ISSN: 0975-3583, 0976-2833 VOL14, ISSUE3, 2023

DERMATOLOGICAL QUALITY OF LIFE OF SUBJECTS SUFFERING FROM VITILIGO

Dr. Sandeep Kapur¹, Dr. Ekram Goyal^{2*}, Dr. Surinder Kumar³, Dr. Ajay Kumar⁴, Dr. Navneet Kaur⁵, Dr. Alka Puria⁶

- 1.Senior Resident, Dr. B.R. Ambedkar State Institute of Medical Sciences (Department of Psychiatry), Mohali, Punjab
- 2. Assistant Professor, Dr. B.R. Ambedkar State Institute of Medical Sciences (Department of Psychiatry), Mohali, Punjab
- 3. Associate Director and senior pulmonologist consultant, Paras hospitals, Near NADA Sahib Gurudwara, Panchkula, Haryana.
- 4.MD Psychiatry, Consultant Psychiatrist, Lakshya Psychiatric Centre Sidhra, Jammu (J&K). 5.Medical officer (Psychiatry), Civil hospital, Khanna, Ludhiana, Department of Health and Family welfare, Chandigarh (Punjab).
 - 6.Senior Resident, Department of Biochemistry, Government Medical College, Patiala, Punjab.

*Corresponding Author and Address: Dr. Ekram Goyal, H. No. 1410, Sector 40-B Chandigarh, 160036, India Email:- ekarm.goyal8@gmail.com

Abstract

Introduction: Vitiligo is a chronic, acquired, debilitating dermatological illness that causes cosmetic disfigurement and is associated with stigma. It impairs sufferer's self-esteem, body image and confidence.

Aim: To assess dermatological quality of life index of subjects suffering from this disorder.

Methodology: This hospital based cross-sectional; observational study was conducted in department of psychiatry. 100 subjects suffering from Vitiligo were consecutively enrolled from department of dermatology. Diagnosis of vitiligo was confirmed by 3 consultants from department of dermatology. Socio-demographic variables were recorded on socio-demographic proforma-4. Quality of life index was recorded on Dermatology Life Quality Index scale (DLQI). All results were statistically analysed on SPSS22.0.

Observations: 55% subjects with vitiligo had impairment in quality of life. Out of which 5% had mild impairment, 40% had moderate impairment and 10% had severe impairment in DLQI scores.

Conclusion: Vitiligo impairs subject's quality of life. It is important to deal with psychological aspect of this disease. Early screening should be done and if needed psychotherapeutic intervention must be taken.

Keywords: Vitiligo, Dermatology Life Quality Index scale (DLQI), Quality of life.

1. Introduction

Vitiligo is a chronic debilitating acquired dermatological illness that causes cosmetic disfigurement. It is characterized by presence of hypopigmented macules. Absence of melanocytes from lesioned skin is the key event in the pathogenesis of this disease.^[1] The

ISSN: 0975-3583, 0976-2833 VOL14, ISSUE3, 2023

disorder affects nearly 1%-2% of the world population irrespective of race and ethnicity with highest incidence recorded in Indian subcontinent followed by Mexico and Japan. [2] However, its prevalence in India is invariable ranging from 0.25% to 4%. In states like Gujarat and Rajasthan it is up to 8.8%. [3] It effects individuals of all the races and both the genders. Age range of effected individuals is 18 to 68 years with majority of patients being in the age group of 18 to 34 years. [4] Exact aetiology of vitiligo is poorly understood. It is implicated to have multifactorial causation. Genetic factors, oxidative stress, autoimmunity, neurological factors, toxic metabolites and lack of melanocyte growth factors might contribute for precipitating the disease in susceptible people. [5][6] In India, stigma is associated with this condition. Many vitiligo patients feel distressed and stigmatized by their condition. They attract attention from the general public, sometimes whispered comments, antagonism and ostracism. The self-image of the vitiligo patients drops considerably and may lead to depression. These patients often develop negative feeling about it, which are reinforced by their experiences over a number of years. Most patients of vitiligo report feelings of embarrassment, which can lead to a low self-esteem and social isolation. [7][8] All these factors lead to prevalence of psychiatric illnesses in such individuals. Depression, anxiety, social anxiety, substance abuse, sleep disorders, psychosomatic disorders and obsessive symptoms are common in these people. [9-11] Numerous studies have reported the psychosocial impact of vitiligo on patient's lives, which is the most important factor that affects quality of life. Several studies have observed poor quality of life index in people who suffer from this chronic debilitating condition. [12-14] This study is an attempt to measure quality of life index in patients of vitiligo visiting a tertiary care centre for treatment.

