Impact of Activity Therapy on Improving the Self Esteem among Women with Mental Illness

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Authors’ contributions

This work was carried out in collaboration between both authors. Author VSC designed the study, performed the statistical analysis, wrote the protocol and wrote the first draft of the manuscript. Author GC managed the literature searches and the analyses of the study. Both authors read and approved the final manuscript.

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ABSTRACT

Self-esteem is an important component of psychological health. Much previous research indicates that lowered self-esteem frequently accompanies psychiatric disorders. It has been suggested that low self-esteem is an etiological factor in many psychiatric conditions as well as in suicidal individuals. Self-esteem also plays some role in quality of life for psychiatric patients.

The objective of the study is to evaluate the effectiveness of activity therapy in improving the self-esteem of mentally ill women.

A quantitative, single-group pretest posttest design is adopted and Non-probability convenient sampling technique is used to select the 60 women with mental illness at psychiatric rehabilitation centre, Jaipur, Rajasthan, India. Samples were divided into four groups. In pre test the level of self esteem was assessed by Rosenberg Self Esteem Scale (RSES). Each group should to select in each week and gave the activity intervention. After the intervention the post was conducted.

Demographic variables were analyzed with descriptive (mean, median and standard deviation) and clinical variables were inferential statistics (Chi-square and paired “t” Test).

In this study 70.0% of the women have low self esteem score. After activity therapy intervention 76.7% of them are having normal self esteem score, 23.3% of the women are having low self-esteem score. Women are gained 26.3% of self esteem.

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1. INTRODUCTION

Mental health is a level of psychological well-being, or an absence of a mental disorder; it is the "psychological state of someone who is functioning at a satisfactory level of emotional and behavioral adjustment" [1]. From the perspective of positive psychology or holism, mental health may include an individual's ability to enjoy life, and create a balance between life activities and efforts to achieve psychological resilience.

According to World Health Organization (WHO) mental health includes "subjective well-being, perceived self-efficacy, autonomy, competence, intergenerational dependence, and self-actualization of one's intellectual and emotional potential, among others." However, cultural differences, subjective assessments, and competing professional theories all affect how "mental health" is defined. A person struggling with his or her mental/behavioral health may face stress, depression, anxiety, relationship problems, grief, and addiction problem [2].

Overall rates of psychiatric disorder are almost identical for men and women but striking gender differences are found in the patterns of mental illness. Gender differences occur particularly in the rates of common mental disorders - depression, anxiety and somatic complaints. These disorders, in which women predominate, affect approximately 1 in 3 people in the community and constitute a serious public health problem.

Self-esteem has emerged as an important concept potentially related to the etiologic, understanding, and treatment of individuals with severe mental illness. Schizophrenia studies have found links between self-esteem and social function, perceived quality of life, depression, and psychotic symptoms. Moreover, theorists and experimental psychologists have found significant links between low self-esteem and the development of paranoid delusions, as well as the maintenance of psychotic symptoms [3].

Successful treatment of mental illness depends on a combination of factors. Medication alone is not enough. It is important to educate about the illness a strong support system, healthy lifestyle choices, and stick to treatment plan. Vocational and social rehabilitation teaches basic life skills to people with schizophrenia so that they can function in their families or communities [4].

Activity therapy is a healing technique that is often employed with people overcoming physical addictions or emotional issues. The main focus of the therapy is to engage the individual in creative accomplishments that help to alter the thought processes of the patient in a positive manner. This therapy may take place between a therapist and a single patient or be utilized in a group environment [5,6].

1.1 Need for the Study

When a person is retarded they are kept aloof by their relatives. No humanity is shown to them. Self-esteem is a most important factor in the development of human's personality. Low self-esteem will lead to unbearable psychological pressure and that pressure can lead to mental illness. Psychiatric patients are more prone to get affected with low self esteem because they are less confident, neglected by the community, limited thinking level, less self coping mechanism, high dependency level, jobless, isolated and stigmatized. These all lead to low self-esteem and low self-esteem affects his treatment process [7].

