

The Prevalence of Vitiligo and Its Impact on the Quality of Life of Iraqi Patients

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Abstract: The study involved 80 vitiligo patients in Iraq from April 2022 to September 2024, using the VitiQoL index to assess their quality of life where. Patients scored parts of their body using specific areas and completed a detailed questionnaire on disease progression and treatment. The dermatologist was the principal investigator during these sessions. The study investigates the correlation between patients' quality of life and vitiligo and the body image of vitiligo patients based on demographic variables such as gender, education, age, marital status, economic status, location, and infection duration. The research also explores the predictive value of body image in vitiligo patients through psychological hardness. The study involved taking photographs of lesions and evaluating disease severity using the vitiligo extent score (VES). The Mean and standard deviation of age patients were 28.5 ± 8.5 , where is there a significant relationship between the VASI score and age of patients with P-value <0.05 and also a significant relationship between VASI score and sex of patients with P-value 0.044 where in this study we found Concomitant psychiatric problems, anxiety, and depression, were associated with QOL. Iraqi patients suffer greatly as a result of how vitiligo affects their quality of life because it carries with it much social stigma, discriminatory practices as well as psychological distress, which go hand in hand with this phenotype. Vitiligo causes self-disparagements.

Keywords: Vitiligo, Patients, VASI, QOL, VES, Prevalence, Depression

INTRODUCTION

Pigmentation disorders are recognized when the color of the skin is different than it ought to be (normal skin) (Ahmed, A. *et al.*, 2018). These disorders often don't get the attention they deserve because they have nothing to do with death. Vitiligo is an example of a common pigmentary disorder; this inherited depigmenting condition has been found to affect about 1% of people globally (vitiligo). However, in this disease, white patches cover various areas of the skin, sometimes with hair in or around them (Alghamdi, K. M. *et al.*, 2012; AlGhamdi, K. M., 2010).

There are frequently surveys that measure the extent to which diseases affect one's QoL as human life quality. A widely recognized health service named Short Form 36 Survey (SF-36), (Esmat, S. M. *et al.*, 2012; Firooz, A. *et al.*, 2004). Which is made up of eight individual dimensions, can be utilized to assess general health status in different illnesses. This is perhaps the most suitable way of determining how much skin disorders bother people because it was developed with this purpose in mind – the use of the Dermatology Life Quality Index (DLQI) (Nomura, H., & Nakayama, T., 2005; Krüger, C., & Schallreuter, K. U., 2015).

The skin depigmented condition called vitiligo can adversely affect the living quality of any person having it, studies have shown that. The purpose of this research was to evaluate how well current instruments measure its effect on patient's life quality and day-to-day existence. The paper intends to demystify some of the hurdles victims experience due to this disorder whilst suggesting ways or advice which could be given so as to improve.

Certain tools used in determining the extent to which vitiligo has affected people's lives are more or less useful. For the most part, the Dermatology Life Quality Index (DLQI) plus Short Form-36 (SF-36) are common (Thompson, A. R., *et al.*, 2010) (Ghajarzadeh, M. *et al.*, 2012). however, whether they accurately mirror the load of this ailment remains controversy. Studies indicate a disagreement between widely accepted DLQI as well as SF-36 in pinpointing substantial Vitiligo disease bothersome (Homan, M. W. L. *et al.*, 2009; Florez-Pollack, S. *et al.*, 2017).

Recently, we have come to appreciate how emotional and psychological problems are significant. Hence, we could say that vitiligo might also be a psychosomatic disorder—thus implying

that both physiological and mental factors play a role at all stages of its development, including starting points, advances, regressions, and disappearances (Mohr, N., Petersen, J. *et al.*, 2021; Furue, M., Yamazaki, S. *et al.*, 2011; Salman, A. *et al.*, 2016). Indeed, it is not surprising since it imposes heavy burdens on their lives; indeed, very many of them wear their shames on their skin, suffer from low self-esteem as well as lack in self-worth, while others choose social distance as a way of dealing with this condition (Bergqvist, C., & Ezzedine, K., 2021; Ingordo, V. *et al.*, 2012).

PATIENTS AND METHOD

Our research involved 80 patients affected by vitiligo at various hospitals within Iraq during the period from April 2022 until September 2024. VitiQoL was employed as an explicit index assessing QoL among sufferers diagnosed with this skin disorder. This scale contained 15 items graded on a seven-point Likert scale of (0-6). Life satisfaction ranged between 0-90 depending upon how well off one felt with respect to their own person; those who scored high points suffered from worse conditions than others.

