

## **EFFICACY OF SELF HELP- MENTAL HEALTH PROMOTION MODEL ON MENTAL HEALTH OF CARE GIVERS OF MENTALLY ILL – PRE EXPERIMENTAL STUDY**

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### **Abstract:**

**Background** - Family carers with mental illness is an integral form of care in our nation as in most Non-Western countries. With limited mental health institutions facilities, the care-givers involve various activities in furnishing care for clients with psychological disturbances. The care-givers from the family of mentally ill undergone significant trouble because of the care-giving responsibility they participate in and required assistance from mental health professionals if they face any emotional or psychological alterations.

**Objective** - To evaluate the baseline mental health of care givers of mentally ill. To develop self help-mental health promotion model for the care givers of mentally ill. Evaluate the efficacy of self help mental health promotion model on mental health of care givers of mentally ill

**Methodology** - A pre experimental one group pre-test and post-test design was adopted to assess the efficacy of self help mental health promotion model among the care givers of mentally ill. In this study, interventional analytical study will be used. Purposive sampling technique will be used to collect data. Selected care givers of mentally ill will be assessed primarily for positive mental health of care givers by the WEBMW scale to measure the mental wellbeing of care givers of mentally ill. And to evaluate psychological morbidities of the care givers of mentally ill will be assessed by using GM-HAT PC Marathi version. And then structured counselling programme will be given to selected sample by Self Help Mental Health Promotion Model developed by researcher as intervention. Secondary outcomes involve evaluation of efficacy of self help mental health promotion model. IEC approval was obtained from Institutional Ethics Committee, Dutta Meghe Institute of Medical Sciences (Deemed to be University)/IEC/ JUNE-2018/7345).

**Expected Results:** This study is mainly planned to evaluate the improvement in mental health of care givers of mentally ill with the help of self help mental health promotion model, hence it will be assessed by Global Mental Health Assessment Tool and Warwick-Edinburgh Mental Well Being Scale. After 28<sup>th</sup> days of intervention the level of stress reduced down around 60%.

**Keywords** – Efficacy, *Self Help Mental Health Promotion Model*, Care Givers, Mentally ill client.

## **Introduction:**

Psychological wellbeing is crucial for a person and public health. To develop psychological wellbeing, encouragement, avoidance, and management of disease are compulsory. These kinds of approaches are interconnected and self-determining. Even though different types of hard work for psychological wellbeing maintenance and avoidance is essential. Psychiatrists usually are not accustomed to psychological wellbeing, encouragement, avoidance. This study introduce summary related to the perception, samples according to target populations, and various intercession for emotional positivity, reduction of psychological illness.<sup>1</sup>

WHO defined health as "a state of complete physical, mental, and social well-being and not merely an absence of disease or infirmity"? Though, a standard of psychological healthiness encouragement and ill health deterrence has been underappreciated more than those of physical health to date with regards to mental health.<sup>2</sup> Some investigation on mental health has been biased seriously on psychopathologies and mental illnesses rather than well-being or optimal functioning.<sup>3</sup> Even if distinct approaches from management are essential for healthy mind encouragement and avoidance of mental illnesses,<sup>4</sup> Susceptible groups recognized by world health organizations from the caregivers of hospice, mental illness, crisis, rape victim, abuse.

The family member who is taking regular care for the mentally ill client for prolonging may experience worried and stressed as the illness appears to be persistent and challenging. Eventually, they may suffer exhaustion and emotional burnout. The caregivers undergo cut off from the social order, due to limitations from their communal and spare time, even the social prejudice and disgrace associated with mental illnesses. Some carers may necessitate looking additional than one client in the family.<sup>5</sup>

So care givers of mentally ill should be assessed for their level of perceived burden, and for the presence of psychological morbidities and need counselling and educational interventions to understand about ways to handle behavioural management issues that arise in mental health areas of concern.

In the light of the above aims, a research carries on for care givers of mentally ill with the intervention through SHMHP Model to promote mental health of care givers of mentally ill.

It did not show any toxic effects on animals in the toxicity and safety studies.

