



Perceived Quality of Life in Individuals with Vitiligo

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Abstract

Introduction: A melano-cytopenic disorder known as vitiligo causes skin depigmentation. Vitiligo substantially decreases an individual's quality of life and causes anxiety and concern for those who have it everywhere in the world as well as for others who are related to them.

Objective: The present study was designed with the aim to examine perceptions of QoL in individuals with exposed, unexposed and both types (exposed/unexposed) of Vitiligo.

Method: A Cross-sectional research design using purposive sampling strategy was employed. The sample comprised of (N=120) individuals with Vitiligo recruited from different dermatology units of hospitals in Lahore, Pakistan. QoL was measured by Dermatology Life Quality Index (1994).

Results: It was found that most of the individuals with Vitiligo tend to report poorer perception of QoL, men perceived QoL better as compared to women. Individuals with both types of Vitiligo (exposed/unexposed) reported a poorer perception about QoL. Interestingly, demographic factors did not appear to affect perceived QoL.

Conclusion: It was concluded that Vitiligo as a chronic and autoimmune condition has a significant negative impact on individuals QoL rather than physiological complications.

Keywords: Vitiligo; Quality of Life (QoL); Life Quality Index

Introduction

People from different social groups devote a lot of importance to beauty. An even skin tone devoid of flaws is a requirement for excellence in any society [2]. Yet skin conditions are very prevalent. The causes, signs, symptoms, and severity of vitiligo vary but psychological complications that affect crucial aspects of daily functioning and QoL, such as emotional, cognitive, and behavioral effects on personality, communications, and socio-occupational functioning are very similar across the board [1]. Vitiligo is the most prevalent de-pigmenting disorder, with a prevalence rate of approximately 1% in the world population [3]. Manifestation of psychological and emotional stress can lead to vitiligo

which generally leads to psychological distress which further may provoke poor psychological well-being, poor QoL and appearance related concerns [10]. Visible skin condition can have a significant social impact, especially when it comes to making and maintaining relationships with others, especially in people who have been diagnosed with vitiligo [10].

Quality of life (QoL)

The degree to which a person is healthy, comfortable, and able to engage in or enjoy life events is referred to as QoL. The term quality of life is inherently confusing because it can be used to describe both an individual's perception of their own lives as well as

their living circumstances. QoL is therefore incredibly subjective. The ability to live a good life in terms of emotional and physical well-being, for example, may be a capability, but one person may define QoL in terms of wealth or happiness with life [7].

- **Domains of QoL:** According to this notion, QoL was defined. The model was introduced using a qualitative approach. To collect related elements into the QoL domain, factor analysis was used. The final model came to the following conclusions about four facets of QoL, including physical health, psychological/spiritual, social and economic, and environmental QoL [4].
- **Physical Health:** This domain contains information on general health, medical services offered to patients, the level of pain people experience, the amount of energy (fatigue) needed for daily activities, the ability of patients to care for themselves without assistance, individual control over life, and chances of living a long life.
- **Psychological/Spiritual:** This aspect includes significant serenity, faith in God, achieving specific goals, overall joy and satisfaction in day-to-day activities, physical appearance and sense of self, real picture and appearance, negative and constructive emotions, confidence, otherworldliness, Religion, personal convictions, thinking, learning, memory, and fixation.
- **Social and Economic:** In contrast, it comprises a person's ability to manage their finances as well as their contentment with and importance of peers, emotional support from family and others, neighborhood, home, career, and education. It also encompasses one's capacity to handle family obligations, efficacy toward others, anxieties, pleasure, and prospects for a happy future [4].
- **Environment:** This area of quality of life covered financial resources, opportunities for physical wellbeing, security well-being, social consideration, availability, and home conditions, as well as opportunities for learning new skills and diversions, exercises for relaxation, and physical conditions (such as contamination, commotion, traffic, atmosphere, synthetic substances, and infections) [4].

According to the World Health Organization, QoL is a person's perception of where they are in life in respect to their goals, standards, and concerns, as well as the culture and value systems in which they live. Common metrics of QoL include wealth, employ-

ment, the environment, physical and mental health, education, leisure activities, social relationships, religious views, safety, security and freedom.

Patients with vitiligo experience stigmatization or even unattractive, particularly if pathological lesions cover a significant portion of the skin, including the genitalia and other exposed areas, such the hands and face. These feelings are the primary causes of decreased QoL and may have a detrimental effect on the psychological health of dermatology patients, as well as on their families, social, and occupational functioning [8].

Rationale of the study

An individual's face is frequently used to evaluate their physical appearance. Any visual impairment has a negative impact on an individual's overall QoL. People who have visible bodily deformities may face stigmatization, which can vary among cultures. One of the dermatological conditions that has the huge impact on QoL is vitiligo. In Pakistan, studies on vitiligo frequently place more emphasis on the clinical aspects of the disease, such as the available treatments, prevalence rates, mental comorbidity, and dietary restrictions, and less emphasis on the psychosocial domain of daily living. However, this study will facilitate to identify how Vitiligo affect one's QoL that need to be screened, assessed and managed.

