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Use of Occupational Therapy for Reducing Depression and its Impact on Self-Esteem in Vitiligo Patients – A Case Study

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KEYWORDS

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ABSTRACT:

Introduction: Vitiligo is a Psycho-dermatological disorder, it is referred as "Sweta Kushta" which is called white leprosy. Vitiligo is an acquired depigmentation disorder caused due to functional loss of melanocytes in the epidermis this results in discolored patches in different areas of the body Vitiligo does not have any physical impairment but it is cosmetically disfiguring which leads to psychological problems like Depression, Low Self-Esteem, Anxiety, Frustration, Embarrassment, Social isolation, Poor body image. Occupational Therapist deals with Depression patients to overcome Depressive feelings by providing positive situations and worthful pleasure, meaningful and pleasurable activities that help the client to tackle depression and improve Self-Esteem.

Objectives: The Objectives of the study are to determine the use of Occupational Therapy intervention in reducing Depression in a Vitiligo patient and to analyze its impact on Self-Esteem.

Methods: This single case study was conducted in the Outpatient unit, Department of Occupational Therapy, Sri Ramachandra Hospital with the permission of the Ethical Committee. The Vitiligo patient who visited the Department of Dermatology, venereology, and leprosy (Outpatient) was screened. The sample who met the selection criteria was selected through purposive sampling and obtained the consent to participate in the study. The pre-test was done by using the outcome measure. Following Occupational Therapy intervention for 4 weeks Occupational Therapy, the post-test was done by using the outcome measure. The result was obtained by comparing the pre-test and post-test scores

Results: The result of this study revealed that Occupational Therapy Intervention showed a significant reduction in Depression, and showed a significant positive impact on Self-Esteem in Vitiligo patient.

Conclusions: This study concludes that Occupational Therapy Intervention is effective for Reducing Depression and shows a positive impact on Self-Esteem in Vitiligo patient.

1. Introduction

The skin is the first and most visible organ in determining our appearance and plays an important role in social and sexual communication. In our society, appearance is important, and it has an impact on how we are perceived by others. [1] Skin disease induces negative emotions such as shame or embarrassment, anxiety, lack of

confidence, and even psychiatric diseases such as depression. $[\underline{2}]$

Vitiligo is a depigmenting skin disorder characterized by the loss of melanocytes in specific areas of the skin, resulting in pigment dilution in the affected areas. Typical lesion includes completely amelanotic, nonscaly, chalky-white macule with distinct margins. [3,4]

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According to Self-Esteem expert Morris Rosenberg, self-esteem is quite simply one's attitude toward oneself. it as a "favorable or unfavorable attitude toward the self. [5] People high in self-esteem claim to be more likable and attractive, have better relationships and make better impressions on others than people with low Self-Esteem. Self-Esteem causes good task performance, with the important exception that high Self-Esteem facilitates persistence after failure. [5]

Low self-esteem is a diagnostic criterion of depressive disorders according to the DSM-IV criteria. [6] Beck and Beamesderfer suggest that characteristics of depression include pessimism, a sense of failure, self-dislike, social withdrawal, and somatic preoccupation. Coopersmith (1967) states that individuals who possess low self-esteem tend to experience feelings of distress, self-hatred, psychosomatic symptoms, and feelings of depression. [7]

Occupational Therapy practitioners can examine the life roles that are meaningful to clients with depression and help adapt their responsibilities to allow them to participate and gain a sense of accomplishment what interferes with a person's ability to meet those responsibilities, such as getting to work late every day or finding work tasks overwhelming. Occupational Therapy practitioners can help persons with Depression examine how to balance leisure, work, and relationships. [8]

Leisure is defined as a "non-obligatory activity that is intrinsically motivated and engaged in during discretionary time, that is, time not committed to obligatory occupations such as work, self-care, or sleep". [9] Individuals who engaged in leisure activity, whether it was physical exercise or more sedentary activity such as card games, were less depressed than individuals who did not engage in leisure activity. [10]