2. Material and Methods

This hospital based descriptive cross-sectional, observational study was conducted in department of psychiatry. Intuitional Ethics Committee permission was taken before conducting the study. 100 subjects suffering from Vitiligo were consecutively enrolled from department of dermatology. Diagnosis of vitiligo was confirmed by 3 consultants from department of dermatology. Written informed consent was taken from all subjects before including them in study. Socio-demographic variables were recorded on socio-demographic proforma-4 and Quality of life index was recorded on Dermatology Life Quality Index (DLQI). Data were statistically analysed on SPSS-22.

Inclusion Criteria

Consenting subjects above the age of 18 years suffering from Vitiligo.

Exclusion Criteria

- 1. Non consenting individuals
- 2. Individuals with intellectual deficit.
- 3. Individuals having other dermatological illnesses or other systemic illnesses having dermatological manifestations.

Details of instruments used

1. Socio-demographic Proforma-1

2. Dermatology Quality of Life Index Scale (DLQI)

This was developed by Finlay and khan in 1994. It is simple 10 question validated questionnaire. Score is calculated by summing the score of each question resulting in a maximum of 30 and minimum of 0. The higher the score more is the impairment in quality of life.

ISSN: 0975-3583, 0976-2833 VOL14, ISSUE3, 2023

Observations

Following observations were made after analyzing data on SPSS-22.0

Table-1: Socio-demographic profile of subjects suffering from vitiligo

Parameter	Categories	Number of subjects (Percentage
		of subjects)
Age (Years)	18 -25	50(50%)
	26-35	41(41%)
	36-45	07(7%)
	46-60	02(2%)
Gender	Males	64(64%)
	Females	36(36%)
Occupation	Employed	42(42%)
	Unemployed	58(58%)
Education	Illiterate	70(70%)
	Literate	30(30%)
	Single	32(32%)
3.6 4.1	Married	60(60%)
Marital status	Separated	05(5%)
	divorced	03(3%)
Income	>5000	82(82%)
(INR/month)	< 5000	18(18%)
Family Dynamics	Nuclear	46(23%)
	Extended	06(6%)
	Joint	31(31%)
	alone	30(30%)
	Friends	10(10%)
Area of living	Rural	92(92%)
	Urban	8(8%)
Religion	Hindu	67(67%)
	Muslim	29(29%)
	Others	4(4%)
A C	0-18	76(76%)
Age of onset of	18-35	24(24%)
Vitiligo (Years)	>35	0(0%)
Site of onset	Upper limbs	64(64%)
	Lower limbs	10(10%)
	Trunk, neck and face	26(26%)
Duration of illness(years)	0-2 year	19 (19%)
	2-5 years	72(72%)
	>5 years	09 (9%)

Table-2: Dermatology Quality of Life scores of subjects suffering from Vitiligo

DLQI	No of subjects (percentage)
No	45(45%)

ISSN: 0975-3583, 0976-2833 VOL14, ISSUE3, 2023

Mild	05(5%)
Moderate	40(40%)
Severe	10(10%)

3. Discussion

This present cross-sectional hospital-based study conducted on 100 subjects observed that majority of individuals suffering from vitiligo were in the age group of 18-25 years age group (50%). This finding of our study is concordant with Sawant et al (2019); where majority of people suffering from vitiligo were in the age group of 18-34 years. ^[4] This implies that it effects younger population. People in this age group are most productive and career oriented. They are out of their homes for the jobs and education. On daily basis they meet a lot of people. Presence of such lesions on skin impairs their self-confidence and performance.

It was also seen in this study that vitiligo effected males more frequently compared to females. Epidemiological studies provide conflicting evidence on occurrence of this condition in both genders. However, there is no major difference observed. [15][16] Many studies have highlighted more stigma among females than males.

In this study it was noted that 55% subjects with vitiligo had impairment in quality of life. Out of which 5% had mild impairment, 40% had moderate impairment and 10% had severe impairment in DLQI scores. Similar findings were reported by a study conducted on 53 vitiligo patients in Hyderabad by Podaralla Ramakrishna and Tenali Rajni et al (2014); where moderate impairment in quality-of-life index was observed using DLQI as an instrument. [9] Similarly other studies also report moderate impairment in QoL. Other studies also reveal the same. [18]

Present study showed that vitiligo influences many aspects of person's quality of life. The most negative effect of the disease on quality of life was found in feelings, emotions, interpersonal relationships, social and leisure time activities.

