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A study to assess the level of stress among care providers of clients with Schizophrenia at a selected setting in Coimbatore, Tamilnadu

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Abstract
A study to assess the level of stress among care providers of clients with schizophrenia at a selected setting in Coimbatore, Tamilnadu.

Objectives
1. To assess the level of stress among the care providers of client with schizophrenia.
2. To associate the level of stress with the selected demographic variables of the care providers of client with schizophrenia.

Methods & Materials: A non-experimental descriptive research design was used in the study. The study was conducted at Kongunadu Mananala Arakkattalai, Coimbatore. After a formal permission and consent from the samples, data was collected. A non-probability purposive sampling technique was used to select the sample size, which was noted to be 100. The tools consisted of two sections: Section A - Demographical Variables and Section B – Self- administered Modified Perceived Stress Scale

Results: The findings revealed that majority of the family care providers 85(85%) had moderate stress and 15(15%) had mild level of stress. The findings indicates that there was no statistically significant association found between the level of stress and the demographic variables of family care providers like age, sex, locality, marital status, education, occupation, relationship, type of family, family monthly income(rupees) and duration of care (in years).

Conclusion: The study concluded that care givers suffer from mild to moderate level of stress. So, need to provide psychological assistance to the caregivers to help them cope with the stress and anxiety.

Keywords: Assess, stress, caregiver, schizophrenia, clients

Introduction

Schizophrenia is the most common of all psychiatric disorders and is prevalent in all cultures across the world. About 15 % of new admission in mental hospitals is schizophrenic patients. It has been estimated that patients diagnosed as having schizophrenia occupy 50% of all mental hospital beds. About three-four a thousand in each community suffer from dementia praecox. About 1% of the general population stands the risk of developing this disease in their lifetime. Schizophrenia has a global prevalence of 0.3-0.7%. In India, the prevalence rate of schizophrenia is high. The epidemiological study concludes that prevalence rate was 2.62 cases per 1000 population.

It is one of the major mental disorders characterized by abnormalities in perception or expression of reality. The onset of symptoms usually happens in young adulthood. Even with available treatments, most people with Schizophrenia continue to experience symptoms throughout their lives. This will create a profound burden in the lives of their family members. Families touched by mental illness are often faced with significant financial burdens that arise from healthcare costs and job loss. A study done in India showed that the antipsychotics are affordable to the family, but the treatment expenditure of co-morbidity, side effects and cost of consultation including travel add to the burden for the family.

Mental and behavioural disorders account for about 12% of the global burden of disease. The World Health Report 2013 has drawn attention to the fact that of nearly 45 crores people estimated to be suffering from mental and behavioural disorder globally. WHO 2011 report states by 2020, 15% of the Disability Adjusted Life Years (DALYs) lost would be due to mental and behaviour disorders, up from 10% in 2000 to 12% in 2010 and that about 24 million people suffer from schizophrenia and 21 million from depression.

Srinivastav (2005) stated 62% of relatives of schizophrenia with regard to social relation suffer from moderate stress, with regard to family relation 60% suffer from moderate stress with respect to finance 48% suffer from severe stress.

(Mental Health Research Association, 2006) stated that number of people with schizophrenia in the world, particularly in developing countries, is increasing and 1 out of 100 people (approx) in the world suffer from schizophrenia

WHO (2008) stated that the number of people who will be diagnosed as having schizophrenia in a year is about one in 4,000, so about 1.5 million people will be diagnosed with schizophrenia worldwide. About 100,000 people in the United States are diagnosed with schizophrenia. Schizophrenia is a devastating disorder for most people who are afflicted and very costly for families and society. The overall cost of schizophrenia in the U.S.A. in 2012 was estimated to be $62.7 billion, with $22.8 billion excess direct health care cost ($7.0 billion outpatient, $5.0 billion drugs, $2.8 billion inpatient, $8.0 billion long-term care). Schizophrenia is a severe form of mental illness that affects about 7 per 1,000 of the adult population, most of them between the ages of 15 and 35 years.

Fazal *et al* (2008) stated that coping mechanisms are expending conscious effort to solve personal and interpersonal problem and seeking to master, minimize or tolerate stress and conflict. Care givers used various types of coping strategies to reduce these symptoms, both in problem and emotional focused components. Most coping strategies used by care givers were self-controlling, positive appraisal and escape avoidance. Two most common type of coping mechanism used are psychological coping strategies (cognitive, behavioural and emotional) and social coping strategies (religious, social and professional support) used by caregivers. It is important to understand the coping experience of family and caregivers. It is important to develop effective coping intervention strategies that help careers cope with the stress and strain of caring for a family member with schizophrenia.

