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# An Experimental approach to evaluate the effectiveness of STM (Structured Teaching Module) on care taker of patient suffering from CMD regarding home care management

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#### Abstract

A psychological or behavioral pattern that manifests in an individual and is connected to discomfort or incapacity but is not part of normal development or culture is known as a mental disorder or mental disease An Experimental approach to evaluate the effectiveness of STM (Structured Teaching Module) on care taker of patient suffering from CMD regarding home care management. The main objectives were to: (1) Evaluate Care Takers' knowledge of home care management of patients with CMD before and after STM implementation; (2) Compare Care Takers' knowledge scores on home care management of patients with CMD with their demographic variables; and (3) Evaluate Care Takers' knowledge of home care management of patients with CMD before and after pre- and posttesting. (4) To determine the correlation between Care Takers' post-test knowledge scores on the management of patients with CMD's at-home care. A method of experimental research was used in the study. The study was carried out in a mental institution with a sample of 50 patients who had CMD based on Care Takers' knowledge. A structured interview schedule with multiple choice questions and STM was created and carried out there. Descriptive and inferential statistics were used to analyse and interpret the data that was obtained. Based on the results of the current study, it can be stated that STM was successful in increasing Care Takers' understanding of home care management for patients with CMD.

**Keywords:** Assess, Effectiveness, Chronic mental disorders (CMD), Structured Teaching Module (STM), Home care management, Family member.

# Introduction

The study revealed that the parent-centered education was effective in improving the knowledge of parents regarding care of children with hydrocephalus and shunt. It helps them to extend the care of these children from hospital to home and hence improve their quality of life. Parents of children with hydrocephalus play a crucial role in recognizing the early signs of shunt-related complications and to prevent morbidity and mortality. To evaluate the effectiveness of an educational intervention among the parents of children with hydrocephalus and shunt. Quantitative, quasi-experimental one group pretest-posttest design was used for the study. Twenty parents of children (<5 years) with ventricular shunt were selected by non-probability convenience sampling technique from pediatric neurosurgery outpatient department of tertiary care hospital, Kerala, India. (Job, K., Murali et. al. 2019)<sup>1</sup> Intellectual disability is a fairly disabling and chronic, lifelong condition with no real cure possible. It occurs before age 18 years, experiences significant limitations in two main areas; intellectual functioning and adaptive behavior. Basic functions of primary caregivers are to meet the physical and health needs of their intellectual disability child. When primary caregivers gain information about the condition of the child, they become more able to understand of how to deal with the child and it will be easy for them to take care of the disabled children at home. Materials and methods: A true experimental research design of pre and posttest with control group was adopted for the present study. Simple random sampling technique was used to allocate the groups as experimental and control group

(N=60+60=120). Researcher developed the tool and structured teaching module. Validity and reliability were found valid (cvr=1) and reliable (r=0.9). After the pretest structured teaching module was administered to the experimental group whereas control group does not receive any intervention. After a month interval posttest were conducted using the same questionnaire as per schedule. (Harishankar, P. (2016)<sup>2</sup>

Nursing is a scientifically rigorous discipline which requires updated information on a regular basis to ensure that best possible care is provided to the patients. The technical advancement has made the job of a nurse to evolve continuously. it is the responsibility of every nurse to remain updated with the ongoing changes as they will affect that the patient. The nurse's knowledge of each patient's case effect the nursing practice has for a patient's care and recovery Worldwide health care system is attempting to respond to the needs. critical care nurses must not only be able to carry out the best research-based practice but also identify the patient's physiological response, make clinical judgment and take appropriate and adequate action while ensuring the support system applied are functioning effectively .to be a successful critical care nurse, one must be caring.3

The studied 125 families to determine the effect of the current movement toward returning mental patients to their homes. From interviews with and attitudinal tests of those families, he reports that they will generally care for the former patient in their home, often with little shame or embarrassment, and usually without re-hospitalizing him. But the former patient's presence, especially when severe psychotic symptoms persist, often puts heavy emotional and social strains on the families. He warns that although families accept the physical presence of the patients, the accompanying social rejection could have serious consequences for the community mental health movement. (Doll, W. (1976)4

