

A Study to Assess the Effectiveness of STM (Structured Teaching Module) Regarding Home Care Management of the Patients with CMD on the Knowledge of the Family Members in a Selected Hospital, Gwalior (M.P)

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Abstract: In India, an estimated 30% of the population suffers from some form of psychiatric disorder. Twenty million Indian families have at least one member suffering from schizophrenia. More than 12% of Indian children aged 1 – 16 years suffer from mental disorders and the incidence of mental retardation is also high. Severe mental disorders that include schizophrenia, bipolar disorders, organic psychosis and major depression affect nearly 2% of our population. Many epidemiological studies conducted in India on mental and behavioral disorders report varying prevalence rate, ranging from 9.5 to 370 per 1000 population. The study utilized an experimental research approach. The study was conducted in a mental hospital, Gwalior, M. P. A purposive sampling technique was utilized for selecting a sample of 50 family members of the 50 patients with CMD in mental hospital, Gwalior, M. P. A structured interview schedule with multiple choice question and STM was prepared. Content validity of the tool was established by 6 experts in the field of psychiatric nursing. Data collected were analyzed and interpreted by using descriptive and inferential statistics. Prior to the implementation of STM the family members had mean percentage 39.89% of total score, which is poor knowledge, whereas after the implementation of STM the family members had mean percentage 72.97% of total score which is good knowledge with the effectiveness of 33.08%. The content of the STM will help the nursing professionals in hospital and community to reinforcing their knowledge on home care management of the patients with CMD and it's also helpful to improve the knowledge of family members of the patient with CMD regarding CMD.

Keywords: Assess, Effectiveness, Chronic mental disorders (CMD), Home care management, Family member.

INTRODUCTION

"People, who through no fault of their own or their families, experience the ill effects of one of several diseases affecting the brain comes under CMD. There is no cure for CMD. People with serious mental illness are significantly functionally impaired by the illness for an indefinite period of time. Chronically mentally ill clients are often diagnosed with schizophrenia, bipolar disorders, depression or schizoaffective disorders".

Mental disorders are mostly ill understood and underestimated problems, particularly in our country, where they are often considered as physical disease. Callahan R. R., [1].

The term mental disorder refers to a clinical syndrome or pattern that occurs in an individual. If a substantive impairment of one or several of the mental

faculties of perception, thinking, feeling, behavior, or the physiological, neurological systems linked to these brain activities known as mental disorders Chadrashekar C. R. [2].

Individuals, who through no fault of their own or their families, suffer from one of several diseases affecting the brain comes under CMD. There is no cure for CMD. People with serious mental illness are significantly functionally impaired by the illness for an indefinite period of time, Chafetz L. [3].

Chronically mentally ill clients are often diagnosed with schizophrenia, bipolar disorders, depression or schizoaffective disorders, Chakraborty P., [4].

In many developing countries, families have been partners in the care of persons with mental

disorders for over five decades. This was so even when the rest of the world looked at families as a cause of mental disorders v Charles H *et al.*, [5].

Home care service seems to offer a viable alternative mode of follow – up care for the chronically mentally ill population Chaturvedi K. S. & Malhotra S., [6].

Moreover, it may be possible to prevent repeated hospitalizations for these patients and offer them a better chance of long term community adjustment Dell W., [7], Dixon L., Adams C. & Luckstead A [8].

Home health psychiatric nursing is a unique and intriguing specialty. For patients who require home care management, it is essential to focus on the home health environment and create programs that will benefit the specific needs of these patients Ebert M. H *et al.*, [9].

The psychiatric patient must be included as health care changes take place. As the need for health continues to rise, addressing psychiatric patient care concerns is of primary importance and the establishment of psychiatric home health programs is imperative Eija S., [10].

Involving family members in some collective form of treatment has many benefits Falloon *et al.*, [11].

In countless cases where incest has occurred secrecy has been seen to be the organizing principle of all family relationships. Meaningful treatment within a family setting enables issues of secrecy, shame, guilt and responsibility to be dealt with while at the same time allowing people to talk about a subject that may have been taboo for far too long Horwitz A.V *et al.*, [12] Info Change News & Features, December [13].

The Objective of the study were

- To assess the knowledge on Home care management of patients with CMD among family member prior to the implementation of STM and Home care management of patients with CMD among family member after the implementation of STM.
- To compare the knowledge scores (KS) family members on home care management of patients with CMD with their demographic variables and Pretest and post-test KS of family members on home care management of patients with CMD.
- To find the Association between post-test KS of family members on home care management of patients with CMD.