## **Rationale:**

A number of factors related to a family member, clients, and illness establish caregiver psychological disorder. These include the personality of an individual with mental illness, the personality of carers which connects with the client's, character, intensity of illness. By doing this study we will be able to study the efficacy of self help mental health promotion model to improve the mental health strengthening to reduce severity of psychological based distress and dysfunction of care givers of mentally ill client before care givers goes in critical condition.<sup>6</sup>

## **Objective**

To evaluate the efficacy of Self Help Mental Health Promotion Model to promote mental health of the care givers and to reduce psychological morbidities.

**Methodology:** A pre experimental one group pre-test and post-test design was adopted to assess the efficacy of self help mental health promotion model to improve the mental health among the care givers of mentally ill.

## **Inclusion criteria**

Family members of mentally ill client who are:

1. Willing to participate in the study
2. Who are accompany with patient during data collection period
3. Care givers aged between 18-60years
4. Those who are able to read and write Marathi
5. Those who are residing with the patient at home since a year

6. Those who are giving care regularly and attending hospital with mentally ill client

#### Exclusion criteria

1. Those who have psychiatric co-morbidities
2. Mentally disabled,
3. Those who have neurological disorder

#### Withdrawal criteria

Participants who meet the following conditions will be stripped from the study.

1. Participants want to withdraw from the study
2. Participants under severe psychological morbidities
3. Participants failed to fulfill the research timetable

The clients with frequency of extreme psychiatric morbidities are referred to psychiatrist in Acharya Vinoba Bhave Rural Hospital, Sawangi (M), for further management. A care giver who has been identified with severe psychological morbidities will not be included in the study. The reason of withdrawal will be recorded.

#### Sample size

The sample size in previous studies varies from 50 to 100.

In present project, **121** care givers directly related to the care of mentally ill client, who residing and giving care regularly to the mentally ill client will be selected for the study.

#### Sample Size in Randomized Controlled Trial

Assumption for Sample Size Calculation:

N = Size per group

P = Anticipated response rate of Control Group

Po = Anticipated response rate of Study Group

Zx = the standard normal deviate for two sided x.

Power of the test is 80%

P = 0.20

Po = 0.40

Level of Significance is 5% = 0.05

For statistical superiority design, the formula is

$$N = \frac{1}{2} \left\{ \frac{Z\left(\frac{\alpha}{2}\right) + Z\beta}{\arcsin \sqrt{p} - \arcsin \sqrt{p_0}} \right\}^2$$

$$= \frac{1}{2} \left\{ \frac{1.96 + 0.845}{\arcsin \sqrt{0.40} - \arcsin \sqrt{0.58}} \right\}^2$$

$$= 121 \text{ sample per group}$$

Sample size for Experimental group – 121

#### Randomization

All participants are selected by sequentially numbered list at random.

**Interventions** - Step 1 - Collecting data in GM-HAT PC Marathi Version application, as mentally ill client admitted in psychiatric ward and with more than 01 weeks, **care givers** attending and residing with them in continuation will be enrolled for the using GM-HAT application.<sup>7</sup> To measure positive mental health of care givers will be assessed by the **Warwick-Edinburgh Mental well being scale**

Step 2 – After enrolling the care givers of mentally ill client for the study, do the entries as per psychological parameters in the GM-HAT PC Marathi Version application. The entries should be done in following type

Section A: Demographic variable includes 1. Distribution of care givers as per their age, relationship and length of care. 2. Distribution of mentally ill client according to their age, educational qualification, occupation, marital status, type of family, duration of illness and treatment duration.

Section B: Intervention will give to the care givers of mentally ill client through self help mental health promotion model after assessment By GM-HAT PC Marathi Version, and based on the severity of psychological well being sessions will be vary.

Step 3 – Collecting data of base line again with the help of GM-HAT PC Marathi Version after intervention.

#### **Outcome measures –**

- Primary outcome includes development of self help mental health promotion model for care givers of mentally ill to promote mental well being.
- Secondary outcomes involve evaluation of efficacy of self help mental health promotion model on mental health of care givers of mentally ill.
- Clinical outcomes –The frequency and symptoms of psychological morbidities will be assessed by the GMHAT PC Marathi Version.

