

Assessment of Psychological Symptoms Associated with Vitiligo

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Abstract: *This study aims to assess the prevalence of psychological symptoms and the quality of life of patients with vitiligo. 50 patients diagnosed with vitiligo were assessed using the Dass 42 scale and the Ferran's and Power's Quality of Life Index. Overall prevalence of depression was 94% while one third of the cases (34%) had severe to very severe depression. Overall prevalence of Anxiety was 86% while 22% cases had severe to very severe anxiety problems. Overall prevalence of stress was 94% while one third of the cases (34%) had severe to very severe stress in lives related to vitiligo. Poor quality of life was associated with over a third (36%) of the cases of vitiligo.*

Keywords: Depression, Anxiety, Stress, Vitiligo

1. Introduction

Relationship between the skin and brain is based on both - being originated from the same ectodermal structure and being under influence of same hormones and neurotransmitters. At this point, psychodermatology is common area of interest based on the mutual relationship and interaction between psychiatry and dermatology [1]. It is a current concept in which both, the clinical presentation and therapeutics tend to overlap. [2]

At least one third of patients seen in dermatology clinics present with a complaint that involves a significant psychological component.[3] The onset of vitiligo is often correlated with certain personality characteristics, stress, illness and personal crisis. The disfiguring nature often leads to severe loss of self esteem or perceived or actual discrimination or rejection[4]. The stigma associated with hypo- or de-pigmentation is severe worldwide. . Mental health in vitiligo patients is poor[5] and leads to a significant impairment in the quality of life.[6],[7]

2. Literature Review

Skin pigmentation can affect mental health . The sense of being stigmatized or being different from others is a common reaction and may affect the person's interpersonal and social behavior, which may increase the risk of depression and other psychosocial disorders[4],[8],[9]. Vitiligo is thus an important skin disease having major impact on the quality of life of patients. Appearance of skin can condition an individual's self-image, and any pathological alteration can have psychological consequences. Many vitiligo patients feel distressed and stigmatized by their condition. They attract undue attention from the general public, some times 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. Vitiligo lesions over face may be particularly embarrassing and the frustration of resistant lesions over exposed part of hands and feet can lead to anger and disillusionment. In many dermatologic diseases such as vitiligo and alopecia areata, psychological dysfunction is the chief complaint.[10] The prevalence of psychiatric comorbidities in vitiligo patients from India was found to be 16-34% using the GHQ (General Health Questionnaire) .[4],[11].In the study of Sukan and Maner[12], in which they compared patients with vitiligo and chronic urticaria for SCID-I diagnoses, they found high prevalence of psychiatric morbidity such as social phobia (26%), dysthymia (26%), obsessive compulsive disorder (26%) and specific phobia (36%) in cases with vitiligo. Another study by Rashid et al. found psychiatric comorbidity in 42% of patients with vitiligo with major depression and anxiety disorders being main comorbidity. [13]

Vitiligo lesions are associated with a high incidence of major depressive disorder and social phobia, lower quality of life, and lower self-esteem. An overall psychiatric morbidity of 79.2% was seen. Major depressive disorder accounted for 56.6% and social phobia for 67.9% respectively. Lower quality of life in patients with vitiligo was associated with higher comorbid mental illness.[14]

Vitiligo when affecting the quality of life, it lowers their self esteem, provides poor body image, and decreases the mental health of the patients. More than half of vitiligo patients (56.5%) indicated that vitiligo moderately or severely affects their quality of life.[15] Patients with vitiligo especially women, seek treatment for their disease, even though they don't have any specific physical disability or social or familial dysfunction. Quality of life is significantly impaired in females to a greater extent than males, as well as in cases affecting more than 10% of the body surface area. [16] Porter et al[17] reported that majority of vitiligo patients experienced anxiety and embarrassment when meeting strangers or beginning a new sexual relationship and many felt that they had been the victims of rude remarks. Salzer

and Schallreuter [18] reported that 75% of vitiligo patients found their disfigurement moderately or severely intolerable.

3. Method

This was a Cross Sectional, analytical study conducted among patients attending the Dermatology OPD at Bharati Vidyapeeth Deemed (to be) Univeristy Medical College and Research Centre; a private tertiary care hospital in Pune, India. The study group comprised of patients who were given treatment from 1st October 2016- 30th March 2018.

A total of 50 patients , all between the ages of 18-60 years, both male and female , diagnosed with vitiligo as per International Classification of Diseases and Health Related Problems- 10 (ICD-10) were included. Patients having pre-existing psychiatric illnesses and other co-existing medical or surgical illnesses as well as those having psychiatric illnesses or medication induced dermatological diseases were excluded. A written informed consent was taken from all participants.

After Obtaining Sociodemographic details of the participants like age, gender, education, occupation, relation with patient, family type, marital status, etc., the psychological symptoms and the quality of life of patients were assessed using the DASS scale and the Ferrans and Power’s Quality of Life scale respectively.

The DASS 42 is a set of three self –report Scales designed to measure the negative emotional states of depression, anxiety and stress. Each of the three scales contains 14 items , divided into subscales of 2-5 items with similar content. Respondents are asked to use 4-point severity/frequency scales to rate the extent to which they have experienced each state over the last week. The DASS is available in English, Hindi and Marathi , translation there of has been done by a team at KEM hospital , Pune.