MATERIALS & METHODS

A quasi-experimental research where pre & post-test without control group design with experimental approach was selected to carry out the study.

The study was conducted in mental hospital, Gwalior, M.P. and Dr. Joshi hospital, Gwalior. Sample size was approximately 50 family members of the 50 patients with CMD in. mental hospital, Gwalior, M.P.

Purposive sampling technique was used to select the sample for the present study. The investigator belongs to the area & rare educational program conducted in the hospital regarding home care management of the patient with CMD. During data collection period all the family members of the patients with CMD attending OPD of the mental hospital selected purposively as per the objective of the study.

The multiple choice questionnaire was consists of two sections i.e. section A and section B.

Section A

It includes selected demographic characteristics of family members of the patients with CMD such as age, sex, religion, educational status, occupation, type of family, per capita monthly family income, residential area, family members accompanying with patient, previous exposure to information about mental disorder, and Patient's information like duration of mental disorder and type of mental disorder.

Section B

It was consists of the items pertaining to knowledge of family members of the patients with CMD regarding home care management. The methods for home care management include personal hygiene, safety and security, nutritional care, administration of medication, assertive communication, emotional and spiritual support, support mechanisms for the families of mentally ill patients.

The validity of the structured interview schedule and content of STM was established in consultation with subject expert of related fields such as psychiatrist, psychologist and psychiatric nurse and statistician. Suggestions of the experts were considered as per the suggestions of consultation with the guide. The reliability of the structured interview schedule was tested by implementation of close-ended questions on 5 samples rather than study sample. Test-retest method & Karl-Pearson's correlation formula was used and the co-relation value was $r = 0.89$

RESULTS

Section I: Description of Socio demographic data

Percentage wise distribution of family members according to their age depicts that the highest percentage (50%) of them were in the age group of 31-40 years and more or less similar Percentage (24% and 22%) were in the age group of 41-50 years and 21-30 years, respectively. However, only 4% were from the age group of more than 50 years.

Percentage wise distribution of family members according to their sex shows that a higher percentage (54%) of the family members was male, when compared to female (46%). It seems that male care givers were higher might be because they can handle the patients with CMD outside. Percentage wise distribution of family members according to their religion shows that most (88%) of the family members were Hindus, whereas only 12% of family members were Muslim

Section 2: Assessment of knowledge of the family members before implementation of STM

Area wise distribution of mean, SD and mean percentage of pretest KS of family members regarding home care management of the patients with CMD shows that the highest mean score (1.4 ± 0.61) which is 46.67% of the total score was obtained in the area of "Personal Hygiene", whereas the lowest mean score (0.78 ± 0.58) which is 26% of the total score was in the area "Importance and need for home care management". However, the mean score (1.76 ± 0.8) which is 35.2% of the total score was in the area of "Administration of medication" and more or less similar mean score (0.68 ± 0.51) which is 34% of the total mean score was in the area of "Support for family members" obtained. In all other areas such as "Meaning and cause of mental disorders" (1.58 ± 1.01), "Nutritional care" (1.64 ± 0.66), "Assertive communication" (1.26 ± 0.63), "Emotional and spiritual support" (3.06 ± 1.06) and "Safety and security" (1.8 ± 0.61) the mean scores vary from 40% to 45% of total mean score. It reveals that the family members of the patients had average knowledge in all the areas of the home care management of the patients with CMD except the areas of "Importance and need of the home care management", "Support for family Members", "Administration of medication" and "Meaning and cause of mental disorders" which was poor.

Section 3:

Area wise comparison of mean, SD and mean percentage of pretest and post-test KS of family members regarding home care management of the patients with CMD reveals that during pretest the highest mean score (1.4 ± 0.61) which is 46.67% of the total score was obtained for the area of "Personal

Hygiene" whereas the lowest mean score (0.78 ± 0.58) which is 26% of the total score was obtained for the area of "Importance and need for home care management". However during post-test it was observed that the highest mean score (3.18 ± 0.75) which is 79.5% of the total score for the area of "Safety and Security", and the lowest mean score (1.98 ± 0.65) which is 66% of the total score was for the area of "Importance and need for home care management".

Section 4

To assess the effectiveness of the STM, mean SD and mean percentage of scores of the pretest and post-test were compared. The findings are presented below.

Comparison of pre and post-test mean, SD and mean percentage with regard to age of the family members of the patients with CMD shows that effectiveness of STM was high for the family members in the age group of 31-40 years, which consist of majority of sample.