Reckon the score helped establish the seriousness of the problem. The general and definite parts of the body were scored separately using the areas such as thighs, arms, trunk, below umbilical, neck, face, and head; this, in turn, helped while using the system quantifying the whole thing, which would have been nearly impossible between two people trying to explain how severe their skin disease is or compare it with somebody else's skin condition. Some patients were then administered a detailed questionnaire developed on "disease progression" and "response to treatment," which would gauge the subjectivity of their opinions about their conditions during the preceding month.

Eighty patients were selected from those who had been referred to the hospital's phototherapy clinic and had consented to take part in the research. Patients completed the VitiQoL questionnaire at the first session and again after 2-3 weeks. During

these sessions, a dermatologist (KH) acted as the principal investigator.

The study Problem

Is there a correlation between the quality of life of patients and vitiligo? In addition to, does the body image of vitiligo patients differ according to demographic variables: gender - educational level - age stage - marital status - economic level - location of vitiligo - duration of infection?

The predictive value was also identified to what extent body image in vitiligo patients can be predicted through psychological hardiness, as the current research topic attempts to identify the relationship between patients' quality of life and vitiligo with psychological hardiness.

The researchers took photographs of the lesions at the time when the patients entered the study to check the progress of their illness. At the time of registration, the disease severity was evaluated using the vitiligo extent score (VES) [18]. A high VES score meant that the patient had vitiligo in many places on the body. These details of all vitiligo lesions were documented for each patient: les identified on VLES indicated those seen in the front side while the opposite side had an indication of no less identified. The head, neck, and hands were considered exposed areas if people could see sores. Areas that other people could not see sores in them were called unexposed parts, but they did not include legs or arms.

Statistical Analysis

SPSS software was used to analyze data in this study with checks for normality based on the Shapiro-Wilk test. The Wilcoxon rank-sum test was employed when the distributional form differed from normality, while Spearman's rank correlation was utilised to ascertain if there was any relationship between variables. The DLQI score had a significant relationship with the SF-36-based mental health (MH), prompting the use of Receiver Operating Characteristic (ROC) analysis for obtaining an optimal cut-off on identification.

RESULTS

Table 1- Study of the general characteristics of patients participating in the research

Variable	Value	CS OI	P-value
AGE (years)			
20-29	30 (37.5)	1.2-1.7	
30-39	35 (43.75)	1.1-1.5	0.8
40-50	15 (18.75)	1.5-1.9	
BMI (kg/m ²)			
25-28	40 (50)	0.8-1.1	

29-31	30 (37.5)	1.5-1.9	0.23
32-35	10 (12.5)	2.3-3.1	
Symptoms			
Patches of skin	30 (37.5)	2.2-3.8	0.09
Body turns white.	50 (62.5)	3.2-3.8	0.05
Place			
Hands	18 (22.5)	3.8-4.4	0.077
Feet	12 (15)	4.2-5.1	0.2
Arms	20 (25)	4.5-4.8	0.05
Face	23 (28.75)	5.2-6.1	0.001
Mucous membranes	7 (8.75)	3.0-3.6	0.73
Sex			
Male	49 (61.25)	1.8-2.5	0.6
Female	31 (38.75)	1.9-4.2	0.044
Education			
Primary	10 (12.5)		
Secondary	33 (41.25)		
College	30 (37.5)	1.1-1.4	0.93
High	7 (8.7)		
Disease duration			
Less than one year	9 (11.2)	1.8-2.7	0.01
One year to 2	40 (50)	2.4-3.5	0.05
2 to 4 years	19 (23.7)	4.1-6.9	<0.05
Higher than four years	12 (15)	4.7-7.1	<0.002
Comorbidities			
blood pressure	29 (36.2)		
Diabetes	15 (18.7)		
Kidney disease	15 (18.7)	1.5-2.9	0.09
Other diseases	21 (26.2)		