Research Questions

- How do most individuals with Vitiligo perceive their QoL?
- Do people with exposed, unexposed and both types of (exposed/unexposed) Vitiligo differ in their perceptions of QoL?
- Are there any gender differences in terms of QoL?

Subjects and method

In the current study, a cross-sectional research design was employed. Purposive sampling was used to obtain the sample from hospitals with dermatology departments in Lahore. The whole sample (N = 120) consisted of 58 (48% of the patients) with exposed Vitiligo (white patches on visible body parts), 29 (24.2%) with unexposed Vitiligo, and 33 (27.5%) with both types (lesions on exposed and unexposed regions). In terms of gender representation, the sample had a mean age of 30.0 years (SD = 10.4) and included 84 (70%) women and 36 (30%) men. Participants

with physical or psychological conditions were excluded from the study. Additionally excluded those who had any skin problem other than vitiligo.

Assessment Measures

- **Demographic Information Sheet:** A self-build demographic information sheet was used to gather knowledge about the exclusive information of the Vitiligo patients such as age, gender, education, work status, family system, residential background and marital status.
- **Dermatology Life Quality Index (DLQI):** DLQI is frequently applied to numerous skin conditions. It measures the impact of skin problems during the last seven days on important aspects of daily life and consists of ten items. There are four alternative answers for each item: (0) not at all relevant, (1) somewhat, (2) somewhat, and (3) very considerably. There was a 30-point scoring range. High performance is correlated with a more disturbed quality of life. The scores fall into the following ranges: No effect on the patient’s life: 0–1, 2–5 minimal impact on the patient’s life, modest impact on the patient’s life: 6–10, 11–20 extremely significant impact on the patient’s life, and 21–30 extremely severe impact.⁵ The current study used Urdu translated version.

Procedure

The various hospital heads were given authorization letters prior to data collection in order to collect data. After obtaining consent, the researcher seeks the patients’ permission and assures them of the confidentiality of any information they have provided. The Dermatology Life Quality Index (DLQI) scales are given to the participants to complete. Basic instructions were given before distributing the questionnaire. SPSS version 21 was used to analyze data.

Results

Most of the individuals with Vitiligo reflected poor perceptions of QoL as indicated by their respective scores.

	Sample size (n)	Percentage (%)
Gender		
Men	36	30%
Women	84	70%
Age		
Mean Years	30.0(10.4)	
Education		
High School	34	28.3%
Undergraduate	16	13.3%
Graduate	37	30.8%
Post-graduate	33	27.5%
Work Status		
Working	57	47.5%
Non-working	63	52.5%
Family System		
Nuclear	72	60.0%
Joint	48	40.0%
Residential Background		
Rural	101	84.2%
Urban	18	15.0%
Marital Status		
Single/In a Relationship	81	67.5%
Married	38	31.7%

Table 1: Demography of the study population.

Variable	M	SD	k	α	Ranges		Skewness	Kurtosis
					Actual	Potential		
QoL	12.5	5.43	10	.78	0-30	1-25	-.47	-.34

Table 2: Descriptives for QoL in Individuals with Vitiligo (N = 120).

Note: M: Mean; SD: Standard Deviation, k: no. of items; α: Reliability Coefficient; QoL: Quality of Life

The mean scores revealed that most individuals perceived poor QoL which indicates that Vitiligo caused disturbance or negatively influence their QoL. Those individuals who have both types of Vitiligo (lesions on exposed/unexposed regions) tend to perceived poor QoL as reflected by their scores given below.

Variable	Exposed (n = 58)	Unexposed (n = 29)	Both (n = 33)	F (2,117)	p	Partial η ²
	M (SD)	M (SD)	M (SD)			
QoL	13.7(4.22)	7.17(5.30)	15.1(4.21)	28.07	.00***	.32

Table 3: One way ANOVA comparing QoL in Individuals with Exposed, Unexposed and Both Type of Vitiligo (N = 120).

Note: QoL: Quality of Life, M: Mean, SD: Standard Deviation, *p<.05, **p<.01, ***p<.001

The mean scores revealed that individuals with both types of Vitiligo (lesions on exposed/unexposed region) greatly influenced by this skin condition that marked significant disturbance in their QoL as compared to individuals with exposed and unexposed Vitiligo.

Variable	Men		Women		t (118)	p	95% CI		Cohen's d
	M	SD	M	SD			LL	UL	
QoL	10.2	5.09	13.4	5.31	-3.0	.00**	-5.28	-1.13	0.61

Table 4: Comparison between Perceptions of QoL on the Basis of Gender (N = 120).