Families and carers of service users with serious mental disorders have often felt excluded from decision-making, care and treatment processes and historically many families, especially relatives of people diagnosed as schizophrenic have felt blamed by professionals for the plight of their diagnosed relatives because of lack of knowledge (Barker P., 2003).5

Family interventions are effective in reducing relapse in patients with schizophrenia, but there is little work demonstrating the effectiveness of the interventions in routine service settings. Its aim was o test the effectiveness of a needs-based family intervention service for patients recruited as out-patients and their careers, including those of low expressed emotion status and its result was relapse outcomes were superior for family-treated patients at sixmonth follow-up, although most of the clinical and symptom patient variables assessed remained stable, as did measures of carer burden with the conclusion of the study was demonstrated the effectiveness of family interventions in routine service settings. Problems with staff, patient and carer engagement and participation were identified. (Barrowclough, C. et al. (2018)

Schizophrenia is the paradigmatic illness of psychiatry. The policy of de-institutionalization has highlighted the role of Care Takers as the primary source of care giving for relatives with schizophrenia. A noteworthy finding by Weidmann *et al.* was that despite the apparent downfall of

traditional family structure, over 60% of patients withlongterm schizophrenia live with at least one 'significant other', i.e. primary caregiver. Fatalism and problemsolving were the two most preferred ways of coping. Problem-focused coping, i.e. problem-solving and expressive-action decreased the burden of caregivers, while emotion-focused coping,

i.e. fatalism and passivity, increased it. As the level of functioning of the patient decreased, the significance with which the coping mechanisms influenced the burden, increased. The use of problem-solving coping by caregivers showed a significant correlation with higher level of functioning in patients. Fatalism and problem-solving were the two most preferred ways of coping. Problem-focused coping, i.e. problem-solving and expressive-action decreased the burden of caregivers, while emotion-focused coping, i.e. fatalism and passivity, increased it. As the level of functioning of the patient decreased, the significance with which the coping mechanisms influenced the burden, increased. The use of problem-solving coping by caregivers showed a significant correlation with higher level of functioning in patientsA high disease burden of mental disorders has been noted worldwide, including Japan. It is important to monitor mental disorder prevalence trends and the use of mental health services over time using epidemiological data and to plan appropriate policies and measures that consider mental health in each country. This review outlines the prevalence trends of common mental disorders (CMD) and the use of mental health services in Japan from the 2000s to the 2010s and compares them with those in other countries. This review clarifies that the prevalence of CMD in Japan has been relatively stable in the past decade. The 12-month prevalence of mental health service use has increased about 1.2 times to 1.6 times in the past 10–15 years. Thus, it is very likely that the rise in mental health service use contributes to increased patient numbers. Regarding cross-national comparison, the prevalence rate of CMD in Japan is much lower compared to rates in the USA and Europe. The 12-month prevalence of mental health service use was also lower in Japan compared to prevalence rates in other high-income countries. Mental health epidemiology has clarified that the prevalence of CMD worldwide has remained unchanged, even though mental health service use has increased in high-income countries. Thus, the gap in treatment quality and prevention should be addressed in the future. (Nishi, D., Ishikawa, H. and Kawakami, N. (2019)

Common Mental Disorders (CMD) refer to depressive and anxiety disorders and are distinct from the feeling of sadness, stress or fear that anyone can experience at some moment in life. Despite some methodological differences in the epidemiological studies, it is estimated that 4.4% and 3.6% of the world adult population suffers from depressive and anxiety disorders, respectively. CMD can affect health and quality of life, and it is noted that CMD affect people at an early age. (Silva, S.A. *et al.* (2020)

Common mental disorders (CMD), a term used for burnout, post-traumatic stress disorder, work-related fatigue, stress complaints, depression and anxiety disorders, are frequent in the physician population. Prevalence rates of these CMD have been found to vary between 6 and 42% in Dutch hospital physicians

. Depression and anxiety rates were strikingly higher in this population compared with earlier studies in the general