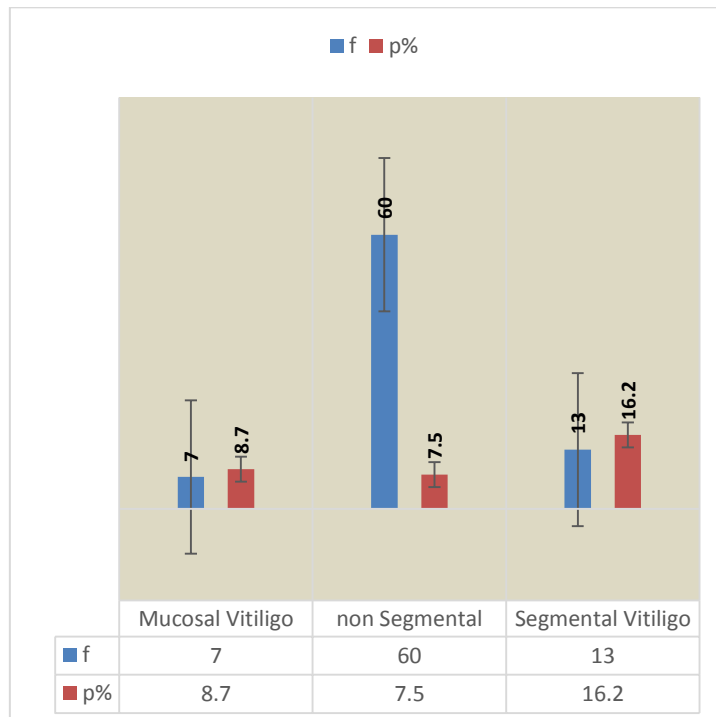


Figure 1- Classification of patients according to the type of widespread vitiligo.

Table 2- Assessment Outcomes Vitiligo quality of life

Variable	Mean	Std
Self-conscious	50.9	10.2
Anxious	47.0	8.8
Depressed	55.9	7.83
Angry	62.2	6.9
Embarrassed	66.7	10.5
Frustrated	45.8	8.7

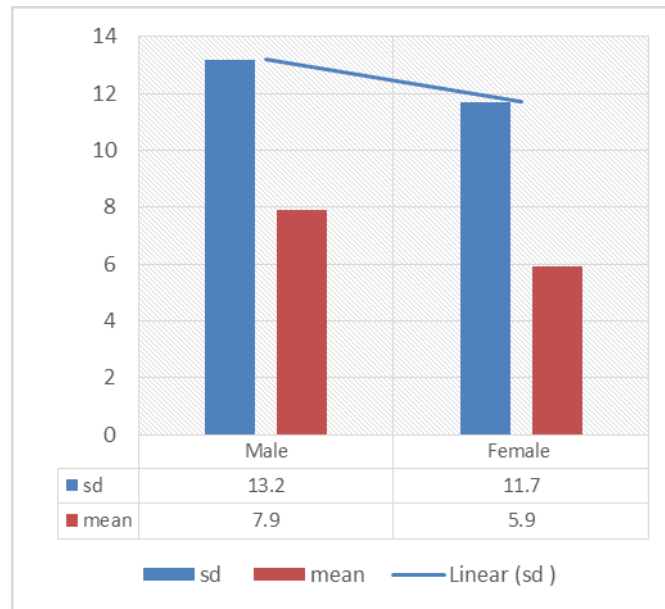


Figure 2- Assessment outcomes of patients according to Skin phototype (Fitzpatrick scale)



Figure 3- Distribution of patients according to the mean value and standard deviation of disease progression

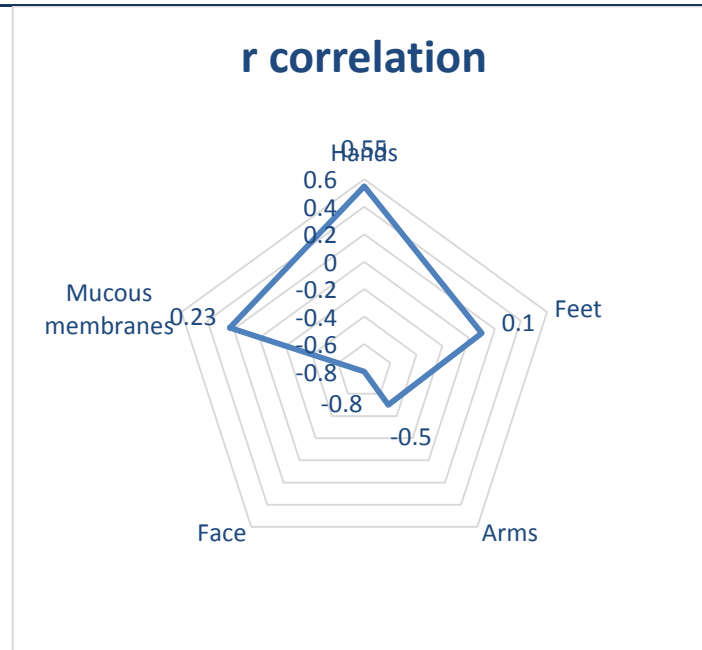


Figure 4- Clarifying the correlations between the prevalence of vitiligo in the body and the quality of life

