CHAPTER III

RESEARCH METHODOLOGY

Introduction

This chapter outlines the methodology used for the present study. The objectives of the study, research design, population and sampling procedure, inclusion – exclusion criteria, methods of data collection, instruments used and ethical considerations are detailed here.

Problem Formulation

Substance abuse is exceedingly interfering the life of multitude of people across the globe. According to World Drug Report 2022, India is located in the 'dark area' of substance abuse, specifically indicating the high prevalence. As dependence to psychoactive substances is considered as a family disease, not only the dependent, but also all the family members have to suffer its consequences.

National Mental Health Survey (2015-16) states that in India, the prevalence of substance use disorders is more among males as compared with females (alcohol related: males- 9.1 %, females- 0.5%; tobacco related: males- 32.8 %, females 9.8 %; other substances: males- 1.1%, females- 0.1%). This points out that, usually in families, while male members (father, husband and/or son) abuse the substances; the female members (mother, wife and or daughter) have to take the responsibility of caring the addicted member.

Similar to any other chronic illness, caring persons with substance dependence is also a great challenge. Studies on the mental health of the care givers identify various pathological signs and symptoms. A study done in India by Mattoo and colleagues (2013) on the burden endured by family caregivers of men with alcohol and opioid dependence confirm the existence of high rates of subjective and objective burden.

Family members of substance dependents often experience codependency, in which the ‘non-ill’ member becomes overly concerned with the difficulties of the other, and renounces to his/her own wants and needs. In a potentially highly unstable ‘role play’, members are subjected to change their family roles and functions. Vacant roles may be redistributed and some family members, especially mothers, might have to bear excessive responsibilities (Schulze B & Rössler W, 2005). To further complicate the picture, caregivers do not know how to ask for help, or refuse to do so because of shame and fear of social stigma (Brown, Biegel & Tracy, 2011).

American Psychological Association (2018) in their guidelines for management of substance use disorders assert that family members have increased prevalence of illness and domestic violence, in addition to deteriorated psychological and interpersonal functioning, including problems with social adjustment, the relationship with the drug using person, family cohesion, enmeshment, interpersonal conflict and stress. The family members also forced to deal with legal and financial problems too.

Mothers whose children abuse alcohol or other substances undergo anguish at manifold levels. They are often worried about the health of their children and other family members. So they initiate their caregiving roles and responsibilities. But the addicted children often refuse to receive this care and may repeatedly engage in arguments. Sometimes, the dependent threatens that he might harm himself or others if his demands are not satisfied. Instances of physical and verbal abuse are also not uncommon. Other family members also every so often blame mothers to be the reason for their son’s substance dependence.

To add to the travails of the mother, she has to confront her own biological vulnerabilities, one of which is hormonal variations occurring during pre-menopausal, menopausal and post-menopausal period. The combination of aforesaid factors and even more weaken the mental health of mothers and make them more susceptible to various psychological and social disorders and dysfunctions, warranting assistance from mental health professionals.

During the extensive review of literature, the researcher understood that the studies on multiple substance dependence done across the globe focus mainly on the causes of dependence and consequences of dependence from the perspectives of the substance dependent. There is dearth of literature, considering the totality of its impact on the institution of family and its constituent members. Only very little deliberations are done from the perspectives of the primary care giver and to understand their needs and challenges. In Indian context also, the struggles and life experiences of spouses and parents of substance dependent is an area less explored.

Scope of the Study

The present research ‘Mothers of Young Adults with Multiple Substance Dependence – A psychosocial study from Kerala’ is an attempt to understand the psychological and social state of affairs of mothers of young substance dependents. It is estimated that 284 million people or 5.6 per cent of global population had used drugs in the previous year (World Drug Report- 2022). It is also expected that there are more than 37 million persons suffering from substance use disorders. This signpost that there are large numbers of mothers who face the similar problem of caregiving their substance dependent sons.

