ABSTRACT

**Background:** Vitiligo is not merely a skin condition; it can have profound psychological effects on individuals who live with it. The visible de-pigmented patches that appear on the skin can lead to a range of emotional and psychological challenges. Some of the key psychological effects of Vitiligo include: Stigmatization and social isolation, low self-esteem, depression and anxiety, body image issues, social anxiety, reduced quality of life. This research aimed to investigate the levels of mood states, and psychological well-being in Vitiligo patients who received cognitive behavioral intervention, comparing them with a control group. The primary objectives of this study were to assess whether there were differences in mood states, and psychological well-being between the pre and post-test assessments following cognitive behavioral therapy. The study also sought to develop an intervention module aimed at alleviating the psychosocial stress experienced by Vitiligo patients. The research method involved a total sample of 30 Vitiligo patients, both male and female, aged between 18 and 45. The data was collected through the General Well Being scale (GWBS-CVRD): The general well-being scale developed by V. L. Chauhan and R. K. Didwania to purposely to assess overall well-being of respondents. It has 50 items which covers 12 dimensions of human life. The mood scale consists of a number of words that describe different feelings and emotions. Statistical analysis of the data was conducted, revealing a positive correlation between the results of the experimental and control group interventions. Statistically significant differences were observed between the pre-test and post-test groups in terms of Mood State, and Psychological Well-being. In conclusion the study undergoes the significant impact of cognitive intervention on enhancing resilience and positively influencing mood state and psychological well-being among the cases of Vitiligo. It helps people with vitiligo feel less stressed, less sad, and more confident about how they look. It also teaches
them ways to handle tough situations and feel better about themselves. By using CBT alongside medical care, we can make life better and happier for people with Vitiligo.

**Key Words**: Vitiligo, Mood State, Psychological well being, Cognitive, Intervention

I. **INTRODUCTION**

**Background**: Vitiligo, a skin condition characterized by the loss of pigmentation in certain areas of the skin, can indeed have a significant psychological and emotional impact on individuals. Its important to recognize that vitiligo is a complex condition with both genetic and environmental factors contributing to its development. Leucoderma can be a result of various triggers, such as burns, allergies, medication side effects, and more. The impact of both vitiligo and leucoderma on an individual's life can be significant. The psychological burden of Vitiligo/leucoderma can affect an individual's overall quality of life. It may limit their participation in various aspects of person’s life, including relationships, career opportunities, and leisure activities. The psychological and social aspects of living with vitiligo or leucoderma are indeed important to consider. Psychological well-being can be a major challenge for people with these conditions, and it can have a profound negative effect on their quality of life. Misconceptions and ignorance about vitiligo often lead to prejudiced attitudes and hurtful behaviors from others.

**Mood State** consists of various feelings and emotions which swings with depression and can fluctuate from irritability to extreme sadness to an angry outburst. Mood consists of various feelings and emotions such as depression, regression, stress, fatigue, guilt, extraversion, and arousal. In the short term mood fluctuation can occur frequently. We need to improve our understanding of such fluctuations.

**Psychological Well Being** is a crucial aspect of overall health, and addressing the emotional impact of vitiligo is an important part of the holistic approach to managing the condition. Vitiligo can definitely have an impact on psychological well-being. The noticeable change in skin pigmentation can lead to feelings of self-consciousness, embarrassment, or even anxiety and depression in some cases. Social stigma and misconceptions about the condition can also contribute to these emotions. It is essential for individuals with vitiligo to receive not only medical support but also psychological and emotional support. Connecting with others who have vitiligo, either through support groups or online communities, can provide a sense of understanding and belonging. Additionally, seeking professional help from a therapist or counselor can be beneficial in managing the emotional challenges associated with vitiligo.

**Cognitive Behavior Therapy** is a brief, goal oriented psychotherapy approach that focuses on practical problem solving. Patients undergoing CBT are taught to recognize and change harmful thought patterns. CBT integrates elements of psychotherapy and behavioral therapy and is usually a one-to-one approach, and it can also be applied effectively in groups or families. Individual having vitiligo encounter tremendous social and psychological challenges. CBT training proves highly effective which the patient’s mood is directly related to his or her patterns of thought, Negative and dysfunctional thinking impacts a person’s
mood, self perception, behavior and even their physical well being. Through CBT, patient’s experience shifts in their self beliefs and acquire skills to manage their thought pattern.

II. LITERATURE REVIEW

According to Robert Griesemer's 4576 case study with patients having skin diseases (Padus-1992) it was inferred that suppression of mental irritation of high intensity can aggravate unhealthy skin conditions and may also generate in mind an obsessive urge to scratch a healthy skin until it gets bruised and soared to pacify psychomotor disturbances.