Relaxation Technique is a simple, low-cost treatment capable of bringing about cognitive, physical, and psychosocial uplift to relieve the feeling of depression. Relaxation techniques help to reduce physical and mental stress. Most patients require training to understand how to reduce depression. Among the relaxation techniques, Jacobson's Progressive Muscle Relaxation Technique is a non-pharmacological, complementary therapy, easy to

learn, can be performed without assistance, is less expensive, no side effects. JPMRT was discovered by Dr. Edmund Jacobson in the year 1976, explaining purposeful contraction and relaxation of the muscle, each time the individual contracts and relaxes the muscle, they feel differences as the tension in the skeletal muscle is released creating a calming effect on the mind and body. [11]

As the application of the Relaxation Technique can be clearly written in manuals, trainers require only brief training. Alternatively, the Relaxation Technique can be prescribed in pre-recorded materials, allowing the promotion of such treatment to be done readily without qualified professionals. The relaxation program at the center is run by the Occupational Therapist who 'assesses the impact of depression, anxiety, and stress on an individual's function and employs relaxation techniques as one method to reduce those levels and positively impact function'. [12] The training comprises one-to-one sessions to develop the individual's understanding of stress, anxiety, or panic and to teach simple breathing exercises and relaxation techniques ranging from 'physical' methods, e.g., Progressive Muscular, Passive Neuro-Muscular techniques to visualization of colors and scenes to promote pleasant and calming thoughts. [13]

1. Objectives

The Objectives of the study are to determine the use of Occupational Therapy intervention in reducing Depression in a Vitiligo patient and to analyze its impact on Self-Esteem.

2. Methods

This Single Case Study was approved by the Ethics Committee for Students Proposals, Sri Ramachandra Institute of Higher Education and Research [Deemed to be University]. The subject was recruited from the Outpatient Unit, Department of Dermatology, venereology, and leprosy, Sri Ramachandra Hospital, Porur, Chennai. Out of 6 Vitiligo Clients screened, 4 of them met the Selection Criteria. The clients were screened using Six - Cognitive Impairment Test, PHQ-9. Among them, one client was selected through Purposive sampling and obtained their written informed consent, and participated in the study. Before the commencement

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of the intervention, the client was assessed using the Outcome measures as pre-test scores. The outcome measures were PHQ-9 and the Rosenberg Self-Esteem Scale. The client underwent Occupational Therapy Intervention for 12 sessions in 4 weeks of each one hour. After completing the 4 weeks of Occupational Therapy Intervention, the participant was assessed using the outcome measures. The Pre-test and Post-test scores of the Outcome measures were analyzed.

Inclusion Criteria: Clinically diagnosed vitiligo patients with grades 4-6 in Fitzpatrick color tone classification was included. All types of vitiligo in the age group of 18 to 50 was included. A score of 0-7 on the 6 Cognitive Impairment Test. and a score of 10-19 on the Patient Health Questionnaire -9 was included. People who can able to speak and understand English or Tamil were included.

Exclusion Criteria: Patients with other dermatological disorders like psoriasis, albinism, acne, etc. were excluded. Other psychiatric, neurological, and orthopaedic conditions were excluded

3. Results

The study was intended to find out the use of Occupational Therapy for reducing Depression and its impact on Self-Esteem in vitiligo patients.

Table 1 shows the pre-test and post-test intervention scores of Patient Health Questionnaire-9. During the pre-test measure, the participant had scored **11** in PHQ-9 which is interpreted to be "**Moderate Depression**" and following Occupational Therapy management the PHQ-9 score has been reduced to **5** which is interpreted to be "**Mild Depression**".

Table 2 shows the pre-test and post-test scores of the Rosenberg Self-Esteem Scale. During the pre-test measure, the participant had scored 9 in RSES which is interpreted to be "Low Self-Esteem" and following Occupational Therapy management the RSES score has been improved to 20 which is interpreted to be "Normal".

Patient Health	Pre-test	Post-test
Questionnaire-9 (PHQ-	score	score
9)		
Score	11	5

Interpretation	Moderate	Mild

TABLE 1: Comparison of Pre-test and Post-test scores of Patient Health Questionnaire-9 (PHQ-9)

Rosenberg Self- Esteem Scale (RSES)	Pre-test score	Post-test score
Score	9	20
Interpretation	Low self- esteem	Normal

TABLE 2: Comparison of Pre-test and Post-test scores of Rosenberg Self-Esteem scale

The result of our study reveals that Occupational Therapy Depression management has shown a significant improvement in reducing Depression and has proven to show a positive impact on Self-Esteem.