Ferran’s and Power’s Quality of Life Index (Generic Version) was used to measure post disability quality of life and social functioning. The QLI produces five scores: quality of life overall and in four domains (health and functioning, psychological/spiritual domain, social and economic domain, and family).

The collected data was coded and entered in Microsoft Excel sheet. The data was analysed using SPSS (Statistical Package for social sciences) version 20.0 software. The results were presented in a tabular and graphical format.

For Quantitative data -Mean, SD, Median etc. was calculated.

For Qualitative data -various rates, ratios and percentage (%) was calculated.

As applicable (For quantitative data test like t-test/ANOVA and for Qualitative data test like z-test, Chi-square test were used for comparison of variables.)

4. Results

Mean age of the study group was 34.22 years with three fourth of the cases (74%) between 21 to 40 years of age.

Slight male predominance was seen in study group with 56% males to 44% females.

Overall prevalence of depression was 94% while one third of the cases (34%) had severe to very severe depression.

Overall prevalence of Anxiety was 86% while 22% cases had severe to very severe anxiety problems.

Overall prevalence of stress was 94% while one third of the cases (34%) had severe to very severe stress in lives related to vitiligo.

Poor quality of life was associated with over a third (36%) of the cases of vitiligo.

Table 1: Distribution of cases as per Age Group

Age group (yrs)	N	%
<20	7	14.0%
21-30	16	32.0%
31-40	21	42.0%
41-50	6	12.0%
Total	50	100.0%
Mean age - 34.22 +/- 4.16 years		

Table 2: Distribution of cases as per Gender

Gender	N	%
Female	22	44.0%
Male	28	56.0%
Total	50	100.0%

Table 3: Distribution of cases as per Prevalence of Depression

Depression (DASS)	N	%
No	3	6.0%
Mild	1 1	22.0%
Moderate	1 9	38.0%
Severe	1 2	24.0%
Very severe	5	10.0%
Total	5 0	100.0%

Table 4: Distribution of cases as per Prevalence of Anxiety

Anxiety (DASS)	N	%
No	7	14.0%
Mild	16	32.0%
Moderate	16	32.0%
Severe	8	16.0%
Very severe	3	6.0%
Total	50	100.0%

Table 5: Distribution of cases as per Prevalence of Stress

Stress (DASS)	N	%
No	3	6.0%
Mild	11	22.0%
Moderate	19	38.0%

Severe	12	24.0%
Very severe	5	10.0%
Total	50	100.0%

Table 7: Distribution of cases as per Quality of Life

QOL (Ferran and Powers)	N	%
Normal	8	16.0%
Moderate	24	48.0%
Poor	18	36.0%
Total	50	100.0%

5. Discussion

Overall prevalence of depression, anxiety and stress among vitiligo cases in our present study was 94%, 68% and 94%. Severe depression and stress was observed in 34% cases while 22% cases had severe anxiety problems.

Studies have shown that vitiligo has a high impact on the mental health of the patients and depression in these patients is significantly higher than in healthy individuals [19],[20]. Saleki M et al. [20] in their study observed prevalence of depression as 52.7% in vitiligo cases. Salzer et al. [18] showed that 75% of vitiligo patients suffered from moderate to severe mental disorders. In our study, the overall prevalence of depression was 94% while one third of the cases (34%) had severe to very severe depression.

Afsharzadeh and collaborators showed that the effects of the disease is clearly stated in their daily lives of majority of the patients, 38.84% of patients had depressed mood and 30.38% of them had major depression [21].

In another study by Sampogna et al. [22], vitiligo patients were found to have a higher prevalence of severe anxiety or depression (39%) than the general population.

In the present study, poor quality of life was associated with over a third (36%) of the cases of vitiligo while 48 % reported moderate levels of their quality of lives and only 16% reported of having a normal quality of life.

In the study by Sangma et al. [23], 76% of patients had decreased quality of life (QoL) with scores falling into poor and moderate QoL (Quality of Life) group in 38% cases each. In a study conducted by Linthorst Homan et al. [24]. QoL was assessed in 245 multiracial adult patients (≥ 18 years) with generalized vitiligo. These vitiligo patients had a low Health Related Quality of Life (HRQL). In a study by Radtke et al. [25], it was found that QoL was severely reduced in 24.6% patients with vitiligo. Garg et al.[26] in their review also observed that vitiligo has a profound impact on the quality of life of the patients. Vitiligo affects emotional, physical, social, psychological and occupational aspects of the QoL of an individual. Bellet et al.[27] in their study also concluded that vitiligo affects the quality of life. It lowers their self-esteem, provides poor body image, and decreases the mental health of the patients.

6. Future Scope

According to the high prevalence of vitiligo in our country, and its effects on their life and personality, and since very few psychiatry related studies has been conducted on these patients, we decided to assess the prevalence of depression in vitiligo patients and compare it with control group.

To conclude Vitiligo has a profound effect on the quality of life of vitiligo patients and so the patients go to any extent in getting it treated although it is not life threatening. The dermatologists should treat it as serious disease with the various treatment modes now available and not dismiss simply because of not having a completely successful treatment. Improving the physician's interpersonal skills with the vitiligo patients increases patient's satisfaction and consequently may have a positive effect on adherence to treatment protocol and better out come of treatments.

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