Table 3- Classification of risk factors in this study according to logistic regression factors

Variable	CS	OI	P-value
Hands	4.1	3.8-4.4	0.077
Face	5.3	5.2-6.1	0.001
Female	4.8	2.7-7.2	0.09
Disease duration Higher than four years	3.6	2.5-5.5	<0.05
Skin phototype (Fitzpatrick scale)	4.7	3.5-5.8	0.003
disease progression, no change	3.77	2.6-5.5	0.0076
quality of life (Angry)	2.87	1.8-3.8	0.07

DISCUSSION

The issue of the impact of vitiligo on the quality of life of patients from Iraq is of equal importance and complexity. It is a prevalent skin disorder characterised by the appearance of white patches on specific areas of the skin as a result of a loss of pigmentation. Iraq has a high incidence of vitiligo, similar to that observed in many other countries. However, the impact on patients’ quality of life is of greater significance than the physical appearance (Hedayat, K. *et al.*, 2016).

To gain a more comprehensive understanding of the challenges faced by individuals diagnosed with vitiligo in Iraq, it is necessary to consider the impact of societal rejection, psychological distress, and a lack of adequate care. As individuals from Iraq age, they may experience increased emotional distress due to the societal perception of beauty and skin tone, which affects their ability to cope with this skin disorder (Al-Mubarak, L. *et al.*, 2011; Ghaderi, R., & Saadatjoo, A.,2014). It is also possible to consider how the healthcare system could be modified to assist individuals living with this condition, as well as to address

their situation in light of cultural beliefs about beauty in Iraq. Nevertheless, with regard to the improvement of healing institutions within our midst, namely those operating in Iraq, it would be beneficial to enhance such facilities for assistance and to provide care (Patel, A. B. *et al.*, 2013).

The issue is being discussed with the objective of providing information about the prevalence of vitiligo in Iraq and the impact it has on patients’ lives. This may help to increase awareness, raise awareness of the condition and enhance support for those with such a skin problem. These are the points from which the conversation should begin and the extent to which it can be developed.

This research employs the original English VitiQoL scoring structure to assess the quality of life of vitiligo patients. Despite the single reliability test conducted during the instrument's construction, Cronbach's alpha value of 0.956 indicates high reliability. A study has revealed that the quality of life of individuals suffering from vitiligo is affected by three key factors: the

restriction of participation, the stigma associated with the condition, and behavioral responses.

Despite this, the original structure of the scale has been maintained, with a correlation in severity ratings that is almost identical.

Research has shown that women suffering from vitiligo tend to report far much poorer qualities of life compared to men. The reason could be that women are more attached to their appearance owing to societal expectations and beauty standards. At the same time, the presence of patches makes sufferers more self-conscious, leading to low esteem.

Many factors contribute to the poor quality of life among young vitiligo patients, unlike in the older ones. The quality of life is highly influenced by factors like the age at the onset of vitiligo being below ten years, the body surface area (BSA) involved, and the clinical type of disease.

Besides, in relation to vitiligo patients, the perception of oneself suffering from this disease and fear with its progress, as well as conditions on the skin surface All these factors are essential for defining the impact of vitiligo on his/her well-being' (2007)

Moreover, younger patients with significantly affecting higher BSA can potentially have more consequences for their quality of life when compared against elderly patients (3). These characteristics serve to worsen the sufferings of young people with vitiligo.

A study was conducted to identify the risks associated with vitiligo. The results indicated that patients under the age of 45 and males had a lower chance of developing the disorder further. Yet, higher rates were recorded among subjects with segmental vitiligo subtype or those who had been affected by this disease for less than five years.

CONCLUSION

We conclude from this study that most vitiligo patients have an inverse relationship with a moderate level of satisfaction with body image and quality of life, as a statistically significant relationship is found between the patient's body image. In this study, it was found that significant differences were found between vitiligo and patients' quality of life. Statistics, especially the duration of patients' infection

It was found that there were statistically significant differences and some demographic variables represented by fear and depression.

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