A Study to Know Correlation among De-Pigmentation of Body Areas and Sex of Vitiligo Patients with their Self Esteem and Impact of Vitiligo on Quality of Life

Divyesh Vernwal¹, D. K. Sharma¹, Swapnil Agrawal², Divya Sharma², C. S. Sushil¹, D. K. Vijayvergia¹

ABSTRACT

INTRODUCTION

Vitiligo is a common, acquired, idiopathic skin disorder characterized by one or more patches of depigmented skin due to the loss of cutaneous melanocytes with no other texture changes. It is considered a significant problem in India. Skin diseases are associated with psychological abnormalities including anxiety, depression, psychosomatic symptoms including pain and discomfort, embarrassment, social inhibition and suicidal ideation. Effective treatment of vitiligo need to accompany improvement in self-esteem, affect, shame, embarrassment, body image, social assertiveness and self-confidence. Psycho-dermatologic disorders fall into three categories. (1) Psycho-physiologic disorders (e.g., acne, vitiligo, psoriasis and eczema) are skin problems, not directly connected to the mind but react to emotional states, as stress. (2) Primary psychiatric disorders that result in self-induced cutaneous manifestations. eg. trichotillomania and delusions of parasitosis. (3) Secondary psychiatric disorders that results in psychological problems. eg. decreased self-esteem, depression or social phobia.

The highest incidence of the condition has been recorded in Japan. Vitiligo, in India, is referred as “ven kushtam” meaning white leprosy. It have impact on self esteem and quality of life. present study was done to know correlation between different body areas of de-pigmentation in vitiligo patients, sex of vitiligo patients with their self esteem and also impact of vitiligo on different domains of life which affect overall quality of life.

MATERIAL AND METHODS: 100 vitiligo patients and 100 subjects as control group were evaluated for self-esteem and quality of life by Rosenberg’s Self-Esteem Scale (RSES), WHO Quality of Life – Bref’s Scale (WHOQOL-BREF’S). Data were tabulated, analyzed and suitable statistics applied (i.e. chi square, T-test).

RESULTS: vitiligo patients report significantly low self-esteem, compared to lighter skinned individuals. 59%, 29%, and 12% vitiligo patients suffered from low, normal and high self esteem respectively. Vitiligo patients had developed poor body image for himself, due to which they faced unexpected psychosocial traumas and made negative view for life, which declined Quality of life in various life domains.

CONCLUSION: Vitiligo generates psychological distress, violates self confidence, self esteem, disrupts social relationship and creates stress-vitiligo vicious cycle.

Keywords: quality of life, self confidence, self esteem, vitiligo.

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diagnosis (confirmed by Dermatologist). Second tool was Hospital Rosenberg’s Self-Esteem Scale (RSES) developed by sociologist Dr. Morris Rosenberg. It is a ten-item Likert-type scale with items answered on a four-point scale to reflect self-esteem of respondents about their feelings, and third tool was World Health Organization Quality Of Life- Bref (Hindi Version) WHOQOL-BREF for quality of life assessment in the four domains, which were (i) physical health, (ii) physiological well-being, (iii) social relations, (iv) environment.

**STATISTICAL ANALYSIS**

Information and data so collected were tabulated, analyzed and subjected to suitable statistical methods (mean, percentages and Chi square test) and conclusions were drawn.

**RESULTS**

Table-1 shows distribution of comparative impairment of self-esteem between male and female on the basis of Rosenberg self-esteem scale (RSES). It was evident that patients had scored < 15 on RSES scale indicating low self-esteem and patients had scored 15-25 on RSES scale indicate normal self esteem while patients scored >25 on RSES scale indicate high self esteem. In our study 33% female and 67% were male vitiligo patients. Among 33% female vitiligo subjects, it was evident that 70% female patients (approx. ¾ population of female) had scored < 15 on RSES scale indicating low self esteem. While 12% female patients had score 15-25 on RSES scale which indicate normal self esteem and only 18% female patients scored >25 on RSES scale which indicate high self esteem. Similarly among 67% male vitiligo subjects, It was evident that 54% male patients (approx. ½ male population) had also scored < 15 on RSES scale indicating low self esteem; While 12% male patients had scored 15-25 on RSES scale which indicate normal self esteem and Rest 18% male patients scored >25 on RSES scale which indicate high self esteem.

![Table-1: Distribution showing relation of self esteem with gender difference According To Rosenberg self esteem scale (RSES)](image)

<table>
<thead>
<tr>
<th>Score on rosenberg self esteem scale</th>
<th>Female (N=33)</th>
<th>Male (N=67)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;15 (Low Esteem)</td>
<td>23 (70%)</td>
<td>36 (54%)</td>
</tr>
<tr>
<td>15–25 (Normal)</td>
<td>4 (12%)</td>
<td>25 (37%)</td>
</tr>
<tr>
<td>&gt;25 (High Esteem)</td>
<td>6 (18%)</td>
<td>6 (9%)</td>
</tr>
</tbody>
</table>

\(\chi^2 = 7.36, P = 0.025, d/f = 2, \text{Significant}\)

Table-2 shows distribution correlation between Rosenberg self esteem scale (RSES) scores and body areas of de-pigmentation. It was evident that 44 patient had de-pigmentation only on exposed areas, 3 patients had de-pigmentation only on covered areas while Rest 53 vitiligo patients had de-pigmentation on both exposed and covered body parts. It was evident that 59 patients had score < 15 on RSES scale indicating low self esteem, among them 28 (47%) had vitiligo spots on both body areas, 29 (50%) had vitiligo spots only on exposed body parts and 2 (3%) patients had only on covered body areas respectively. While 29 patients had score 15-25 on RSES scale which indicate normal self esteem had respective figures 17 (59%), 11 (38%) and 1 (3%) and Rest 12 patients scored >25 on RSES scale which indicate high self esteem and their respective figures were 8 (67%), 4 (33%) patients. The difference among these three groups were statistically highly significant (P=0.00001), i.e. vitiligo patients significantly had low self esteem in whom vitiligo patch was on the exposed body areas of patients.