Comparison of pre and post-test mean, SD and mean percentage with regard to sex of the family members of the patients with CMD shows that the difference in mean percentage were more or less similar for male (33.86%) and female (32.17%) .

Comparison of pre and post-test mean, SD and mean percentage with regard to religion of the family members of the patients with CMD shows that the differences in mean percentage were more or less similar for Muslim (33.81%) and Hindu (32.99%) family members.

Comparison of pre and post-test mean, SD and mean percentage with regard to educational qualification of the family members of the patients with CMD shows that Further, effectiveness was higher (36.78%) for the family members who had higher secondary education and more or less similar percentage (35.23% and 34.01%) for those who had primary education and degree and above, respectively. Lowest effectiveness (22.86%) was for the family members who had high school education. However, highest percentage (37.14%) of difference in mean percentage was observed for the family members who do not had formal education.

Comparison of pre and post-test mean, SD and mean percentage with regard to occupation of the family members of the patients with CMD shows that the effectiveness of STM was more or less similar (36.28% and 35.1%) for those family members who had business and private job, respectively and only 23.34% effectiveness was for those who were

government employees. However, the effectiveness of STM was 31.02% for those who were unemployed.

Comparison of pre and post-test mean, SD and mean percentage with regard to type of family of the family members of the patients with CMD shows that the effectiveness of STM was highest (37.62%) for those family members who belonged to extended family and lowest (28.87%) was for them who were from joint family.

Comparison of pre and post-test mean, SD and mean percentage with regard to per capita monthly family income (in Rs.) of the family members of the patients with CMD shows that the highest difference in mean percentage (37.14%) was for the family members from the income group of Rs. ≥ 3200 and the lowest difference (28%) was for the family members from the income group of Rs. ≤ 479 .

Comparison of pre and post-test mean, SD and mean percentage with regard to residential area of the family members of the patients with CMD shows that post-test higher mean score (25.71 ± 4.54) which is 73.47% of the total score was for the urban family members with higher pretest mean score was (14 ± 4.44) which is 40% of the total score which showing 33.47% of difference in mean percentage of score. However, lower post-test mean score (25.41 ± 4.93) which is 72.61% was for the rural family members with lower pretest mean score was 13.93 ± 4.23 which is 39.8% of the total score and the difference was 32.81%.

Comparison of pre and post-test mean, SD and mean percentage with regard to family member accompanying with the patients with CMD shows that the highest difference in mean percentage (36.1%) was for the spouse and the lowest difference (22.14%) was for the son/daughter.

Comparison of pre and post-test mean, SD and mean percentage of score with regard to source of information of the family members of the patients with CMD shows, the highest difference in mean percentage (34.74%) was found for the health professional as a source of information and the lowest difference (23.81%) was where the relatives was source of information.

Comparison of pre and post-test mean, SD and mean percentage of KS of family members with regard to type of mental disorders of the patients with CMD shows that the highest difference in mean percentage (37.85%) of score was for the family members of the patients with mental retardation and the lowest difference (25.72%) was for the family members of the patients with organic psychosis.

Comparison of pre and post-test mean, SD and mean percentage of KS of family members with regard to duration of mental disorder of the patients shows that the highest difference in mean percentage (36.79%) was for the family members of patients with 2 – 3 years of mental disorder and the lowest difference (20%) was for the family members of patients with mental disorder for < 2 years.

Section 5:

To assess the effectiveness of STM on knowledge of family members on various aspects of home care management of the patients with CMD, hypothesis testing was done by using paired 't' test and chi-square test.

H0₁: There is no significant difference between pre and post-test KS of the family members regarding home care management of the patients with CMD.

Paired 't' test was calculated to analyze the differences in pretest and post-test KS on different aspects of home care management of the patients with CMD (Meaning and cause of mental disorders, Importance and need for home care management, Personal Hygiene, Safety and Security, Nutritional Care, Administration of medication, Assertive communication, Emotional & Spiritual Support, Support for family members and overall) shows that highly significant difference between the area wise score value of pretest and post-test. Hence, the stated null hypothesis is rejected and statistical hypothesis was accepted ($P < 0.01$). Thus the difference observed in the mean score value of pretest and post-test were true difference

H0₂: There is no significant association between post-test KS and selected demographic variables of the family members regarding home care management of the patients with CMD.