Thara (2005) in a survey report of Schizophrenia Society in Canada revealed that most of the caregivers experienced their life had steadily declined since they started care giving to client having schizophrenia. Caregiver's life is affected because of lack of social support, family routine, family functioning with family and friends. In developing countries, most of the patients with schizophrenia live with their families due to inadequate awareness and health care services. This illness has impact on family in various ways. Among them, the human and economic burdens are significant. Caring of a client with schizophrenia leads to considerable amount of burden among caregivers. Schizophrenia not only affects the patient's life but also constitute a significant burden for their families. When a person develops schizophrenia, parents usually experience feeling of anger, anxiety, sadness, fear and frustration which should be considered in the integral treatment of patients. Most of the caregivers felt care giving had negative impact on their daily living.

It is a multidimensional response to physical, psychological, emotional, social, and financial stressors associated with the care-giving experience. The burden can be objective or subjective. Objective burden is defined as readily verifiable behavioral phenomena. Example: Negative patient symptoms; caregiver's life disrupted in terms of domestic routine, social activities, and leisure; social isolation; problems related to finance and employment; effects on the health of the entire family; and the unusual behavior of the patient. Subjective burden comprises emotional stressors such as fear, sadness, anger, guilt, loss, stigma, rejection, etc., on the caregiver.

The shift towards community care for patients with mental disease has resulted in the transfer of responsibility of their day-to-day care to their family members, which has led to profound psychosocial, physical, and financial burden on the patients' families.

Schizophrenia is found in all societies and geographical areas and is a major cause of death in patients. About 15% of new admissions in mental hospitals are schizophrenia cases, and it has been estimated that they occupy 50% of the hospital beds. About 3-4% per 1000 people in every community suffer from schizophrenia.

About of the general population carries the risk of developing this disease in their lifetime. India ranks among the highest in the prevalence rate of schizophrenia. Amongst the epidemiological studies in India, the study of functional psychosis in urban community (SOFPU) in Madras is the most confounding one. It was a multistage census survey wherein the prevalence rate of schizophrenia was estimated to be at 2.62/1000 people.

The World Federation of Mental Health estimates that 80% of the caregivers in the world are female. They could be the spouse, mother, or daughter of the patient. Studies have shown that women, who have to care for a mentally ill patient, are prone to have six times more depressive and anxiety symptoms than those who have no such liability. It has been reported that factors influencing the caregiver burden include the gender and age of the patient, severity of the disease, cultural factors, stigma, duration of the disease, and disability. Studies exploring the relationship between the economic condition and caregiver burden have shown that a lower socioeconomic level is associated with increased caregiver burden.

The burden on the family caregivers results in negative consequences not only for themselves but also for the patients, other family members, and the health care system as a whole. It affects their physical, emotional, and economic status.

Emotional distress affects the ability to cope with stress as well as productivity and thus the impact of the mental illness is enormous. Other negative implications among the family members include alcohol and substance abuse, delinquent behavior and impaired quality of life. Interest is growing in the field of mental health around the families who care for their mentally ill members. The interest generated has been due to factors such as deinstitutionalization of the mentally ill, increasing professional recognition of the family's burden in caring for the mentally ill members and growing self-help movement of the families of mentally ill.

The objective of the present study was

1. To assess the level of stress among the care providers of client with schizophrenia.
2. To associate the level of stress with the selected demographic variables of the care providers of client with schizophrenia.

Materials and research methodology

Research methodology is a significant part of any study which enables the researcher to project the research undertaken. Research methodology is the systematic way to carry out an academic study and research in flawless manner. The methodology enables the researcher to project a blue print of the details, data, approach, analysis and finding of research undertaken.

The present study was carried out to assess the level of stress among family care providers of clients with schizophrenia.

Research Approach

Research approaches are the plans and the procedures for research that plan the steps from broad assumptions to detailed methods of data collection, analysis and interpretation. In the present study, a quantitative approach was used.

Research Design

Research design is the overall plan for obtaining answers to the questions being studied and for handling various challenges to the worth of the study evidence. (Polit and Beck, 2010)

A non-experimental descriptive design was used in this study.

Variables
A variable is any quality of a person, group, or situation that varies or takes on different values typically, numeric values (for example, body temperature, heart rate). (Polit and Beck, 2010)
The variables used for the present study were as follows:

Study variables: Stress of family care providers of clients with schizophrenia.

Demographic variables: Family care providers details includes sex, locality, marital status, education,
occupation, relationship, type of family, family monthly income, duration of care.

Research Setting
The present study was conducted at Kongunadu Mananala Arakkattalai, Coimbatore. Kongunadu Mananala Arakkattalai was started in the year 2004. It has outpatient and inpatient services including various therapies like psychotherapy, occupational therapy & etc.

Population
A population is an entire aggregation of cases in which a researcher is interested. In the present study, population includes all the family care providers of clients with mental illness.