4. Discussion

As of now, there are limited studies supporting Vitiligo and Depression this study links Occupational Therapy management to Depression and Self-Esteem in a vitiligo patient. This study aims to find out the use of Occupational Therapy intervention in Reducing Depression and its impact on Self-Esteem in a Vitiligo patient.

According to Y.C. Lai et al, they stated that active evaluation of signs and symptoms of Depression for patients with vitiligo should be done and provide appropriate referrals to manage their psychiatric problem accordingly Mariana L. D'Amico states that the effectiveness of interventions within the scope of Occupational Therapy to improve and maintain performance and participation for people with serious mental illness.[14]

According to Somenath Sarkar et al (2018), Patient who has Vitiligo patches on their skin have a higher incidence of psychiatric comorbidities like Depression, Social anxiety, lower Self-Esteem, decreased Quality of Life, Fear, Embarrassment and Anger, Physical limitations, and Discomfort, and Cognitive impairments. [15]

Among a variety of techniques in Occupational Therapy, we had planned a tailor-made Occupational Therapy intervention by using Relaxation techniques and Leisure activities which made us decrease the possible level of

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depression, and the overall score for the Patient Health Questionnaire-9 (PHQ-9) reduced.

The result of our study proves the Alternative Hypothesis that Occupational Therapy intervention will show a significant reduction in Depression and a positive impact on Self-Esteem in a vitiligo patient.

Jacobson's progressive muscle relaxation is a part of the relaxation technique that helped the participant to decrease Depression, Similarly, Tejal C. Nalawade et al (2016) have proved that Jacobson's progressive Muscle relaxation appears to show a significant reduction in Depression among older adults. According to Ali Akbari et al proved that Jacobson's progressive muscle relaxation is significant in improving the self-esteem of multiple sclerosis patients. [16]

Psychoeducation as a part of the intervention which helped the participant to know more about themselves and helped them to improve their Self-Esteem. Similarly, Mariana Flavia de Souza Tursi et al proved that psychodrama is an adjuvant to pharmacological treatment that helps to reduce depression and according to Wells, Don et al proved that psychoeducation had improved the level of self-esteem among adolescents at high risk of dropping out.[17]

Mindfulness is a part of Cognitive Behaviour Therapy which helps the participants to overcome the negative thoughts similarly Teasdale, J. D., et al have proved that mindfulness-based Cognitive Behavioural Therapy helps the patient to decrease the relapse and recurrence of depressive symptoms among depressive patients. According to Christopher A. Pepping et al had mindfulness and self-esteem are related which indicates that mindfulness improves self-esteem. [18]

The effect of guided imagery on the participant has helped them to seek pleasure from the imaginary situation and helped him to overcome negative thoughts. According to Joao Luis AlvesApostolo proved that Guided Imagery as an Intervention has decreased the depression level among depressive disorder patients and also improves the comfort level of the participant. [19]

The deep breathing technique helped the participant to decrease the depression by relaxing of mind and body. Similarly, Li-JungChung et al proved that deep breathing techniques help the patients to overcome Depression. [20]

The leisure activity is selected based on an interest checklist where the patient had selected the activities according to the interest which helped the participant to improve his Interpersonal skills, and self-esteem and to decrease the possible level of depression similarly Hsiao-Yun Lee et al have stated that Leisure Activity helps to decrease the risk of depression among older adults [21] This single case study provided information about the positive impact of Occupational Therapy intervention on Self-Esteem by reducing Depression in a Vitiligo patient. This study has been limited to a single case based on these results it could not be Generalized to Vitiligo patients with depression. Purposive sampling can cause selection bias that may have an impact on the result of the study. The Patient Health Questionnaire-9 is applicable for measuring the Depressive symptoms in the past 2 weeks which is not applicable to prove a stable prognosis

Further studies are needed to explore the process of providing and receiving Occupational Therapy for Depression in Vitiligo patients. Further studies can be carried out by applying Occupational Therapy intervention for other psychiatric co-morbidity in vitiligo patients. The intervention can be conducted for a larger population. Future studies can include different types of Vitiligo to generalize to a broader population of people with vitiligo. Future studies can investigate the effects of group therapy in decreasing Depression and improving Self-esteem in vitiligo patients.

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