Dutch population (4.6% for anxiety and 3.3% for depression), which also used self-report instruments. In residents, burnout prevalence rates range between 41 and 76%, whereas depression prevalence rates range from 7 to 56% (de Jong, M.A., Nieuwenhuijsen, K. and Sluiter, J.K. (2016)

Intellectual disability children will most likely not be able to grow up to realize their caregiver's dreams and expectations. The primary caregivers of intellectual disability children require lifelong adjustment. Hence the primary caregivers need guidance through teaching module which is an important aspect of management. The primary caregivers should understand the actual condition of the intellectual disability child and should avoid attitudes like rejection or over protection. They should not feel guilty, depressed or responsible for the condition. Home is the vital place of care for intellectual disability child. The child may be dependent on the primary caregivers help throughout his or her life. Care giving is a natural aspect of primary caregivers and need to help the child twenty- four hours a day with basic tasks such as feeding, dressing, hygiene etc. While primary caregivers describe the positive benefits that the child with intellectual disability brings to their lives, the care of these children can have a significant impact on the family, the home and on the physical, emotional and mental health of the primary caregivers (Joy, E., Sreedevi, P.A. and Joy, F.E. (2015)

Common mental disorders are a group of distress states manifesting with anxiety, depressive and unexplained somatic symptoms typically encountered in community and primary care settings. Risk factors for these disorders are mainly lower socio-economic status, psychological illnesses, poor reproductive health, gender disadvantage and physical ill-health. WHO has recommended that treatment of all these disorders should be based in primary care to be more effective and accessible to all the community people. The structure of mental health care in primary care is generally understood in terms of the "pathways to care" model and it plays a major role in countries like ours where community-based mental health services do not exist. Both the psychological and pharmacological therapies are found to be equally effective for treating these disorders. Integration of mental health into primary care can be considered as the stepping stone in the way forward to tackle the barriers and problems in effective management of common mental disorders in the community. The acute shortage of mental health professionals and the relatively low levels of awareness about mental disorders make it mandatory that primary health care should remain the single largest sector for mental health care in low- and middle-income countries like ours. Risal, A. (2012)

Many epidemiological studies conducted in India on mental and behavioral disorders report varying prevalence rate, ranging from 9.5 to 370 per 1000 population (Chandrasheker C. R., 2007).

Home health psychiatric nursing is a unique and intriguing specialty. Forpatients 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. The psychiatric patient must be included as

health care changes take place. As the need for home health continues to rise, addressing psychiatric patient care concerns is of primary importance and the establishment of psychiatric home health programs is imperative (Callahan R.R., 1999).

Costillo, (1998) has reported that a slight relationship exists between the attitudes of parents towards counseling and their knowledge of mental retardation. Wrong parental attitudes do interfere with the child's learning. The basic needs of mentally retarded are vital and depend primarily upon the family unit.

Several studies have proved the effectiveness of psychoeducational interventions given to the family members in improving the outcome of schizophrenia (Falloon T.R.H., et. al., 1999)

The studies reviewed have tested the effect of psychoeducational programmes designed to prevent or delay maintenance pharmacotherapy. The results have confirmed the positive effects of a family-based psycho-educational programme on delaying the recurrence of an episode for a patient with schizophrenia. A review on the recent update on family psycho-education for schizophrenia by Dixon, Adams and Lehman showed that relapse rates and family burden were reduced through these family interventions (Goldstein M.J., 1995, Lam D. H., 1991 & Dixon L, et. al., 2000)

Management of crisis situations that include assaultive or self-harming behaviors of children and adolescents in residential treatment settings may require the use of physical restraints are meant to preserve and maintain the child's safety, but they are not without risk and potential for respiratory compromise. Therefore, nursing care for these children must include comprehensive assessment and individualized interventions to prevent the use of restraints and avoid situations (Johnson T. D., 2007).