Family members are considered to be the key persons in the treatment of substance dependence. Involving a significant person from the family in the treatment process have shown better results in terms of faster symptom redressal and longer period of abstinence. Mothers can be considered as key partners in the treatment process. But before empowering mothers to take on the responsibilities and tasks of caregiving, their physical and mental health should be improved. This study helps in understanding the psychosocial problems of mothers comprehensively. This aids in planning an all-inclusive treatment plans for the dependents.

The Aim of the Study

The general aim of the study is to understand the psychosocial profile of mothers of young adults with multiple substance dependence.

Specific Objectives

- To understand the demographic background of the mothers of young adults with MSD
- To study the psycho-social profile of the target group
  - To measure the level of depression
  - To assess their perceived social support
  - To understand their coping mechanisms
  - To study the burden experienced by them
- To study the struggles, needs and challenges of the target group

Hypotheses

Research Hypothesis 1- Majority of the mothers of young adults with MSD experience high degree of Depression

Null Hypothesis 1- Majority of the mothers of young adults with MSD does not experience significant depression

Research Hypothesis 2- Majority of the mothers of young adults with MSD experience low perceived social support.

Null Hypothesis 2- Majority of the mothers of young adults with MSD does not experience low perceived social support.

Research Hypothesis 3- Majority of the mothers of young adults with MSD experience high degree of burden

Null Hypothesis 3- Majority of the mothers of young adults with MSD does not experience significant burden

Independent and Dependent Variables

There are many of dependent and independent variables in this study. Some of the independent variables are age, education, employment and marital status. The dependent variables are all those attributes defining the psychosocial profile, the burden experienced by the mothers, perceived social support and coping mechanisms employed by the mothers. Other key terms used in the study are - young adults and multiple substance dependence.

Theoretical Definition of Concepts and Variables

Youth- The United Nations, for statistical purposes, defines ‘youth’, as those persons between the ages of 15 and 24 years, without prejudice to other definitions by Member States. The Secretary-General first referred to the current definition of youth in 1981 in his report to the General Assembly on International Youth Year (A/36/215, para. 8 of the annex) and endorsed it in ensuing reports (A/40/256, para. 19 of the annex). However, in both the reports, the Secretary-General also recognized that, apart from that statistical definition, the meaning of the term youth’ varies in different societies around the world. The General Assembly resolution A/RES/62/126 in 2008 also reinforce the same age-group for youth.

Young Adult- According to Ministry of Youth Affairs, persons belonging to the age group ranging from 18 to 24 are considered as young adults.

Multiple Substance Dependence- According to ICD-10, dependence syndrome is defined as a cluster of physiological, behavioral and cognitive phenomena in which the use of a substance or a class of substances takes on a much higher priority for a given individual than other behaviors that once had greater value. A central descriptive characteristic of the dependence syndrome is the desire (often strong, sometimes overpowering) to take psychoactive drugs (which may or may not have been medically prescribed).

The dependence syndrome may be present for a specific substance (e.g. tobacco or diazepam), for a class of substances (e.g. opioid drugs), or for a wider range of different substances. Multiple substance dependence is the term used when an individual develops dependence towards a wide range of substances.

Depression- According to ICD-10, in typical depressive episodes, the individual usually suffers from depressed mood, loss of interest and enjoyment, and reduced energy leading to increased fatigability and diminished activity. Other common symptoms are reduced concentration and attention, reduced self-esteem and self-confidence, ideas of guilt and unworthiness, bleak and pessimistic views of future, ideas or acts of self-harm or suicide, disturbed sleep and diminished appetite.

Social Support- Social support is the perception and actuality that one is cared for, has assistance available from other people, and most popularly, that one is part of a supportive social network (Cohen, S; Wills, T.A. 1985). These supportive resources can be emotional (e.g., nurturance), informational (e.g., advice), or companionship (e.g., sense of belonging); tangible (e.g., financial assistance) or intangible (e.g., personal advice). Social support can be measured as the perception that one has assistance available, the actual received assistance, or the degree to which a person is integrated in a social network.

Coping Skills- Coping skills (also called coping strategies or coping mechanisms) are tools and techniques used to handle difficult emotions, decrease stress, and establish or maintain a sense of internal order (Zeidner, M. & Endler, N.S. 1996). Coping strategies refer to the specific efforts, both behavioral and psychological, that people employ to master, tolerate, reduce, or minimize stressful events (Folkman & Lazarus, 1980).

