



Psychosocial Problems Associated with Vitiligo: A Correlational Study on Vitiligo Patients

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Abstract

Psychosocial problems influence the mental health as well as daily living of individuals. Vitiligo is one of those diseases which are strongly associated with psychosocial problems among its victims. Individuals with this disease are found to experience marriage delay, workplace discomfort, anxiety, depression, and are unable to cope with their skin condition. To determine psychosocial problems associated with Vitiligo and to evaluate the role of psychotherapy in case management of Vitiligo patients, this study employed a quantitative correlational study design. Data was collected from skin clinics in Islamabad from 15th December 2017 to 15th April 2018. A sample of 100 respondents including 60 cases and 40 controls was selected through convenient sampling technique. Questionnaires on Self-esteem, Depression and Dermatology life quality index (DLQI) were used for data collection. Descriptive and inferential analysis was performed for data analysis. Pearson correlation between vitiligo and psychosocial problems was significant at the p-value 0.01 level (2-tailed). Study results showed that Vitiligo significantly correlates with depression, self-esteem, and impaired quality of life among cases. Regression analysis among Vitiligo and psychosocial problems was significant with a p-value < .001. Moderation regression analysis between Vitiligo effects and psychotherapy was not found significant. Vitiligo has been found to be associated with depression, low self-esteem, and impaired quality of life. However, the proposed effect of psychotherapy has not been confirmed. Therefore, the study suggests further research to evaluate psychotherapy's role in managing the psychosocial problems of Vitiligo cases.

Keywords Psychosocial, problems, associated, correlational study, Vitiligo patients.

1. Introduction

Vitiligo is a medical term used for skin disease characterized by white patchy skin of the patient (1). It is also known as Phulveri in the local language of Pakistan. In medical science it is an acquired idiopathic discoloration of the skin. Diseased skin is associated with the presence of chalky white-colored macules (2). Most affected areas are sun-exposed, like the hands, arms, neck, and face; it affects almost 2% of the population (1). Most cases develop this disease before thirty years of age but it can present at any stage of life (3). The most reported causative factors for disease are stress, traumatic event in life, and physical trauma to the body (4). Vitiligo causes disfigurement of the human body that is directly related to psychological problems like stress, low self-esteem, depression, and impaired quality of life (5). Young people having Vitiligo encounter more difficulty with social adjustment and develop issues of low self-esteem (6). Vitiligo is associated with high psychiatric illnesses;

there is a need to develop a database on psychosocial aspects of Vitiligo across the cultures (7). The case management approach toward Vitiligo is still biological and not psychological (8). Patients with Vitiligo have more psychological challenges in their life but unfortunately, do not receive psychological treatment (9). Furthermore, the role of a physician is not just to treat physical ailments but also care for the mental and spiritual healing of the patient. Moreover, it adds to the doctor's responsibilities to assess the patients for mental issues and offer psychological therapy to them (10). Thus, there is a need to measure depression, self-esteem level, and quality of life among patients of Vitiligo to explore its effects on their lives. Adding to this discourse, psychotherapy has a strong association with the cure of psychological issues related to skin diseases which sensitizes the need to assess the role of psychotherapy in this regard (11). Moreover, the physician must take into account the role of psychiatrist in management of psychosocial issues and associated symptoms when treating the patients of Vitiligo, as Vitiligo patients are at high risk of developing depression,

impaired quality of life and low self-esteem (12). Thus, psychosocial problems associated with Vitiligo and the role of psychotherapy in case management of Vitiligo patients were evaluated with the help of following research objectives: (1) To estimate the relationship between Vitiligo and level of depression, low self-esteem, and impaired quality of life among Vitiligo patients. (2) To evaluate the effect of psychotherapy on the relationship between Vitiligo and level of depression, low self-esteem, and impaired quality of life among Vitiligo patients.