Psychiatric epidemiology has gone through various stages of growth over the past five decades in India. Many epidemiological studies conduced in India on mental and behaviours disorders report varying prevalence rate, ranging from 9.5 to 370 per 1000 population. These discrepancies are not specific to Indian studies but also seen in international studies (Math S. B. et. al. 2007)

The presence of mental health problems results in an enormous financial burden on individuals, their families & society as a whole. The treatment of mental illness involves significant expenditure secondary to the utilization of health resources. Many mental disorders are chronic and require long-term medication. In countries such as India where most people do not have health insurance & have to pay for treatment, this places a huge burden on the family (Kuruvilla A. & Jacob K.S. 2007)

#### Methodology

Research Design: The research design is the overall strategy for finding answers to the study questions as well as for resolving some of the challenges that may arise. Quasi-experimental research where pre & post-test without control group design with experimental approach was selected to carry out the study.

O...X O2 = E

01	=	Assessment	of	knowledge	before administration of STM	
O2	=	Assessment of knowledge after administration of STM				
X	=	Implementation of STM regarding home care management of				

		the patients with CMD.
Е	=	Effectiveness.

Sample and Settings:- The study was conducted in mental hospital.

Care Takers of the patients with CMD attending OPD of Mental Hospital Gwalior, Daily OPD strength of this Hospital was around 50-70 patients. Approximately 50 Care Takers of the 50 patients with CMD in. mental hospital, Sampling is the process of obtaining information about an entire population by examining only a part of it.

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

**Tools:** - A structured interview schedule with multiple choice questions and STM was prepared The multiple choice questionnaire was consists of two sections i.e. section A and section B.

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

Sl. N o.	Area	No. of Ques tions	Maxim um Score
1	Meaning and cause of mental disorders	4	4
2	Importance and need for home care management	3	3
3	Personal Hygiene	3	3
4	Safety and Security	4	4
5	Nutritional Care	4	4
6	Administration of medication	5	5
7	Assertive communication	3	3
8	Emotional and Spiritual Support	7	7
9	Support for Care Takers	2	2
	Total	35	35

Scoring Procedure

The correct response receives a score of "one" for each item, whereas the incorrect response receives a score of "zero."

**Section B**: This section contains information on what relatives of patients with CMD know about home care management. Personal hygiene, security and safety, nutritional care, prescription administration, assertive communication, emotional and spiritual assistance, and support systems for the families of mentally ill patients are some of the strategies used in home care management.

Grade	Percentage	Actual Score	
Very poor	0-20%	0-7	
Poor	21-40%	8-14	
Average	41-60%	15-21	
Good	61-80%	22-28	
Excellent	81-100%	29-35	

# Data collection and ethical approval

The investigator personally addressed the audience to inform the CMD patients' families of the necessity and significance of the study and take consent from them. An interview schedule was used to gather data both before and after the STM was put into use. The day after the pretest, a group of Care Takers of CMD patients received STM for home care management of CMD. Ten days following the STM's implementation, a post- test was undertaken.

# **Analysis of Data**

The acquired data were organised, tabulated, and analysed using inferential statistics like the X2 and student t-test as well as descriptive statistics like percentage, mean, and

standard deviation. Data were shown as tables, graphs, and figures.

#### **Results**

To determine the effectiveness of STM for home care management of the patients with CMD on the knowledge of the Care Takers in Mental Hospital, a quasi-experimental study including 50 Care Takers of patients with CMD was conducted. By utilising both descriptive and inferential statistics, the collected data were examined.

#### The results are as follows

The majority (50%) of the Care Takers were male; The majority (54%) of the Care Takers were in the age range of 31–40 years. The majority of the family (88%) were Hindus. The majority (42%) of the Care Takers held a degree or above. The majority of the Care Takers (46%) owned their own firm. About 50% of the Care Takers were from nuclear families. The majority of the mentally ill patients' families belonged to the middle class. The majority of the Care Takers (58%) were from rural areas. The majority of the Care Takers (76%) got the information from the health professional The majority (48%) of patients with CMD also had schizophrenia. The majority of the patients (92%) had CMD for over two years.

The Care Takers' combined mean knowledge scale on the pretest was 13.96 4.27, which represents 39.89% of the overall score and indicates a lack of knowledge.