Savin, (1993). In Vitiligo is thus an important skin disease having major impact on the quality of life of patients suffering from vitiligo. Appearance of skin can condition an individual self-image, and any pathological alteration can have psychological consequences

Al-Abadie et al, (1994) indicated that psychological stress increases level of neuroendocrine hormones which affects the immune system and alters the level of neuropeptides. The increase in the level of neuropeptides may be the initiating event in pathogenesis of vitiligo. In a study of 150 vitiligo patients, they assessed the nature and extent of the social and psychological difficulties associated with the disease and their impact on treatment outcome by using Dermatology Life Quality Index (DLQI). Their results clearly demonstrated that patients with high DLQI scores responded less favourably to a given therapeutic modality thereby suggesting that additional psychological approaches may be particularly helpful in these patients.

According to Ginsberg (1996), 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. Particularly in teenagers, mood disturbances including irritability and depression are common. Patients with vitiligo are very sensitive to the way other perceives them and they will often withdraw, because they anticipate being rejected. Sometimes, strangers and even close friends can make extremely hurtful and humiliating comments. The impact of such factors is profound subjecting them to emotional distress, interference with their employment, or use tension-lessoning, oblivion-producing substances such as alcohol.

Kent & al Abadie, (1996); Parsad et al., (2003) Most of the studies worldwide have used only dermatology specific health-related-quality-of-life (HRQL) questionnaires and reported vitiligo had an adverse impact on HRQL, particularly on psychosocial functioning.

Finley and Ryan (1996), Vitiligo is no exception to these observations. With an incidence of about 1% of the total population, it is probably one of the most common causes of disfigurement due to skin diseases. However, as it does not cause any direct physical impairment vitiligo is often considered as a mere cosmetic problem rather than a major skin disease.

Porter et al.;(1996) As skin color plays a major role in an individual’s perception of health, wealth, and worth, pigmentedary disfigurements like vitiligo cause severe psychosocial distress and social stigmatization
Papadopoulos et al, (1999) have shown that counseling can help to improve body image, self-esteem and quality of life of patients with vitiligo, also having positive effect on course of the disease. It is important to recognize and deal with psychological components of this disease to improve their quality of life and to obtain a better treatment response. In India and perhaps elsewhere also men, women and children with vitiligo face severe psychological and social problems. It is more acute in the case of young women and children.

According to Porter (2000), suggested that the skin is the most visible organ of our body which determines to a great extent our appearance and plays a major role in social and sexual communication. In our society, appearance is very important, and it greatly influences the way we are perceived by others.

Behl et al, (2000) Adults and children of both sexes are equally affected; the proportion of patients with a positive family history varies from one part of the world to another, with particularly wide ranges reported in India (25-18%), with reports of up to 40% elsewhere in the world.

According to Porter (2000), suggested that the skin is the most visible organ of our body which determines to a great extent our appearance and plays a major role in social and sexual communication. In our society, appearance is very important, and it greatly influences the way we are perceived by others.

III. METHODOLOGY

1. Research Design: The experimental research design is to be adopted to examine mindfulness cognitive behavioral therapy intervention on mood state among vitiligo patients in relation with psychological well being.

2. Sample Technique: This study is correlation and involves experimental method of research. For this method the purposive sample technique is preferred. Approximately 30 patients with pigmentation would comprise the sample. Participants would be volunteers of age in between 18-45 years with clinically diagnosed vitiligo. The sample would be purposely selected through various criteria such as; Patient’s History, Physical/Medical condition, Age category, Gender, Address etc.

3. Variables: There is only one Independent Variable and that is Cognitive Behavior Therapy, and possible Dependent Variables include: Psychological Well Being and Mood State.

4. Objectives

- To study the Mood State and Psychological well-being between control and experimental group in reference with Pre & post test CBT Intervention.
- To examine whether any difference between Pre-test and Post-test group of CBT Intervention on Mood State and Psychological well-being.
5. Hypothesis

- Hypothesis-1: Mood State and Psychological wellbeing significantly differ between control and experimental group interference with Pre & post test test Cognitive Behavior Therapy Intervention.

- Hypothesis-2: Mood State and Psychological wellbeing significantly differ between Pre-test and Post-test group of Vitiligo patients interference with Cognitive Behavior Therapy Intervention.

6. Procedure: In this study, Thirty (30) vitiligo patients would be selected from fifteen (15) subjects would be assigned as experimental group and another fifteen (15) subjects would be assigned as control group. In the first phase (Pre-test), data would be collected from both groups such as experimental and control group were treated without any intervention program. In the second phase, Cognitive Behavior Therapy training intervention would be given to experimental group and the control group would be treated without any intervention. In the third phase (Post-test), the data would be collected from both experimental and control group. All procedure would be conducted in Supervision of Co Investigator from Both Dermatology and Psychiatric Department.