#### **Assessment of adverse events**

From previous studies, no adverse events were observed. If any severe level of symptoms of psychological morbidities observed during the study will be recorded and then referred for treatment.

#### **Data management and monitoring**

The base line mental health assessment and the assessment after completion of the intervention will be done at the end of 28<sup>th</sup> days. Adverse events, severe psychological morbidities and withdrawal due to any cause will be recorded in CRF by researcher.

Follow-up will take place every week during the intervention. Their record will be checked during this period for everyday activities, adherence and adverse effects if any. Participants will be contacted by mobile phone weekly for four weeks for evaluation of adaptation and follow up of self help mental health promotion model and coping strategies, problem solving skills and stress management.

#### **Statistical analysis**

Statistical analysis will be performed by using SPSS version 22. The statistical analyses can be regression, correlation, covariance-based SEM and component-based SEM (PLS).

#### **Ethics and dissemination**

Datta Meghe Institute of Medical Sciences (Deemed to be University), (DU/IEC/JUNE-2018/7345).

#### **Expected outcome/Results:**

This study is mainly planned to evaluate the improvement in mental health of care givers of mentally ill with the help of self help mental health promotion model, hence it will be assessed by Global Mental Health Assessment Tool and Warwick-Edinburgh Mental Well Being Scale

After 28<sup>th</sup> days of intervention the level of stress reduced down around 60%. Will be accepted as the results of psycho educational intervention which leads to improved awareness regarding clinical features of mental illness and enhanced stress management and problem solving skills among the caregivers. One research study findings

revealed that caregivers burden, depression, anxiety and stress are highly prevalent among caregivers of clients with depression and are significantly improved after implementation of family intervention.

### Discussion:

The present study analyse the efficacy of self help mental health promotion model among care givers of mentally ill by using data from care givers of mentally ill approaches to in patient department and OPD of psychiatric department from Acharya Vinoba Bhave Rural Hospital, Sawangi. In that way the intervention will contribute to improve the adaptation of coping strategies and application of problem solving skills among care givers while they face trouble in their day to day activities. Also somewhere it will contributing to prevent and minimize the level of anxiety, stress and low mood experienced by care givers of mentally ill.

Previous studies reported, an association between care givers burden and having another family member mental illness requiring care. Through the study it was assumed that this may occur because of the increase in caregiving activities for sick family member, which may enhance the negative effects of caregiving.

Fallahi et al, 2014; Yazici et al, 2016; reported in their studies that caregivers commonly don't have enough knowledge and skills for providing care to the client with mental illness, therefore family intervention has been established to intervene and to teach effective coping strategies for the families with mentally ill member.

Barnhard et al, 2006; Perlick et al, 2010; revealed that family psycho-educational interventions significantly improve depressive symptoms and reduce care givers burden. The finding from the study, the mentally ill and their impact on family care givers: A qualitative case study indicated that the family care givers experienced four types of negative impact, including financial burden, social, psychological, and physical health. This study concluded that the family member should engage in support groups to obtained emotional support.

The present study reported that one fourth of the studied samples have sufficient support system. Also it will assumed that the intervention of self help mental health promotion model will be effective in reducing psychological morbidities as well as enhance mental health strengthening and will improve problem solving skills and coping strategies.

A number of studies in this region are available on various aspects of Mental health and psychological problems. Mishra et al reported an interesting case of trichotillomania in a pre-school child<sup>8</sup>. Aryal et al assessed the mental health status of adolescents left behind by migrant workers<sup>9</sup>. Ransingh et al studied about unrecognized prevalence of macrocytosis among the patients with first episode of psychosis and depression<sup>10</sup>. Depression and need of Telepsychiatry was addressed by Behere et al<sup>11,12</sup>. Tripathi et al studied the gender differences in obsessive-compulsive disorder<sup>13</sup>. Sleep disorders<sup>14</sup>, major depressive disorders<sup>15</sup> and substance abuse<sup>16</sup> in mental problems have been also reported.

So care givers need intervention of psycho-education and need to be taught education about mental illness, effective coping strategies, problem solving skills, and stress management. Therefore the present study aimed to find out efficacy of care givers intervention on care givers psychological morbidities ( Psychological disorders).