The mean score for the entire family during the post-test was 25.54, meaning that 72.97% of the overall score indicated that the Care Takers had good

knowledge.Category-wise post-test mean scores that exceeded 66% of the overall score in every category indicate strong understanding.

The bulk of the sample's Care Takers, who were between the ages of 31 and 40, showed strong STM effectiveness.

Almost equally as many male (33.86%) as female (32.17%) Care Takers of CMD patients found STM to be effective.STM was roughly equally beneficial for the Muslim and Hindu Care Takers of the patients with CMD, respectively (33.81% & 32.99%).The Care Takers with the highest efficacy rate (37.14%) were those without a formal education.STM was more successful for people who were self-employed and unemployed, as well as for members of extended families.

STM had the highest effectiveness (37.14%) for families with individuals earning less than Rs. 3200.STM was roughly equally beneficial for the urban and rural Care Takers of CMD patients, at 33.47% & 32.81%, respectively.

For the Care Takers that were from extended family, STM was more successful. For the Care Takers of CMD patients who received information from a health professional, the STM was more successful (34.74%). For the spouse of patients with CMD, STM had the most effectiveness (36.1%). STM's effectiveness for Care Takers of patients with mental impairment was highest (37.85%). The STM was more beneficial for patients' families who had been suffering for the previous two to five years. With the exception of the type of family, which shows a significant relationship and educational level, which shows a highly significant relationship, there is no significant association between the KS of Care Takers in post-test and the demographic variables of Care Takers.

#### Conclusion

Based on the results of the current study, it can be stated that STM was successful in increasing Care Takers' understanding of home care management for patients with CMD. Care Takers had a mean percentage of 39.89% of the overall score prior to the implementation of the STM, which indicates inadequate knowledge. After the implementation of the STM, however, they had a mean percentage of 72.97% of the total score, which indicates strong knowledge with an effectiveness of 33.08%.

# Implication

### **Nursing service**

The information in the STM will allow nurses working in hospitals and the community to update their understanding of how to manage patients with CMD in their homes. It will also serve to increase the knowledge of home care of CMD patients among patients' families.

#### **Nursing education**

The nurse educator can use the STM to instruct the students on how to handle patients with CMD's at-home care.

#### **Nursing research**

The research findings can be applied to examine the efficacy of STM in various facets of home care management for individuals with certain chronic mental disorders. The research findings can be applied to study the management of individuals with acute mental illnesses receiving care at home.

# 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 conduct with control group.

A study can be conduct on practice of the Care Takers on home caremanagement of the patients with CMD.A comparative study can be conduct on knowledge and practice of the Care Takers on home care management of the patients with CMD.A self-instruction module can be prepared and tested for its effectiveness.