2. Research Hypotheses

Based on the research objectives, following hypotheses were formulated:

- **H1:** *There is a positive relationship between Vitiligo and the level of depression among Vitiligo patients.*
- **H2:** *There is positive relationship between Vitiligo and altered quality of life of Vitiligo patients.*
- **H3:** *There is a negative relationship between Vitiligo and the self-esteem of Vitiligo patients.*
- **H4:** *Psychotherapy negatively moderates the relationship between Vitiligo and depression among Vitiligo patients*
- **H5:** *Psychotherapy negatively moderated the relationship between Vitiligo and quality of life among Vitiligo patients*
- **H6:** *Psychotherapy negatively moderates the relationship between Vitiligo and self-esteem levels among Vitiligo patients*

3. Methodology

3.1 Study design

This was a quantitative correlational study design that explained the relationship of Vitiligo as independent variable with dependent variables including depression, self-esteem and quality of life among cases and control of Vitiligo disease. Moreover, the moderating role of psychotherapy on dependent variables was measured among Vitiligo cases.

3.2 Study participants

There was a sample of 100 respondents including 60 cases and 40 controls. As Vitiligo is a rare disease, the convenient sampling method was used to recruit the participants from skin clinics in Islamabad.

3.3 Data collection

Data were collected from December 2017 to April 2018. Study used three scales to measure the study variables. Beck's Depression Inventory measured the level of depression. Quality of life by Dermatology life quality index (DLQI) and level of Self-esteem was measured by Morris Rosenberg self-esteem scale. All the scales were freely available; the authors' permission was not required. All the scales were in English language and were administered without any change. Depression, self-esteem and quality of life were measured among all the respondents. However, moderating role of psychotherapy was only assessed among Vitiligo cases. Data about psychotherapy was collected by asking Vitiligo cases whether they have received/not received the psychotherapy session or visited psychiatrist for their psychosocial issues.

3.4 Data analysis

Quantitative data analysis was performed by using SPSS software. Descriptive analysis was performed to analyze demographic variables, while inferential statistical analysis was carried out for correlational, regression, and moderation regression analysis to draw inferences.

3.5 Ethical considerations

The Institutional Review Board approved the study. All participants were informed about the study and gave written consent to participate. Participation was voluntary and anonymous.

4. Results

Out of a total of 100 respondents, there were 21% respondents from the age group of 17- 25 years, 18% from 26 to 30 years, 22% from 31 to 35 years, 3% were from 36 to 40 years, 15% were from 41 to 45 years, 19% were from 46 to 50 years, and 2% were from above 50 years of age. There were 44% (44) male respondents and 56% (56) were females. There were 69% married and 31% unmarried respondents. The correlational analysis presented in table 1 was done to test the research hypotheses.

Table 1:Correlational analysis

	Vitiligo	Psychotherapy	SE	DLQI	DT
Vitiligo	1				
Psychotherapy	.316**	1			
Self-esteem (SE)	-.732**	-.102	1		
Dermatology life quality index (DLQI)	.614**	.327**	-.427**	1	
Depression (DT)	.754**	.277**	-.545**	.454**	1

** . Correlation is significant at the 0.01 level (2-tailed).

Table 1 shows that there is significant negative correlation between Vitiligo and level of self-esteem, the more severe disease is low level of self-esteem would be. Correlation between Vitiligo and impaired quality of daily life shows significant relationship with each other. The correlation value between Vitiligo and depression is also significant among patients. Psychotherapy has significant correlation with self-esteem, quality of life and depression among patients. Table 2 shows linear regression analysis that was

run to calculate P-value to accept or reject study hypotheses. B (beta) is regression coefficient, R² is the coefficient of covariance to determination value of proportion of variability in dependent variable because of effect of independent variable. ΔR² is adjusted R square and it predicts the variability by considering the whole study population and is more reliable measure.

Table 2: Linear regression analysis of Vitiligo and dependent variables

	B	R ²	ΔR ²
Vitiligo X Depression	0.754***	.569	.569
Vitiligo X Dermatology life quality index	0.614***	.371	.377
Vitiligo X Self-esteem	-.782***	.554	.554

** P < .001

Based on linear regression analysis following hypotheses were accepted:

H1: there is a positive relationship between Vitiligo and the level of depression among Vitiligo patients. (β = .754, p < .001)

H2: there is a positive relationship between Vitiligo and the altered quality of life of Vitiligo patients.(β = .614, p < .001)

H3: there is a negative relationship between Vitiligo and the self-esteem of Vitiligo patients.

(β = -.782, p < .001)

Table: 3 presents the moderation effect of psychotherapy on relationship of independent and dependent variables among Vitiligo cases. (β = -0.031^(ns), p < .001) value showed that there is no moderating effect of psychotherapy on relationship between Vitiligo and level of depression among patients.