### Conclusion:

Final conclusion will be drawn from the final result of the statistical review.

### Figures and Tables:

Fig. 1: Representation figure of Research methodology

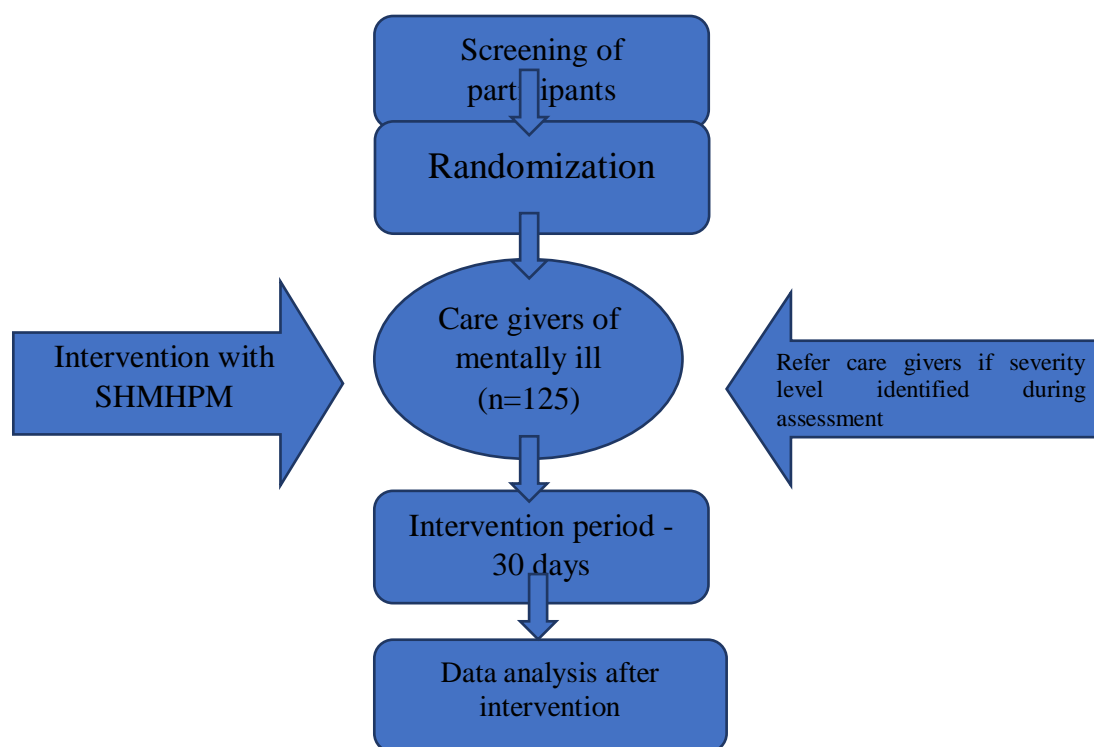


Table1. – Schematic Representation

Group	Pre-test	Intervention	Post test	Post test	Post test
	Day 1	Day 1	Day 1	Day 7	Day 28
One group	O1	X	O2	O3	O4

### Key

**O1** - Pre-test to assess the level of positive mental health and psychological morbidities of care givers of mentally ill

**X** - Psychological Education through Self Help Mental Health Promotion Model

**O2** - Post-test to assess the level of positive mental health and psychological morbidities of care givers of mentally ill (**Immediate after assessment**)

**O3** - Post-test to assess the level of positive mental health and psychological morbidities of care givers of mentally ill (**7<sup>th</sup> Day**)

**O4** - Post-test to assess the level of positive mental health and psychological morbidities of care givers of mentally ill (**28<sup>th</sup> Day**)