7. Tools:

- Mood Chart: This scale consists of a number of words that describe different feelings and emotions. Reach each item and then list the number from the scale below next to each word and Mark using the response scale. i.e. very slightly, Not at all, A little moderate, Quite a bit, Extremely.

- General Well Being Scale (GWBS-CVRD): The general well-being scale developed by V. L. Chauhan and R. K. Didwania to purposely to assess overall well-being of respondents. It has 50 items which covers 12 dimensions of human life.

IV. RESULT

The correlation between pre and post-test group of these variables was find out and it shows that there is a difference between the pre & post values of psychological well being or mood state of that patients who treated by cognitive behaviour therapy, or the result observed that the experimental group has lower values in post-test as compare to pre-test values in respect to mood state, psychological well being which increases their quality of life.

Table no-1 observes Mean, SD, MD and t-ratio between post-test cognitive intervention Experimental and Control group in reference to Mood State and Psychological wellbeing. The result reveals that there was a statistical significant difference between post-test experimental and control group in respect to Mood State and Psychological wellbeing as the p value is lower than 0.01 levels. Here with results observed that the Mean value of Control group was higher than the Experimental group. The Study variables that Mood State Mean value of Experimental Group (M= 151.28) and Control Group (M=160.37) and Psychological Well Being value of Experimental Group (M= 84.11) and Control Group (M=93.33). But the
difference was found statistically significant between experimental and control group of post-test cognitive Intervention group in Mood State and Psychological wellbeing. The results revealed that the difference was found statistically significant in Mood State (t= 2.13, p > 0.03) at 0.05 levels and Psychological wellbeing (t= 2.49, p > 0.01) at 0.01 levels between post-test of experimental and Control group as the p value is lower than 0.01 and 0.05 levels. The Graphical representation are mentioned in Figure no-1

Table No. 1: Mean, SD and t-ratio between Post-test Experimental and Control Group in Mood State and Psychological Wellbeing

<table>
<thead>
<tr>
<th>Variables</th>
<th>Post-test Group</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>MD</th>
<th>t-ratio</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mood State</td>
<td>Experimental</td>
<td>15</td>
<td>151.28</td>
<td>5.73</td>
<td>9.09</td>
<td>2.13*</td>
<td>0.03</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>15</td>
<td>160.37</td>
<td>6.44</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychological Wellbeing</td>
<td>Experimental</td>
<td>15</td>
<td>84.11</td>
<td>5.52</td>
<td>9.22</td>
<td>2.49*</td>
<td>0.01</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>15</td>
<td>93.33</td>
<td>6.71</td>
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</tr>
</tbody>
</table>

Note: **- significant at 0.01 level ; *- significant at 0.05 level

Mean Difference Between Experimental and Control Group of Post-Test Cognitive Intervention in Study Variables

![Graph showing mean difference between experimental and control group](image)

**Fig No. 1**

**Note:** Bar diagram shows mean difference between experimental and control group of post cognitive intervention in study variables such as Mood State and Psychological well-being.
V. DISCUSSION AND CONCLUSION

This study observed that the impact of vitiligo on individuals, particularly during their second and third decades of life. Vitiligo can profoundly impact body image. Individuals may become hyper-aware of their skin's appearance, leading to body dysmorphia and dissatisfaction with their physical selves. The fear of judgment and discrimination can cause social anxiety, making it challenging for people with Vitiligo to engage in social interactions or public activities. The emotional and psychological effects, including reduced self-esteem and negative body image, are noted. Additionally, the study suggests that in certain cultural contexts, there is a stigma and mood swings attached to vitiligo, which can result in affected individuals being marginalized or shunned. To deal with these psychological effects, individuals with Vitiligo often develop coping mechanisms, some of which may be unhealthy, such as avoiding social situations or concealing their condition. CBT is a therapeutic approach that aims to help individuals identify and change negative thought patterns and behaviors. It's encouraging that CBT is considered as a potential intervention for individuals with vitiligo. By addressing beliefs about oneself and providing skills to control thought processes, CBT may contribute to improving the emotional and psychological well-being of individuals affected by vitiligo.

The lack of awareness and knowledge about vitiligo can contribute to the issues faced by individuals with this condition, including the psychological and emotional challenges. The study's findings can serve as a valuable resource for specialists, academicians, and counselors to better understand and address the psychological symptoms associated with vitiligo. A comprehensive understanding of the various aspects of the psychological impact of vitiligo at different stages can provide a more nuanced approach to intervention and support. It would contribute to a more holistic understanding of the challenges faced by individuals with vitiligo and help develop targeted strategies for addressing their needs. We may not be able to change how world perceive their colour, but we would surely be able to change the subjective sufferings of these Vitiligo subjects.

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VII. REFERENCES