Note: QoL: Quality of Life; M: Mean; SD: Standard Deviation; CI: Confidence Interval; LL: Lower Limit; UL: Upper Limit, * p < .05, ** p < .01, *** p < .001.

Results revealed that Vitiligo tend to have greater impact on QoL of women as they reported poor perceptions about their QoL (M = 13.4, SD = 5.31) rather than men (M = 10.2, SD = 5.09) with statistically significant difference t (118) = -3.0, p <.001, d = 0.61.

Findings of Pearson Product Moment Correlation indicated that gender was the only single demographic factor that significantly correlated with QoL. This finding reflected that women with Vitiligo tend to report poorer perceptions about QoL as compared to men. However, it was found that other sociodemographic factors such as age, education, work status, family system, marital status and residential background were not significantly correlated with QoL.

Sr no	Variables	1	2	3	4	5	6	7	8
1	Age	-	-.214*	.007	.194	.094	.088	.658**	-.073
2	Gender		-	-.094	.025	.089	.020	-.198*	.272**
3	Education			-	.180	-.074	-.396*	-.161	.084
4	Work status				-	.051	.163	.253	-.161
5	Family system					-	.181*	.084	-.082
6	Residential background						-	.171	-.274
7	Marital status							-	-.157
8	QoL								-

Table 5: Correlation between Demographic Factors and QoL (N = 120).

Discussion

The goal of the current study was to better understand how people with exposed, unexposed, and both types of vitiligo perceived their QoL. The study's initial finding showed that most Vitiligo patients often express lower perceptions of QoL. In contrast, men experienced higher QoL. Women sometimes exaggerate or draw attention to their feelings, emotions, ideas, and problems in front of others, which has a detrimental impact on their QoL and causes problems in interpersonal or intrapersonal interactions. Men, on the other hand, tend to hide their emotions and problems

from others and strive to act calmly in situations that improve their QoL. The finding was consistent with previous research [6].

A prospective cross-sectional study was also carried out. In four dimensions of the scale, scores were evaluated in relation to demographic, clinical, and social factors (relationship with colleagues, family relationship, social relationship, and self-respect). Women reported poor QoL than men. Patients who had visible lesions, perceived poor QoL than those who did not. The finding suggested that vitiligo has a detrimental effect on QoL [12]. Furthermore,

another research study indicated that women tend to report poor perceptions of QoL along with higher levels of depression, stigmatization, low self-esteem and poor coping skills [13].

Another finding of the study showed that, in comparison to other groups, people with both types of vitiligo tend to report lower perceptions of their QoL. According to published research, those who have both types of vitiligo (white lesions on exposed and covered body parts) are more likely to be stigmatized, marital conflicts, poor body image and report adverse psychological consequences which ultimately affect their perceptions of QoL [2]. Similarly another study found that those patients who have lesions on their visible and invisible body parts are likely to report poor perceptions about their QoL. In addition, patients with genital involvement scored significantly worse on vitiligo QoL scale than those without lesions in this area [11]. Further, it was also significantly revealed that their psychological health influenced by the negative impact of Vitiligo [10].

In the present study it was revealed that gender was the only single significant sociodemographic factor that significantly correlated with QoL. A previous research was conducted with intend to evaluate the perceptions of QoL along with the contribution of different demographic factors. The mean score of QoL in men was significantly higher than in women. Other factors were not found to affect the QoL of individuals with vitiligo. It has been determined that QoL of individuals with vitiligo is influenced by a variety of controllable and non-modifiable factors. Counseling and increasing awareness may help to reduce stigma related to gender. To facilitate prompt care, the practitioner must be vigilant for any mild indications of QoL impairment [14].

Conclusion

Vitiligo is a condition that causes a loss of skin pigment [10]. Along with medication, behavioral adjustments and psychological treatments are crucial for its management. The current study came to the conclusion that most Vitiligo sufferers tend to report poor perceptions of QoL. In contrast, women reported decreased QoL. Individuals from three groups of Vitiligo (exposed, unexposed, and both) showed substantial variations in QoL. Individuals who suffer from both types of vitiligo (exposed/unexposed) tend to report poorer perceptions of QoL. Gender was the only single sociodemographic factor that found to be significantly correlated with QoL. The results of this study revealed that as opposed to

physical difficulties, the psychological or mental health of an individual was more affected by vitiligo. There are multiple psychosocial factors such as poor body image, perceived stigmatization, lack of social support and lower level of self-esteem that might determine or played a major role to influence QoL. Conducting an awareness campaign to dispel myths, misunderstandings, and superstitious beliefs about Vitiligo is important. It is vital to take into account psychological components and problems, and those who have a history of being vulnerable might be evaluated and referred for psychiatric assistance.

Disclaimer

The text is based on an academic thesis.

Conflict of Interest

None.

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