It's certainly plausible that women experience higher levels of stress because of the demands of their social role. 'Increasingly, women are expected to function as carer, homemaker, and breadwinner – all while being perfectly shaped and impeccably dressed. These are the kind of pressures that can leave women feeling as if they've somehow failed; as if they don't have what it takes to be successful; as if they've been left behind. And those kinds of feelings can lead to psychological problems like anxiety and depression.' self-esteem has been explored in a great number of studies conducted in community
Several studies have explored the relationship between self-esteem and psychological outcomes in community samples. For example, Greenberg et al. found that high self-esteem had an anxiety-buffering function among students in an experimental setting. Likewise, threats to self-esteem have been shown to induce anxiety and to activate strategies that defend or restore a person’s self-esteem. In a longitudinal study, including nearly 3000 participants from two samples aged 15–21 years, [9] Orth, Robins and Roberts showed that low self-esteem more strongly predicted depression, than depression predicted low self-esteem. Moreover, a large meta-analysis by Sowislo and Orth, comprising a total of 85 longitudinal studies, concluded that the effect of low self-esteem on negative affectivity is solid and holds across different samples and design characteristics of studies, but notably, mostly limited to community samples [10].

Phil Richardson, Kevin Jones, Chris Evans, Peter Stevens, and Anna Rowe [11] focused on the importance of art therapy in improving the bio-psycho-social functions positive and negative symptoms and quality of life in persons living with schizophrenia.

Fraguela-Vale et al. (2016) found that the practice of PA was simultaneously associated with both better perceptions of BI and a higher satisfaction with oneself.

Zamani Sani, Seyed Hojjat et al. [12] investigated the relationship between physical activity (PA) and self-esteem (SE), while introducing body mass index (BMI), perceived physical fitness (PPF), and body image (BI) in adults (N =264, M =38.10 years). The findings indicated that PA had an indirect and positively associated with SE.

Zekiye Basaran [8] investigates the effect of recreational activities on the self-esteem and loneliness level of prisoners as an alternative education and study findings shows that Recreational activities were specified to have positive effect on increasing the self-esteem level and decreasing loneliness level of the prisoners Mousavi Gilani S R, Dashipour A [13] focused on the effect of physical therapy on self esteem and findings of study shows that experimental group received the physical therapy self esteem was very high compare to control group of the university students.

Blanco-Ornelas et al. (2017) showed that regular PA had an indirect and positive effect on personal self-concept through the subjective importance of physical fitness and appearance.

According to Faculty of Sports and Exercise Medicine UK Physical activity can help prevent and manage mental health problems [4].

2. RESEARCH METHODOLOGY

A Quantitative Approach with a pre experimental one group pre-test and post-test design was adopted to assess the effectiveness of activity therapy to improve the Self Esteem among the women with mental illness. A Sample of 60 women was selected with mental illness by non probability convenient sampling methods & who met the inclusion criteria was selected for this study. The data were collected from April 15th, 2019 to June 16th 2019 at Psychiatric Rehabilitation Centre, Jaipur, Rajasthan, India.

2.1 Study Sample Inclusion Criteria

- The female patients who are diagnosed with mental illness.
- All sub categories are included.
- Both acute and chronic patients are included.
- The clients who are having insight.
- The women who are willing to give consent for the study.
- The clients who speaks and understands Hindi and English.

2.2 Study Sample Exclusion Criteria

- Patients who are having co morbid conditions like alcoholism, mental retardation
- Patients who are having high suicidal tendencies.
- Patients who were attending programmer in department of psychiatric and neurological rehabilitation (DPNR).

| Group | Pretest | Intervention | Posttest |
|-------|---------|--------------|----------|
| One group | O1 | X | O2 |
2.3 Hypothesis

H1- There will be a significant difference between pre test and post test level of self esteem scores among women with mental illness.

H2- There will be a significant association between post test level of self esteem scores with selected demographic variables of mentally ill women

2.4 Study Tool

The tool was selected after extensive literature review from the various text book, internet search, guidance and discussion with experts in the field of nursing, psychiatry, psychology and statistic. A structured questionnaire was used to collect data from the women with mental illness who are admitted in the Psychiatric Rehabilitation Centre.

The tool consisted of Section A and B Demographic profile of the Client and Rosenberg Self-Esteem Scale (RSES), developed by Dr. Morris Rosenberg, in 1965, is a self esteem measure widely used in research. It consists of 10 items that is like yes or no type scale. Fourteen of the scale items have positively worded statements and eight of the scale items have negatively worded ones. The scale measures state self esteem by asking the respondents to reflect on their current feelings. The Rosenberg self esteem scale is considered a reliable and valid quantitative tool for self-esteem assessment.

2.5 Scoring Pattern

- If Women answered yes to the following questions “1” point is given after each answer 1, 4, 7, 9, 12, 14-22. The answer No equal “0” point.
- If Women answered yes to the following questions “0” point is given after each answer 2, 3, 5, 6, 8, 10, 11, and 13. The answer No equal to “1” point
- The higher score gained by the women indicate high Self Esteem.