Target population
It refers to the elements of people or objects to which the investigator wants to generalize the researcher's findings. In the present study, the target population comprised of all the family care providers of client with schizophrenia in Tamil Nadu.

Accessible population
Is composed of cases from the target population that are accessible to the researcher as study participants. The accessible populations in the present study comprised of all family care providers of client with schizophrenia attending outpatient department at Kongunadu Mananala Arakkattalai, Coimbatore.

Sample
The samples for the present study were family care providers of clients with schizophrenia from Kongunadu Mananala Arakkattalai, Coimbatore, in the age group of 18-60 years, who fulfilled the sampling criteria.

Sample Size
The main purpose of the study was to obtain large enough sample to show statistical significance and being economical at the same time. The sample size was 100 family care providers of clients with schizophrenia considering the availability of time, samples and acquaintance of the investigator.

Sampling Technique
The purpose of using a sampling technique is to increase representation and to decrease sampling error. In this study, a non-probability purposive sampling technique was used to select the family care providers of clients with schizophrenia who fulfilled the sampling criteria.

Criteria for Sample Selection
In sampling criteria the researcher specifies the characteristics of the population under the study by detailing the inclusion criteria.

Inclusion criteria
These are the characteristics that each sample elements must possess to be included in the study. In the present study the inclusion criteria were as follows:
1. Family care providers of clients with schizophrenia
2. Family care providers between the age group of 18 to 60 years
3. Family care providers who were able to communicate in English and Tamil
4. Family care providers who were attending the OPD at Kongunadu Mananala Arakkattalai, Coimbatore
5. Family care providers who were available at the time of data collection

Exclusion criteria
These are the responses of subjects that require their removal as subjects. In the present study the exclusion criteria were as follows:
1. Family care providers of clients whose duration of illness was less than six months
2. Family care providers who were illiterate
3. Family care providers who were not the member of client's family or not related to the clients
4. Family care providers who were not willing to participate

Development and Description of Tool
In the present study the tool comprised of 2 parts as following:

Part I: Demographic data: Family care provider demographic details comprised of age, sex, marital status, education, relationship with the client, type of family, occupation, income, locality and duration of care.

Part II: A Self- administered Modified Perceived Stress Scale: was used to assess the level of stress of family care providers of clients with schizophrenia. It was adopted from a standardized perceived stress scale which was invented by Mr. William in the year 1995. The modified stress assessment tool contains 20 questions and numbers of positive items were 10 and negative items were 10. Each item in the tool consisted of 4 responses as follows:
<

Responses Scores
Never 0, Rarely 1, Often 2 & Always 3
The total score of the tool ranged from 0-60. The higher score indicated high level of stress. The scores were interpreted as follows:

Raw Score Percentage (%)	Level of Stress
25	Mild level
26-59	Moderate level
60-100	Severe level

Validity of Tool
Validity encompasses whether the result obtained me*et al*l of the requirements of the scientific research methods. Content validity of the tool was obtained by submitting the tool to experts including Research experts in the field. In the

present, the tool validity was obtained from a psychiatrist, a social worker, a psychologist and two Ph.D specialized in nursing.

Reliability of Tool

The reliability of the tool was assessed using the split half method. Correlation coefficient was calculated by using the Karl Pearson correlation coefficient. The reliability score for the self-administered modified stress tool was 0.87,

Ethical Consideration

The study was carried out after obtaining an ethical clearance from the ethical committee of Kongunadu Mananala Arakkattalai, Coimbatore. The following ethical principles were followed in course of study.

Ethical Principle Action Carried out

Principle of beneficence

The study was done to assess the level of stress, family burden and coping among the family care providers of clients with schizophrenia.

Principle of respect for human dignity

Those who were willing to participate were selected as samples for the study and right to withdrawn was ensured before data collection.

Principle of confidentiality

The information regarding the samples and their performance was kept confidential.

Principle of informed consent

Informed consent was obtained from all the samples selected for the study.

Pilot Study

Pilot study is a small scale preliminary study conducted in order to evaluate feasibility, time, cost, adverse events and effectiveness in an attempt to predict an appropriate sample size and improve upon the study design prior to performance of a full scale research project.

In the present study the pilot study was conducted in one week. The pilot study was carried out at Kongunadu Mananala Arakkattalai, Coimbatore. Ten family care providers were assessed for the level of stress, family burden and coping. One hour time period was taken by the samples to complete questionnaire. The environment was spacious, calm &well ventilated. After the examination of pilot study, five questions of the tools were reworded for respondents to understand easily.

Data Collection Procedure

The permission to carry out the research was obtained from the Manager, Kongunadu Mananala Arakkattalai, Coimbatore. The samples who fulfilled the sample selection criteria were selected by using the nonprobability purposive sampling technique. Pilot study samples were excluded from the study. The selected samples were given a brief introduction about the self and the study. Informed consent to participate in the study was obtained. Ethical principles were followed throughout the period of data collection. 3-4 samples were completed each day. Each one took nearly one hour to fill all three questionnaire. The collected data was coded, compiled and tabulated. At the end of the one month period of data collection the investigator collected the data from 100 care providers.