Table 3:Moderation regression analysis of psychotherapy with dependent variables

	B	R ²	ΔR ²
Depression	-0.031 ^(ns)	.557	.000
Self-esteem	0.017 ^(ns)	.554	.000
Dermatology life quality index	0.576 ^(ns)	0.397	0.397

** P < .001

Based on analysis,thehypotheses rejectedwere:

H4: Psychotherapy negatively moderates the relationship between Vitiligo and depression among Vitiligo patients (Rejected).

Moderation Regression analysis of psychotherapy and effect of Vitiligo on altered quality of life of the patients showed that there is no effect of moderating variable on the dependent variable and that effect is not significant as ($\beta = 0.576^{(ns)}$, $p < .001$).

H5: *Psychotherapy negatively moderates the relationship between Vitiligo and the quality of life among Vitiligo patients* (Rejected).

Moderation regression value ($\beta = 0.017^{(ns)}$, $p < .001$), showed that there is a no significant relationship between patient-self-esteem and psychotherapy sessions received.

H6: *Psychotherapy negatively moderates the relationship between Vitiligo and the self-esteem level among Vitiligo patients* (Rejected).

5. Discussion

This study was intended to see the relationship of Vitiligo with psychosocial problems among Vitiligo cases and evaluate psychotherapy's role in the case management of Vitiligo patients. Two research objectives guided the study based on which six research hypotheses were formulated to test the level of association between study variables. Study results revealed that vitiligo is associated with depression, low self-esteem and impaired quality of life among its patients. These results are consistent with the findings of Sampogna et.al (2008) who reported that Vitiligo patients experience psychosocial problems and face challenge to manage and cope with impaired quality of life(9). Similarly, Maria (2008) stated that patients with skin conditions went through high mental stress and psychosocial issues in their life most importantly depression, anxiety and impaired quality of life(13). Kostopoulou et.al (2009) wrote that change in body image causes loss of self-esteem among Vitiligo patients contributing to their social isolation. Therefore, a more realistic way of reducing social isolation in people with Vitiligo is to support them in exploring and using effective coping strategies for enhancing self-esteem(14). Similarly, Girimes (2018) worked on Vitiligo patient stories and established that self-esteem and the psychological burden of disease need to be managed among Vitiligo patients(15). However, this study could not establish an association between psychotherapy and psychosocial problems of Vitiligo. The findings of the study are not consistent with the previous studies where psychotherapy has been found to play a moderator role in the regulation of self-esteem, depression, and improvement of quality of life among patients with diseases involving disfigurement and altered body appearance(10,15). As in this study those who received psychotherapy showed no significant change in their quality of life and reduction in effects of Vitiligo.

Therefore, this study emphasizes the evaluation of level of psychotherapy that is being given to the patients of Vitiligo in Pakistan and also about its effectiveness.

Align with Colom et.al (2004) therapeutic treatment of psychological disorders is complementary and it must be assisted with pharmacotherapy and psychotherapy (16). As supported by the previous studies, there is need to explore the role of psychotherapy in treatment of psychological conditions and physicians need to understand psychosocial impact of the skin diseases, ensure emotional support during case management, and should provide psychotherapy to the patients (17). It is discussed in previous studies that because of cosmetic reasons, social stigma is attached to Vitiligo which causes psychological stresses among patients (18). Therefore, this study unfolds the need to look into the case management of Vitiligo disease and more detailed study on evaluation of role of psychotherapy during the management of Vitiligo. Further studies should be carried out to study the exact role of psychotherapy in the case management process of vitiligo.

6. Conclusion and Recommendations

Vitiligo is a skin disease and causes disfiguration of the human body. Vitiligo patients experience psychosocial problems including depression, low self-esteem, and impaired quality of life. Therefore, along with the medical treatment psychotherapy can play important role to help patients cope with psychosocial problems. This present study suggests further research to evaluate psychotherapy role in managing the psychosocial problems associated with Vitiligo.

Limitations The study was conducted on small sample size, so findings can not be generalized.

Conflict of Interest The authors report no conflicts of interest. The authors alone are responsible for the content and writing of this article.

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