Following this identification, before the collection of the data, informed consent was taken from all the participants and they were assured about the confidentiality by telling them about the purpose of the study.

A detailed history was taken after obtaining consent from all the participants of study.

Dermatology life quality index (DLQI) were administered on patients to determine the impact of vitiligo vulgaris on quality of life (QOL)

DLQI is a general questionnaire for evaluation of quality of life in dermatology patients and consists of 10 questions about disease symptoms, feelings, daily activities, type of clothing, social or physical activities, exercise, job or education, interpersonal relationships, marriage relationships and treatment. Its domain is from zero (without any effect on quality of life) to 30(extremely large effect on quality of life).

According to the score obtained, the effect of disease on quality of life can be divided into 5 classes which are- without effect, low effect, moderate effect, very large effect and extremely large effect.

Statistical analysis

Data was entered into SPSS version 21.0 and represented in proportions and percentages. Data was analyzed to compare the quality of life indices (DLQI) for duration and severity of vitiligo.

RESULTS

A total number of 300 patients aged 16 to 35 years were taken in study among. Patients were divided into 3 groups in which maximum 71% were among patients between 18 to 25 years who were mainly college going students followed 17.7% of age group 16 to 17 years who were school going students and 11.3% patients of age group 26 to 35 years.

Mean age of study population was 20.69 years. Out of total number of 300 patients, 51% of patients were male and 49% of patients were female.

There was a male preponderance with ratio of 1.04:1. In this study, out of 300 patients 87% were unmarried. About 75.7 % (maximum patients) were students with 16.6% were among working population and 7.7% were housewife (Table 1).

Table 1: Socio demographic profile, clinical features and quality of life measures in vitiligo vulgaris Patients.

Socio demographic profile		
Age		
16-17 years	53	17.7
18-25 years	213	71.0
26-35 years	34	11.3
Sex		
Male	153	51.0
Female	147	49.0
Marital status		
Unmarried	261	87.0
Married	39	13.0
Occupation		
Housewife	23	7.7
Job/work	50	16.6
Student	227	75.7

According to this study 49% of patients had vitiligo vulgaris for less than 1year. All the 300 patients were assessed on the basis of clinical grounds

Table 4: Quality of life measures in vitiligo vulgaris patients.

Dermatology life quality index (DLQI) grade		
No effect (0-1)	13	4.3
Small effect (2-5)	79	26.3
Moderate effect (6-10)	116	38.7
Very large effect (11-20)	87	29.0
Extremely large effect (21-30)	5	1.7

According to DLQI scores of vitiligo showed no effect in 4.3% of the patients, small effect in 26.3% of the patients, moderate effect in 38.7% of patients, very large effect in 29% of patients and extremely large effects on 1.7% of patients. (Table 5).

Table 5: Descriptive statistics of DLQI

DLQI	
Maximum possible score	30
Mean (SD) score	8.61 (4.99)
Median	8.00
Highest score	24
Lowest score	0

DISCUSSION

Our study indicates the diverse ways in which vitiligo affects the lives of Indian patients. In spite of different educational and occupational backgrounds, the concerns and beliefs in patients were similar and misconceptions about vitiligo were prevalent amongst people of all social strata. Patients from rural areas experienced greater problems with ostracism and marriage probably due to closer social grouping in villages. Apart from suffering the stigma of vitiligo, patients also had guilt about the stigma that attached to other unaffected members of the family because of their disease. Previous studies have noted lowered self-esteem in patients with vitiligo while those who coped well with their disfigurement were found to have higher self-esteem. Patients who have vitiligo, however, the observations made in this study have important implications for the management of vitiligo. Evaluation of psychological and social factors in addition to the primary dermatological condition is as relevant to vitiligo and perhaps more so than in other skin disease. Interestingly, patients with greater impairment of quality of life were found to respond less favorably to treatment. In evaluating the psychological impact of vitiligo, it is also important to consider the patient's life situation including social support network and the attitude of colleagues, and family members as even "mild" disease may greatly distress the patient. Psychological interventions such as cognitive behavioral therapy are helpful in improving body image, self-esteem and QOL of patients with vitiligo and also appear to have a positive effect on the course of the disease. Apart from individual interventions, support and self-help groups may help people deal with this psychologically and socially devastating disease. The severity of the psycho-social impact is indicated by the fact that some patients thought about their disease all day and could not bear to look at themselves in the mirror even when covered areas alone were affected. A previous questionnaire and interview based study of 300 patients with vitiligo in a hospital-based out-patient setting indicated that two-thirds felt worried about the spread of disease, whether their children would inherit the disease and whether new cures would be found. Over half said that people stared at them, and from 20% to 25% said that they had been the victim of snide remarks by strangers. In a

previous study of 30 patients from India, 10% patients were found to have depression, one patient had anxiety and one patient had suicidal ideation.

1. Concern that the disease could spread to involve the whole body was an important reason for seeking treatment. The psychosocial impact on education, marriage, and employment was felt most by young adults. In older patients, the social price of vitiligo in the family to be paid by unaffected younger family members was a major concern. Vitiligo had an impact on the choice of career with some jobs being denied to patients. On the other hand, the development of vitiligo after employment had been secured had fewer effects. An area of major impact is marriage with difficulties in getting married. Even after marriage, vitiligo continued to exert its influence leading to difficulties with in-laws, sexual relations, and even resulting in divorce. Patients also faced the burden of unsolicited advice and intrusive questioning from family members, peers, friends and well-wishers.