#### References:

1. Chadda RK. Psychiatric patient in the community: Challenges and solutions. *J Mental Health Behave.* 2001;6:7–15.
2. Chadda RK, Singh TB, Ganguly KK. Caregiver burden and coping: A prospective study of relationship between burden and coping in caregivers of patients with schizophrenia and bipolar affective disorder. *Soc Psychiatry Psychiatric Epidemiology.* 2007;42:923–30.
3. Platt S. Measuring the burden of psychiatric illness on the family: An evaluation of some rating scales. *Psycho Med.* 1985;15:383–93.
4. Thara R, Padmavati R, Kumar S, Srinivasan L. Instrument to assess burden on caregivers of chronic mentally ill. *Indian J Psychiatry.* 1998;40:21–9.
5. Nehra R, Chakrabarti S, Kulhara P, Sharma R. Caregiver-coping in bipolar disorder and schizophrenia – A re-examination. *Soc Psychiatry Psychiatric Epidemiology.*
6. Maji KR, Sood M, Sagar R, Khandelwal SK. A follow-up study of family burden in patients with bipolar affective disorder. *Int. J Soc Psychiatry.*
7. Vimal K Sharma 1, Peter Lepping, Murali Krishna, Shazia Durrani, John R M Copeland, Patricia Mottram, Rashmi Parhee, Bennett Quinn, Steven Lane, Anthony Cummins. Mental Health Diagnosis by Nurses Using the Global Mental Health Assessment Tool: A Validity and Feasibility Study. *Br J Gen Pract.* 2008 Jun;58(551):411-6.
8. Mishra, K.K., P. Kelkar, and K. Kumar. “An Interesting Case of Trichotillomania in a Pre-School Child.” *Journal of Indian Association for Child and Adolescent Mental Health* 14, no. 4 (2018): 131–35.
9. Aryal, N., P.R. Regmi, E. van Teijlingen, P. Simkhada, and P. Mahat. “Adolescents Left behind by Migrant Workers: A Call for Community-Based Mental Health Interventions in Nepal.” *WHO South-East Asia Journal of Public Health* 8, no. 1 (2019): 38–41. <https://doi.org/10.4103/2224-3151.255348>.
10. Ransing, R., S. Patil, K. Pevekar, K. Mishra, and B. Patil. “Unrecognized Prevalence of Macrocytosis among the Patients with First Episode of Psychosis and Depression.” *Indian Journal of Psychological Medicine* 40, no. 1 (2018): 68–73. [https://doi.org/10.4103/IJPSYM.IJPSYM\\_139\\_17](https://doi.org/10.4103/IJPSYM.IJPSYM_139_17).
11. Behere, P.B., K. Kumar, and A.P. Behere. “Depression: Why to Talk?” *Indian Journal of Medical Research* 145, no. April (2017): 411–13. [https://doi.org/10.4103/ijmr.IJMR\\_295\\_17](https://doi.org/10.4103/ijmr.IJMR_295_17).
12. Behere, P.B., H.D. Mansharamani, and K. Kumar. “Telepsychiatry: Reaching the Unreached.” *Indian Journal of Medical Research* 146, no. August (2017): 150–52. [https://doi.org/10.4103/ijmr.IJMR\\_993\\_17](https://doi.org/10.4103/ijmr.IJMR_993_17).
13. Tripathi, A., A. Avasthi, S. Grover, E. Sharma, B.M. Lakdawala, M. Thirunavukarasu, A. Dan, et al. “Gender Differences in Obsessive-Compulsive Disorder: Findings from a Multicentric Study from Northern India.” *Asian Journal of Psychiatry* 37 (2018): 3–9. <https://doi.org/10.1016/j.ajp.2018.07.022>.
14. Gupta, R., S. Das, K. Gujar, K. Mishra, N. Gaur, and A. Majid. “Clinical Practice Guidelines for Sleep Disorders.” *Indian Journal of Psychiatry* 59, no. 5 (2017): S116–38. <https://doi.org/10.4103/0019-5545.196978>.
15. Pal, S., R.M. Oswal, and G.K. Vankar. “Recognition of Major Depressive Disorder and Its Correlates among Adult Male Patients in Primary Care.” *Archives of Psychiatry and Psychotherapy* 20, no. 3 (2018): 55–62. <https://doi.org/10.12740/APP/89963>.
16. Patel, T.V., M.J. Brahmbhatt, and G.K. Vankar. “Prevalence of Alcohol Use Disorders in Hospitalised Male Patients.” *Archives of Psychiatry and Psychotherapy* 20, no. 4 (2018): 47–55. <https://doi.org/10.12740/APP/99147>.