4. Conclusion

There is a need for information and reassurance in patients with vitiligo, as these patients experience anxiety due to the spreading depigmenting lesions, and are worried as they appear different from others. A good social support can help the patient in developing strategies to accept their difference by self-talk, reducing distress, and encouraging exposure to feared situations. Presence of psychosocial stress and psychiatric comorbidity related to vitiligo can have implications in the management of this disease. It is important for the dermatologist to recognize and understand the psychosocial and the psychiatric comorbidities, and consequences of vitiligo, so that they can deal with them. Therefore, Management of vitiligo should include evaluation of the psychological (psychiatric comorbidity and psychological aspects of daily life) and social (effects on occupational and social functioning) factors along with the dermatological factors. A multidisciplinary approach can be adapted, for treating patients with vitiligo. Psychologist can treat symptoms of anxiety and depression through cognitive-behavior therapy, stress management program, dermatological education and other structured educational programs.

ISSN: 0975-3583, 0976-2833 VOL14, ISSUE3, 2023

Limitations

- 1. Small sample size
- 2. It was a hospital based cross-sectional study.
- 3. There was no control group.

5. References

- 1. Le Poole IC, Das PK, van den Wijngaard RM, et al. Review of the etiopathomechanism of vitiligo: a convergence theory. *Exp Dermatol.* 1993;2(4):145–53.
- 2. Alikhan A, Felsten LM, Daly M, Petronic-Rosic V. Vitiligo: A comprehensive overview part I. Introduction, epidemiology, quality of life, diagnosis, differential diagnosis, associations, histopathology, etiology, and work-up. J Am Acad Dermatol. 2011;65:473–91.
- 3. Mahajan VK, Vashist S, Chauhan PS, Mehta KIS, Sharma V, Sharma A. Clinico-Epidemiological Profile of Patients with Vitiligo: A Retrospective Study from a Tertiary Care Center of North India. Indian Dermatol Online J. 2019;10(1):38-44.
- 4. Sawant NS, Vanjari NA, Khopkar U. Gender Differences in Depression, Coping, Stigma, and Quality of Life in Patients of Vitiligo. Dermatol Res Pract. 2019;20(9):6879412.
- 5. Gupta MS, Gupta AK. Psychiatric and psychological comorbidity in patients with dermatological disorders: Epidemiology and management. Am J Clin Dermatology.2003;4:833-42.
- 6. Frisoli ML, Essien K, Harris JE. Vitiligo: Mechanisms of Pathogenesis and Treatment. Annu Rev Immunol. 2020;38:621-648.
- 7. Kent G, Al'Abadie M. Psychological effects of vitiligo: A critical incident analysis. J Am Acad Dermatol. 1996;35:895–8.
- 8. Leary M, Kowalski RM. Social anxiety. New York: Guildford Press; 1995 Pandve HT. Vitiligo: is it just a dermatological disorder? Indian J Dermatol. 2008;53(1):40-1.
- 9. Ramakrishna P, Rajni T. Psychiatric morbidity and quality of life in vitiligo patients. Indian J Psychol Med. 2014;36(3):302-3.
- 10. Sarkar S, Sarkar T, Sarkar A, Das S. Vitiligo and Psychiatric Morbidity: A Profile from a Vitiligo Clinic of a Rural-based Tertiary Care Center of Eastern India. Indian J Dermatol. 2018;63(4):281-284.
- 11. Koblenzer CS. Psychosomatic concepts in dermatology. A dermatologist-psychoanalyst's viewpoint. Arch Dermatol. 1983;119:501–12.
- 12. Jayaprakasham A, Darvay A, Osborne G, McGibbon D. Comparison of assessments of severity and quality of life in cutaneous disease. Clin Exp Dermatol 2002;27:306-8.
- 13. Onegnae K, Van Geel N, De Schepper S, Naeyaert JM. Effect of vitiligo on self-reported health-related quality of life. J Dermatol 2005;152:1165-72.
- 14. Hedayat K, Karbakhsh M, Ghiasi M, Goodarzi A, Fakour Y, Akbari Z, Ghayoumi A, Ghandi N. Quality of life in patients with vitiligo: a cross-sectional study based on Vitiligo Quality of Life index (VitiQoL). Health Qual Life Outcomes. 2016;14:86.
- 15. Liu J-B, Li M, Yang S, et al. Clinical profiles of vitiligo in China: an analysis of 3742 patients. *Clinical and Experimental Dermatology*. 2005;30(4):327–331.

ISSN: 0975-3583, 0976-2833 VOL14, ISSUE3, 2023

- 16. Dave S, Thappa D, Dsouza M. Clinical predictors of outcome in vitiligo. *Indian Journal of Dermatology, Venereology and Leprology*. 2002;68(6):323–325.
- 17. Radtke MA, Schäfer I, Gajur A, Langenbruch A, Augustin M. Willingness-to-pay and quality of life in patients with vitiligo. British Journal of Dermatology. 2009;161(1):134–139.
- 18. Baidya S, Dey P, Mohanty R. Assessment of quality of life in vitiligo patients attending a tertiary care hospital A cross sectional study. Ind Psychiatry J. 2021;30(1):62-66.