**Pattern of Self-esteem Questions**

| S.No. | Questions | No. of Questions |
|-------|-----------|------------------|
| 1     | Positive  | 1, 4, 7, 9, 12, 14, 15, 16, 17, 18, 19, 20, 21, 22 |
| 2     | Negative  | 2, 3, 5, 6, 8, 10, 11, 13 |

2.6 Scoring Interpretation

| S. No. | Level of self-esteem | Range |
|--------|----------------------|-------|
| 1      | Normal               | 11-22 |
| 2      | Low Self Esteem      | 0-11  |

2.7 Intervention Protocol

**Place:** Psychiatric Rehabilitation centre, Female Wards

Activity: paper cover making were explained with the raw materials.

Tool: Rosenberg self esteem scale

Time: 45 Mints morning and evening with client convenience

Frequency: Once a day

Administered By: Investigator explained and demonstrated the procedure and gave the raw materials to them making activities

Recipient: Women with mentally illness

2.8 Data Collection Procedure

The study was performed at Psychiatric Rehabilitation Centre, Jaipur. The Investigator obtained data from the women with mental illness who were undergoing rehabilitation process. The main study was conducted for a period of 8 weeks that from 15. 4. 2019 to 16. 6. 2019. Initially the investigator approaches each woman with mental illness after getting permission from the incharge. Investigator selected 80 women initially. In 10 of them were dropped due to chronic illness, 4 of them were unable to attend due to their physical inability, 3 of them were discharges and 3 were not willing to participate the study.

Finally investigator took the 60 women for the study who fulfill the inclusion and exclusion criteria.

The total 60 women were divided into four groups. Each group contained 15 women. Every day the participants were gathered around 2 PM in the common hall. The pre-test questionnaire was administered to them and response were record to find out the self esteem level before activity therapy.

3. RESULTS

Demographic findings specify that maximum women (36.7%) belong to age between 20-30 year and residing in municipal area (50%).
Approximately (46.7%) were married and follow the Hindu religion. In view to Education level 33.3% were having primary, belong to Nuclear family (60%) and 66.7% were employed and maximum (61.66%) earning INR < 10000 monthly during pre morbid phase. 41.66% women having the stay < 3 month followed by the poor family support(35%). Findings shows that there is huge difference in pretest and posttest results and statistically highly significant.

### Table 1. Socio demographic profiles of women with mental illness N=60

| S.N | Demographic Variable      | No. of women | Percentage |
|-----|---------------------------|--------------|------------|
| 01  | Age                       |              |            |
|     | 20-30 Year                | 22           | 36.7       |
|     | 31-40 Year                | 16           | 26.6       |
|     | 41-50 Year                | 15           | 25         |
|     | Above 50 Year             | 07           | 11.7       |
| 02  | Residence                 |              |            |
|     | Urban                     | 12           | 20         |
|     | Semi Rural                | 30           | 50         |
|     | Rural                     | 18           | 30         |
| 03  | Marital Status            |              |            |
|     | Married                   | 28           | 46.7       |
|     | Unmarried                 | 22           | 36.7       |
|     | Separated                 | 02           | 3.3        |
|     | Widow                     | 08           | 13.3       |
| 04  | Religion                  |              |            |
|     | Hindu                     | 39           | 65         |
|     | Muslim                    | 06           | 10         |
|     | other                     | 15           | 25         |
| 05  | Type of family            |              |            |
|     | Joint family              | 24           | 40         |
|     | Nuclear family            | 36           | 60         |
| 06  | Education Status          |              |            |
|     | No formal education/ illiterate | 16 | 26.66 |
|     | Primary                   | 20           | 33.33      |
|     | High school               | 14           | 23.33      |
|     | Higher secondary          | 10           | 16.67      |
| 07  | Pre morbid Occupation     |              |            |
|     | Employed                  | 40           | 66.7       |
|     | Un employed               | 18           | 30.0       |
|     | House wife                | 02           | 3.3        |
| 08  | Pre morbid Income (Monthly)|              |            |
|     | <INR 10,000               | 37           | 61.66      |
|     | INR 10001 – 20000         | 14           | 23.33      |
|     | >INR 20000                | 09           | 15         |
| 09  | Family Assistance / Support|             |            |
|     | Good                      | 11           | 18.33      |
|     | Moderate                  | 18           | 30         |
|     | Average                   | 10           | 16.67      |
|     | Poor                      | 21           | 35         |
| 10  | Duration of stay at Rehabilitation Centre | | |
|     | < 3 Month                 | 25           | 41.66      |
|     | 3-6 Month                 | 12           | 20         |
|     | 7-10 Month                | 10           | 16.67      |
|     | 11- 13 Month              | 08           | 13.34      |
|     | > 13 Month                | 05           | 08.33      |