#### References

- Job, K., Murali, A. and Udayakumaran, S. (2019) "Effectiveness of structured teaching program on knowledge regarding home care management of children with hydrocephalus and shunt among their parents," Journal of Pediatric Neurosciences, 14(3), p. 114. Available at: https://doi.org/10.4103/jpn.jpn\_79\_19.
- Harishankar, P. (2016) "Effectiveness of structured teaching programme on knowledge regarding home care management of epilepsy among caregivers at neurology OPD, SVIMS, Tirupati," International Journal of Practical Nursing, 4(2), pp. 61–64. Available at: https://doi.org/10.21088/ijpn.2347.7083.421 6.4.
- "Effectiveness of structured teaching programme on knowledge and practices of pediatric nurses regarding care of children on mechanical ventilator" (2017) International Journal of Science and Research (IJSR), 6(12), pp. 379–383. Available at: https://doi.org/10.21275/art20178696
- 4. Doll, W. (1976) "Family coping with the mentally ill: An unanticipated problem of deinstitutionalization," Psychiatric Services, 27(3), pp. 183–185. Available at: https://doi.org/10.1176/ps.27.3.183.
- 5. Barker P., (2003), "Psychiatric and Mental Health Nursing The craft of caring", 1st ed., Published by Hodder Arnold, London, P 126
- 6. Barrowclough, C. et al. (2018) Randomised controlled effectiveness trial of a needs- based psychosocial intervention service for carers of people with schizophrenia: The British Journal of Psychiatry, Cambridge Core. Cambridge University Press. Available at: https://www.cambridge.org/core/journals/th e-british-journal-of- psychiatry/article/randomised-controlled- effectiveness-trial-of-a-needsbased- psychosocial-intervention-service-for-carers-of-people-with-schizophrenia/D9B0514C3E028F22D51E4 ACCB8D132B4 (Accessed: April 21, 2023).
- 7. \*Former Postgraduate Resident \*\*\*Former Associate Professor \*\*Professor and Head Correspondence to:Dean A. Creado (no date) A comparison of the level of functioning in chronic...: Indian Journal of Psychiatry, LWW.Available at: https://journals.lww.com/indianjpsychiatry/Fulltext/2006/48010/A\_comparison\_of\_the\_level\_of\_functioning\_in.5.aspx (Accessed: April 21, 2023).
- 8. Nishi, D., Ishikawa, H. and Kawakami, N. (2019) "Prevalence of mental disorders and Mental Health Service use in Japan," Psychiatry and Clinical Neurosciences [Preprint]. Available at: https://doi.org/10.1111/pcn.12894.
- 9. Silva, S.A. et al. (2020) "Common mental disorders prevalence in adolescents: A systematic review and meta-analyses," PLOS ONE, 15(4). Available at: https://doi.org/10.1371/journal.pone.0232007.
- de Jong, M.A., Nieuwenhuijsen, K. and Sluiter, J.K. (2016)
   "Common mental disorders related to incidents and behaviour in physicians," Occupational Medicine, 66(7), pp. 506–513.
   Available at: https://doi.org/10.1093/occmed/kqw030.
- 11. Joy, E., Sreedevi, P.A. and Joy, F.E. (2015) "Effectiveness of a structured teaching programme on knowledge regarding home care of intellectually disabled children among caregivers," Indian Journal of Psychiatric Nursing, 9(1), p.

- 21. Available at: https://doi.org/10.4103/2231-1505.262289.
- 12. Risal, A. (2012) "Common mental disorders," Kathmandu University Medical Journal, 9(3), pp. 213–217. Available at: https://doi.org/10.3126/kumj.v9i3.6308.
- Chadrashekar C.R. (2007), "Psychiatric Epidemiology in India", The Indian Journal of Medical Research, Vol. – 126, No. – 3, Pp. – 183-84.
- 14. Callahan R.R., (1999), "Psychiatric Home Health: Patient Advocacy In The Home Setting", Home Health Care Management & Practice, Vol. 11, No. –3, Pp. 25-32.
- 15. Costello (1998), "Parental Attitudes Toward Mental Retardation", American Journal of Mental Deficiency, Vol. 71, No. 1, Pp. 8-10.
- Falloon T.R.H., Boyd J.L. & McGill C.W. et. al., (1999), "Family Management in The Prevention of Exacerbations of Schizophrenia, A Controlled Study", The New England Journal of Medicine, Vol. – 306, Pp. – 1437-40
- Goldstein M.J., 1995, Lam D. H., 1991 & Dixon L, et. al., (2000), "Chronic / Serious Mental Illness", Archives of Psychiatric Nursing February Vol. – XI, No. – 2, Pp. – 21-30
- Johnson T. D., (2007)," Respiratory Assessment In Child And Adolescent Residential Treatment Settings, Reducing Restraint – Associated Risks", Journal of Child And Adolescent Psychiatric Nursing, (August) Vol. 20, No.- 3, Pp. – 176-83.
- Math S. B. Chandrashekar C.R. & Bhugra D., (2007), "Psychiatric Epidemiology in India", The Indian Journal of Medical Research, Vol. – 126, No. – 3, Pp – 183-92.
- Kuruvill A. & Jacob K. S., (2007), "Poverty, Social Stress & Mental Health", The Indian Journal of Medical Research, October Vol. – 126, No. – 4, Pp. – 273-78.