Chi square was calculated to find out the association between the post-test KS and the demographic variables of the family members of the patients with CMD. There was no significant association between KS of family members in post-test when compared with age, sex, religion, occupation, monthly per capita income, residential area, family member accompanying the patient, previous exposure to information, type of mental disorder and duration of mental disorder except types of family which shows significant relationship and educational qualification which shows a highly significant relationship. ($P > 0.05$).

Hence, it can be interpreted that the difference in mean score related to all the demographic variables were not true, except type of family and educational

qualification, whereas, null hypothesis accepted for all other demographic variables except these two where null hypothesis was rejected.

DISCUSSION

A quasi-experimental study was conducted on 50 family members of patients with CMD to assess the effectiveness of STM regarding home care management of the patients with CMD on the knowledge of the family members in Mental hospital, Gwalior, M. P. . Data were collected from 01.10.2010 to 14.10.2010 through the structured interview schedule. Collected data were analyzed by using descriptive and inferential statistics.

The findings are summarized as follows:

- The highest percentage (50%) of the family members was in the age group of 31-40 years.
- Higher percentage (54%) of the family members was male.
- Most (88%) of the family members were Hindus.
- The highest percentage (42%) of the family members were degree holders and above.
- The highest percentage (46%) of the family members had their own business.
- Fifty percentage of the family members belonged to nuclear family.
- Most of the family members of the mentally ill patients were from middle class.
- Higher percentages (58%) of the family members were from rural area.
- Highest percentages (44%) of the family members were spouse.
- Most (76%) of the family members received the information from the health professional.
- The highest percentage (48%) of the patients with CMD had schizophrenia (48%).
- Most (92%) of the patients had CMD for more than 2 years.
- The total mean KS of the family members during pretest was 13.96 ± 4.27 which is 39.89% of the total score revealing poor knowledge.
- The total mean KS of family members during post-test was 25.54 ± 4.73 which is 72.97% of the total score revealing good knowledge.
- Area wise post-test mean score were above 66% of the total score in all the areas reveals good knowledge.
- Effectiveness of STM was high for the family members in the age group of 31-40 years, which consist of a majority of samples.
- Effectiveness of STM was almost similar to the both the male (33.86%) and female (32.17%) family members of the patients with CMD
- STM was more or less similar (33.81% & 32.99%) effective for the both Muslim and Hindu family members of the patients with CMD, respectively.

- The highest percentage (37.14%) of effectiveness was observed for the family members who do not have formal education.
- The STM was most effective for those who were self-employed and unemployed.
- STM was more effective for the family members who were from extended family.
- Highest (37.14%) effectiveness of STM was for the family members of the income group of Rs. ≥ 3200 .
- STM was more or less similar (33.47% & 32.81%) effective for the urban and rural family members of the patients with CMD, respectively.
- Highest effectiveness (36.1%) of STM was for the spouse of the patients with CMD.
- The STM was more effective (34.74%) for the family members of the patients with CMD who received information from a health professional.
- Highest effectiveness (37.85%) of STM was for the family members of the patients with mental retardation.
- The STM was more effective for the family members of patients suffering for last 2 – 5 years.
- A highly significant difference was found between the pre and post-test KS.
- No significant association between KS of family members in post-test when compared to the demographic variables of family members except types of family, which shows significant relationship and educational qualification which shows a highly significant relationship.

CONCLUSIONS

From the findings of the present study it can be concluded that STM regarding home care management of the patients with CMD was effective to improve the family member's knowledge. Prior to the implementation of the STM the family members had mean percentage 39.89% of total score, which is poor knowledge, whereas after the implementation of STM the family members had mean percentage 72.97% of total score which is good knowledge with the effectiveness of 33.08%.

Implication

Nursing service

The content of the STM will help the nursing professionals in hospital and community to reinforcing their knowledge on home care management of the patients with CMD and it's also helpful to improve the knowledge of family members of the patients with the CMD regarding CMD.

Nursing education

- The nurse educator can use the STM to teach the students about home care management of the patients with CMD.

Nursing research

- The findings can be utilized for conducting research on the effectiveness of STM on various aspects of home care management of the patients with specific chronic and acute mental disorder.

RECOMMENDATIONS

- Same study with large sample size can be done for replication to standardize the STM on home care management of the patients with CMD.
- Same study can be conducted with a control group.
- A study can be conducted on the practice of the family members in home care management of the patients with CMD.
- A comparative study can be conducted on knowledge and practice of the family members in home care management of the patients with CMD.
- A self-instruction module can be prepared and tested for its effectiveness.

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