### Table 2. pretest and posttest assessment of self esteem

| Component    | No. of Participants | Mean ± SD     | Mean Difference | Paired t-test |
|--------------|---------------------|---------------|-----------------|---------------|
| Pretest      | 60                  | 10.07±2.37    | 5.80            | T=17.01       |
| posttest     | 60                  | 15087±2.21    |                 | P<0.001***    |
| Component | Max. Score | Mean score self esteem therapy | Mean Difference (95% confidence Interval) | Percentage of self esteem gain (with 95% confidence interval) |
|-----------|------------|--------------------------------|-------------------------------------|----------------------------------------------------------|
| Pretest   | 22         | 10.07                          | 5.8 (5.12 - 6.48)                    | 26.3 (23.3 – 29.5)                                       |
| Posttest  | 22         | 15.87                          |                                     |                                                          |

Table 3. Evaluation of activity therapy

| S.N  | Demographic Variable | Level of Self esteem | Frequency | Chi- square test |
|------|----------------------|----------------------|-----------|-----------------|
|      |                      | Below Average (≤ 5.80) | Above Average (≥ 5.80) |                       |
|      |                      | Frequency | %     | Frequency | %     |                         |
| 01   | Age                  | 20-30 Year | 17     | 28.34     | 05     | 8.33         | 22                       |
|      |                      | 31-40 Year | 06     | 10        | 10     | 16.67       | 16                       |
|      |                      | 41-50 Year | 05     | 8.33      | 10     | 16.67       | 15                       |
|      |                      | Above 50 Year | 02     | 3.33      | 05     | 8.33        | 07                       |
| 02   | Residence            | Urban      | 07     | 11.67     | 05     | 8.33        | 12                       |
|      |                      | Semi Rural | 16     | 26.66     | 14     | 23.34       | 30                       |
|      |                      | Rural      | 07     | 11.67     | 11     | 18.33       | 18                       |
| 03   | Marital Status       | Married    | 13     | 21.67     | 15     | 25          | 28                       |
|      |                      | Unmarried  | 14     | 23.34     | 08     | 13.34       | 22                       |
|      |                      | Separated  | 03     | 5         | 05     | 8.33        | 08                       |
|      |                      | Widow      | 0      | 0         | 02     | 3.33        | 02                       |
| 04   | Religion             | Hindu      | 16     | 26.66     | 23     | 38.34       | 39                       |
|      |                      | Muslim     | 04     | 06.67     | 02     | 3.33        | 06                       |
|      |                      | other      | 10     | 16.67     | 05     | 8.33        | 15                       |
| 05   | Type of family       | Joint family | 22     | 36.67     | 14     | 23.34       | 36                       |
|      |                      | Nuclear family | 08     | 13.33     | 16     | 26.66       | 24                       |
| 06   | Education Status     | No formal education / illiterate | 12     | 20        | 04     | 6.67        | 16                       |
|      |                      | Primary    | 12     | 20        | 08     | 13.34       | 20                       |
|      |                      | High school | 04     | 6.67      | 10     | 16.67       | 14                       |
|      |                      | Higher secondary | 02     | 3.33      | 08     | 13.34       | 10                       |

Table 4. Association of self esteem gain score with selected demographic variables

| S.N | Demographic Variable | Frequency | % | Frequency | % | Chi- square test |
|-----|----------------------|-----------|---|-----------|---|-----------------|
| 01  | Age                  | 28.34     | 8.33 | 22         | P= 0.05* |
| 02  | Residence            | 11.67     | 8.33 | 07         | Df = 3 |
| 03  | Marital Status       | 21.67     | 25  | 28         | X² = 4.27 |
| 04  | Religion             | 26.66     | 38.34 | 39         | X² = 3.59 |
| 05  | Type of family       | 36.67     | 23  | 36         | X² = 4.44 |
| 06  | Education Status     | 20        | 6.67 | 16         | X² = 10.97 |