Data Analysis Procedure

Data was analyzed using descriptive and inferential statistics.

Descriptive statistics

1. Frequency and percentage distribution was used to assess demographic variables.
2. Mean, SD, frequency and percentage was used to analyze stress.

Inferential statistics

1. Chi-square was used to associate stress of the family caregivers with their selected demographic variables.

Analysis and interpretation

The findings revealed that with regard to age, 46(46%) are in the age group of 51–60 years and 8 (8%) of them were in the age group of 31-40 years. With respect to sex, 62(62%) of them were females and 35(35%) were males. With regard to locality, majority 68(68%) of them belonged to rural area and 40(40%) belonged to urban area. With regards to educational status, significant 36(36%) of them had primary education. With regard to marital status, majority 56(56%) of them were married. With regard to duration of illness, significant 42(42%) of them had 1-5 yrs of illness. With regard to relationship with the client, 50(50%) were parents. With respect to type of family, majority 92(92%) of them were from nuclear family. The study findings revealed that most of the clients belong to the age group above 41yrs. Many of them were female from rural area having primary and graduate education. Majority of them were from nuclear family married and duration of illness was between 1-10 years.

Table 1: Distribution of caregivers according to their level of Sress

S. No	Score	Level of family burden	Frequency (n)	Percentage (%)
1	**<25**	Mild	15	15
2	26-59	Moderate	85	85
3	60-100	Severe	00	00

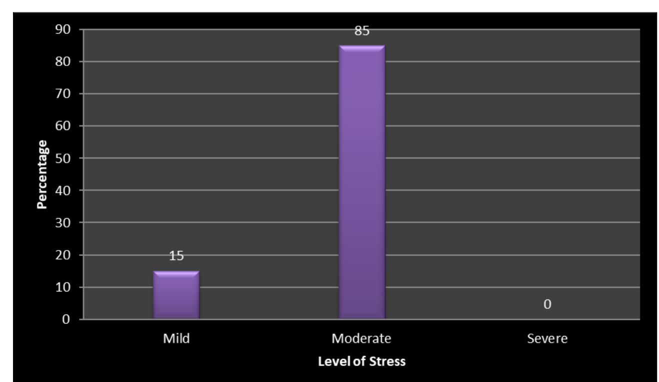

Fig 1: Percentage distribution of caregivers according to their level of Stress

The findings revealed that majority of the family care providers 85(85%) had moderate stress and 15(15%) had mild level of stress. The findings indicate that care givers suffer from mild to moderate level of stress. The findings indicates that there was no statistically significant association found between the level of stress and the demographic variables of family care providers like age,

sex, locality, marital status, education, occupation, relationship, type of family, family monthly income(rupees) and duration of care (in years).

Nursing implication
Nursing Education

1. Nurses should give attention to improve the knowledge of schizophrenia and its treatment and prevention.
2. Inadequate knowledge will lead to high prevalence of stress among family care providers of clients with schizophrenia.
3. Therefore the family care providers must be aware of the nature of the disease, its treatment and prevention.

Nursing Research

1. The study creates awareness for further studies among family care providers of clients with schizophrenia.
2. Further, researcher can use this study as a valuable reference material. Large scale studies can be conducted.

Nursing Management

Steps should be taken by the higher authorities to organize seminars and workshops for the up gradation of knowledge through skilful training for health professionals.

Nursing Administration

Classes should be provided for family care providers which will help them how to tackle stress, coping and family burden while caring for clients with schizophrenia.

Recommendation

1. A similar study can be conducted on a larger sample using random sampling technique for broader generalization.
2. The same study can be replicated in urban, semi urban and rural settings.
3. A longitudinal prospective study can be carried out to rule out the causes of stress, family burden and coping among family care providers of clients with schizophrenia.
4. Interventional studies may be carried out on larger sample.

Limitations of the study

The study was limited for the following reasons:

- It was restricted to caregivers of schizophrenic patients
- The sample size was limited to 100 caregivers
- The data was collected only from first-degree relatives of schizophrenic patients.

Conclusion

The findings revealed that majority of the family care providers 85(85%) had moderate stress and 15(15%) had mild level of stress. The findings indicate that care givers suffer from mild to moderate level of stress. The findings indicates that there was no statistically significant association found between the level of stress and the demographic variables of family care providers like age, sex, locality, marital status, education, occupation, relationship, type of family, family monthly income(rupees) and duration of care(in years). There is a need for providing psychological assistance to the vulnerable caregivers to help reduce their stress and positive coping strategies, as well as strengthening and increasing the economic support for families affected due to schizophrenia.

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