- In a study by Ongena et al vitiligo moderately affecting head, face or neck areas, trunk and feet localizations were found to correlate significantly with the overall DLQI score. Vitiligo on the exposed areas in a few of our patients caused problems in social interaction though most patients claimed to be unaffected. Patients with vitiligo in the covered areas were less concerned about social interaction and functioning, but were quite worried about the social consequences of vitiligo spreading to the exposed areas.

Patients who visited their dermatologist about their disease often had higher DLQI scores. However, disease location, severity, and visibility were found to be independent of the number of consultations in the same study. In our study, quick treatment results were desired resulting in multiple consultations and willingness to spend large amounts of money. Treatment was expected to result in complete repigmentation failing which it was expected to at least arrest the progression of the disease. Patients frequently changed their doctors because of impatience with the slow response, due to lack of information about the need for prolonged therapy or in spite of it. Dietary restrictions were believed to play an important role in therapy by patients, their family members and medical practitioners.

There was a tendency to be less troubled by the disease with passing time, but this was not an irreversible change of attitude. For example, patients who were unconcerned and did not seek treatment became troubled by the disease when they were disqualified for employment on medical grounds because of vitiligo.

References

1. Kent G, al-Abadie M. Factors affecting responses on Dermatology Life Quality Index items among vitiligo sufferers. *Clin Exp Dermatol* 1996; 21:330-3.
2. Belhadjali H, Amri M, Mecheri A, Doarika A, Khorchani H, Youssef M. et al. Vitiligo and quality of life: A case-control study. *Ann Dermatol Venereol* 2007; 134:233-6.
3. Ongena K, Van Geel N, De Schepper S, Naeyaert JM. Effect of vitiligo on self-reported health-related quality of life. *Br J Dermatol* 2005; 152:1165-72.
4. Sharma N, Koranne RV, Singh RK. Psychiatric morbidity in psoriasis and vitiligo: A comparative study. *J Dermatol*; 2001; 28:419-23.
5. Firooz A, Bouzari N, Fallah N, Ghazisaidi B, Firoozabadi MR, Dowlati Y. What patients with vitiligo believe about their condition *Int J Dermatol* 2004; 43:881-4.
6. Porter J, Beuf AH, Nordlund JJ, Lerner AB. Psychosocial reaction to chronic skin disorders: A study of patients with vitiligo, *Gen Hosp Psychiatry* 1979; 1:73-7.
7. Porter JR, Beuf AH, Lerner A, Nordlund J. Psychological effect of vitiligo: A comparison of vitiligo patients with "normal" control subjects, with psoriasis patients, and with patients with other pigmentary

- disorders. *J Am Acad Dermatol* 1986; 15:220-4.
8. Borimnejad L, Parsa Yekta Z, Nikbakht-Nasrabadi A, Firooz A. Quality of life with vitiligo: Comparison of male and female 2006;3:124-30.
 9. Hill-Beuf A, Porter JD. Children coping with impaired appearance: Social and psychological influences. *Gen Hosp psychiatry* 1984; 6:294-301.
 10. Mattoo SK, Handa S, Kaur I, Gupta N, Malhotra R. Psychiatric morbidity in vitiligo: Prevalence and correlates in India. *J Eur Acad Dermatol Venereol* 2002; 16:573-8
 11. Mattoo SK, Handa S, Kaur I, Gupta N, Malhotra R. Psychiatric morbidity in vitiligo and psoriasis: A comparative study from India. *J Dermatol* 2001; 28:424-32.
 12. Giacomini MK, Cook DJ. User`s guides to medical literature: XXVIII. Qualitative research in health care A. Are the results of the study valid? Evidence-Based medicine Working Group. *JAMA* 2000; 284:357-62.
 13. Sofaer S. Qualitative methods: What are they and why use them? *Health Serv Res* 1999; 34:1101-18
 14. 1987; 39:493euf AH, Lerner A, Nordlund J. Response to cosmetic disfigurement: Patients with vitiligo cutis 1987;39:493-4.
 15. Porter J. The psychological effects of vitiligo: Response to impaired appearance. In:HANN SK, Nordlund JJ, editors. *Vitiligo a monograph on Basic and clinical Science*.Oxford: Blackwell Science Ltd;1000. p.97-100.
 16. Gupta MA,Gupta AK, Psychiatric and psychological co-morbidity in patients with dermatologic disorders: Epidemiology and management.*Am J Clin Dermatol* 2003;4:833-42.
 17. Prasad D, Pandhio R, Dogra S, Kanwar AJ, Kumar B. Dermatology Life Quality Index score in vitiligo and its impact on the treatment outcome. *Br J Dermatol* 2003; 148:373-4
 18. Papadopoulos L, Bor R, Legg C. Coping with the disfiguring effects of vitiligo: A preliminary investigation into the effects of cognitive-behavioral therapy. *Br J Med psychol* 1999; 72:385-96.