P= 0.17, Df = 2
P= 0.05*, Df = 1
P= 0.05*, Df = 3
| S.N | Demographic Variable | Level of Self esteem | Frequency | Chi-square test |
|-----|----------------------|----------------------|-----------|----------------|
| 07  | Family Assistance / Support | Below Average (≤ 5.80) | Frequency | % |
|     |                      |                     | 06        | 10   | 02  | 3.33  | 08   | \(X^2 = 10.97\) |
|     |                      |                     | 02        | 3.33 | 05  | 8.33  | 07   | \(P= 0.05^*\) |
|     |                      |                     | 08        | 13.33| 14  | 23.34 | 22   | \(Df = 3\) |
|     |                      |                     | 14        | 23.34| 09  | 15    | 23   | \(X^2 = 10.97\) |
| 08  | Duration of stay at Rehabilitation Centre | Below Average (≤ 5.80) | Frequency | % |
|     |                      |                     | 02        | 3.33 | 02  | 3.33  | 04   | \(P= 0.32\) |
|     |                      |                     | 01        | 1.67 | 07  | 11.67 | 08   | \(Df = 4\) |
|     |                      |                     | 03        | 05   | 02  | 3.33  | 05   | \(X^2 = 4.68\) |
|     |                      |                     | 10        | 16.67| 17  | 28.33 | 27   | \(Df = 4\) |
Results shows that there is enhancement of 26.3% in self esteem score after the implementation of activity therapy. Difference between the pretest and post test were analyzed using percentage and mean difference with 95% confidence interval.

There is close association in the level of self esteem gain score and women demographic variables. It shows the elders, more educated and joint family women are gained more self esteem than others statistically significant.

4. DISCUSSION

Finding of the study were supported by the Dalbirkaur. G conducted study on activity therapy among mentally ill clients to examine the relationship between depression and self esteem. In this study majority of the subjects 48.14% were male and high level of self esteem and half of the subjects 52.86% were female and having low self esteem. In the way from unborn 57.14% were having high level of self esteem and half of the subjects from rural 50% were having low level of self esteem. Majority of the subjects had school education (57.7%) and had high level of self esteem. Half of the subjects had college education (50.0%) and have low level of self esteem.

Study conducted by Brekke J S, Kohrt B, Green M F which focused on measuring changes in self esteem level before and after 4 weeks of executive physical functioning sessions. It was done in comparative study for the 30 clients in experimental group and 30 clients in control group at NIMHANS. Researchers carefully measured the physical, psychological and emotional indicators of self esteem. The self esteem was assessed by structured scale of Rosenberg Self Esteem scale. The total mean pre test value obtained was 12.93 and standard deviation was 3.150. The total mean post test value obtained was 25.07 and standard deviation was 3.863. The total means value of the post of 25.07 was higher than the total mean value of the pre test score of 12.93 indicating that the improvement was 12.14. The ‘t’ value was 18.561 and it was found significant at p<0.001 [11].

Gulay Tasci, Sema Baykara, M. Gurkan Gurok & Murad Atmaca [14] investigate the effect of exercise on therapeutic response in depression treatment. Anxiety and depression levels decreased in both groups. The decrease in anxiety and depression scores with antidepressant use is an expected outcome. However, there was a statistically more decrease in the average-scaled scores in the Group treated with antidepressant and exercise than the Group treated with only antidepressant [14].

5. CONCLUSION

The study findings concluded that the role of nurses in managing and improving the self esteem is mandatory in the health centers and rehabilitation centers. Through various activity therapy women with mental illness, self esteem was improved. So improvement of self esteem reflects the effectiveness of activity therapy. So the nurses should educate the women with mentally ill clients to understand the causes of low self esteem and advantages of activity therapy.

There are some limitations in our study. the relative smallness of the sample limits the significance of the findings in the study. On the other hand, the information on whether the recommended exercises were performed at the desired amount and level are based on patient statements and this is a limitation. However, there is a need for long-term studies that would be performed in larger groups and include supervised Activity programmes and that would be accompanied by biological variables such as neurohormonal and brain imaging.

CONSENT AND ETHICAL APPROVAL

The study objectives, intervention, data collection procedure were approved by research Ethics
Committee, Seedling School of Nursing, Jaipur National University, Jaipur, Rajasthan, India. The respondents were explained about the purpose and need for the study. They were assured that their details and answers will be used only for the research purpose. Further they were ensured that their details will be kept confidentially. Thus the investigator followed the ethical guidelines.

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COMPETING INTERESTS

Authors have declared that no competing interests exist.

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