Table-3 describes the quality of life of both groups as evaluated through WHOQOL – BREF. It is evident that mean score (0 – 100) in the study group in physical, psychological, social relationship and environmental domain was 50.43, 45.70, 48.41 and 53.01 while in the control group it was 76.09, 72.93, 79.02 and 66.36 respectively. Domain scores of both the groups were in descending order for physical, psychological, social relationship and environmental domain. The QOL scores in all the domains were significantly higher in control group as compared to study group with mean score 197.55 vs 294.58.

**DISCUSSION**

It was seen that lowering of self-esteem and self-confidence of vitiligo patient’s was related to age of onset of disease and chronicity of disease. Childhood-onset vitiligo was found to be correlated with important psychosocial trauma and leads to negative self-esteem. With the increasing significance of consultation liaison psychiatry, we also have to focus on psychosocial management of such chronic dermatological illness. More awareness is being created among physicians and evidence of effective treatment for psychiatric disorder is reducing the negative attitudes towards psychiatric disorders.

This study was undertaken to find correlation between different domains for quality of life.
body areas of de-pigmentation with the self-esteem of vitiligo patients. We also made comparative assessment of self esteem impairment in females and male. To assess self esteem standard scale was used. It was a semi structured interview and all available information including patient information, informant’s information was used to decide severity of impaired self esteem. The result of distribution of comparative impairment of self esteem between male and female that approx. ¾ population of female and approx. ½ male population indicating low self esteem which was supported by Wang X et al1 who found that Men affected more than women (0.71% vs. 0.45%, p<0.01).On the contrary Hita Shah et al2 in their study on 365 patients found that females (68.4%) were affected more than males (31.6%) in a ratio of 2:1:1. However Handa and Kaur3, Lu T et al4 and most of the researchers reported that males and females affected with almost equal frequency. The reason why females outnumbered males in some studies seemed presumably due to the fact that social stigma and marital concerns prompted women to seek early consultation.

On studying association between self esteem and body area of de-pigmentation, it was observed that difference among these three groups were statistically highly significant (P<0.00001), i.e. vitiligo patients significantly had low self esteem in whom vitiligo patch was on the exposed body areas of patients. Our findings were supported by finding of Özlem Devrim Balaban et al5, Podaralla Ramakrishna et al6 which report lower self-esteem in vitiligo patients compared to lighter skinned individuals. Childhood-onset vitiligo was found to be correlated with important psychosocial trauma leading to negative self-esteem. It is showing that more the vitiligo on the exposed body areas of patients lower the self esteem, that is self esteem inversely proportional to the vitiligo area on exposed body areas. Impact on different domains of life which affect overall quality of life in vitiligo patient was also studied. Though there are generic as well as disease specific instrument available to assess QOL, WHOQOL-BREF was used in this study. This scale measures QOL and it’s easy to administer. It has been used in a variety of medical conditions. This instrument has minimum possible confounding influence on socio-cultural differences. Quality of life is “the subjective satisfaction expressed or experienced by an individual in his physical, mental and social situations”. Various measures both generic as well as disease specific have been used to assess QOL. The different domains of quality of life which were analysed, include the following: Physical health, Physiological well-being, Social relations and Environment. We had taken total of every domain and grand total of all domains for analysis. On tabulation we found that domain scores of both the groups were in descending order for physical, psychological, social relationship and environmental domain. The QOL scores in all the domains were significantly lower in study group as compared to control group with mean score 197.55 vs 294.58. So quality of life was significantly worst for all the domains in study group. This finding was comparable to previous study done by Sangma LN et al.7, who showed that Quality of life (QOL) in vitiligo patients declined more severely, and there was more incidence of depression compared to the control group. These changes were critical for the psychosocial life of the affected people. Similar results had drawn by Mishra N et. al.8

**CONCLUSION**

It can be inferred that vitiligo patients have low self esteem and confidence. Vitiligo generates psychological distress and disrupts the social relationship, which creates a vicious stress-vitiligo cycle. Results in this study indicated that majority of vitiligo patients had low self esteem, which was significantly impaired in patients having vitiligo on exposed areas. Vitiligo affects QOL in majority of vitiligo patients and such patients require more sympathetic attitude from a dermatologist and society.

In view of the lack of too much studies in our country concerning impaired self esteem and quality of life in Vitiligo, our attempt to have a close look at self esteem and quality of life in a reasonable sample of Vitiligo patients may serve a platform for future research.

**Limitations of the study**

This study was a point prevalence study and it included all cases from Government hospital located in an urban centre, hence the results cannot be generalized. So a prospective study with a large sample from different centres and also considering rural population may be carried out to explore psychiatric morbidity of different population affected by vitiligo. Similarly effect of treatment of vitiligo on psychiatric morbidity was not taken in to consideration in this study. Therefore a case-control prospective study should be planned, which may demonstrate improvement in standard of living, if any after successful treatment of vitiligo.

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