Caregiver Burden- Caregiver burden can be defined as the strain or load borne by a person who cares for a chronically ill, disabled, or elderly family member (Stucki & Mulvey, 2000). It is a multidimensional response to physical, psychological, emotional, social, and financial stressors associated with the caregiving experience. It is the stress which is perceived by caregivers due to the home care situation (Schulz, R. & Beach, S. R. 1999)

Operational Definition

Mother – In this study, the term mother is used to describe biological mother of the dependent individual, who is performing the function of caregiving. She is living with the dependent in the same family. She is a witness to and a victim of the dependents' altered behavior under the influence of substances.

Young Adult – 'Young Adult' is operationalized to describe persons belonging to the age group 18 – 24 years.

Multiple Substance Dependence – By the term 'Multiple Substance Dependence', the researcher proposes to describe the group of physical, psychological and social symptoms a person manifests after being a habitual abuser of two or more class of psychoactive substances viz. alcohol, opioids, cannabinoids, sedatives or hypnotics, cocaine, stimulants, hallucinogens, tobacco and volatile solvents.

Study Design

The design of the research is descriptive as it aims to describe the psychological and social condition of the mothers. Both quantitative and qualitative data are used by the researcher. Quantitative data are used to measure the variables like depression, social support, coping and burden. Qualitative records are used to understand the emotional component of the struggle endured by the mothers. Standardized scales are used for collecting quantitative information and in-depth interview was used to collect qualitative data.

Duration of the Study

The data collection was carried over from November 2021 to April 2022. The duration of the study will be six months.

Universe

The universe of the study is the mothers of young adults with multiple substance dependence.

Population

There are thirty-five registered deaddiction centers (Government and Non-Government) across Kerala, according to Kerala State Mental Health Authority. This includes fourteen Vimukthi Kendras (run by the Government of Kerala) and other private deaddiction centers. These deaddiction centers follows allopathic mode of treatment in addition to counseling. Residential treatment is generally followed and accommodates 30-40 inmates on average for 4 to 12 weeks, depending on patients and deaddiction centers. Only a few centers carry out family based interventions, follow-up and relapse prevention programs. Secondary sources from Kerala State Mental Health Authority suggest that deaddiction centers in the central Kerala cater to beneficiaries from all over Kerala, due to the advantages of availability and accessibility of State-of the art treatment/rehabilitation facilities. They provide services to treatment recipients belonging to all socio-economic sectors, regardless of religion and class categorizations.

The population of the study is the mothers of young adults with multiple substance dependence, who are receiving residential deaddiction treatment from three psychiatric hospitals in central Kerala, namely Santhula Trust Hospital, Koothattukulam, Bishop Vayalil Medical Centre, Moolamattom, and Nair’s Hospital, Ernakulam.

Sample Frame

Sample frame consists of list of persons admitted for treatment of multiple substance dependence in the aforesaid hospitals, during the time period of data collection.

Method of Sampling

Method of sampling planned for this study is purposive sampling.

Sample Size

The researcher interviewed 72 mothers as respondents of the study.

Inclusion- Exclusion Criteria

Among the patients seeking residential deaddiction treatment for substance abuse, only those fulfilling the ICD-10 criteria of dependence for more than two classes of substances were considered for the study.

In order to limit the study geographically and to control certain confounding variables, the researcher planned to detail strict inclusion-exclusion criteria

Inclusion Criteria

- Mothers of young adults (age group 18-24) who belong to the age group of 40-54 years
- Mothers of young adults receiving residential deaddiction treatment from mental health centers in central Kerala
- Biological mothers of the substance dependent young adults
- Mothers whose minimum educational qualification is pre-degree or pre-university

Exclusion Criteria

- Mothers of young adults whose age is either below 40 or above 55 years
- Young dependents who do not conform to the age group of 18-24, or females, or other gender minorities
- Mothers who have other chronic psychiatric illness before the onset of pattern of dependence in their child/children
- Mothers who have physical disabilities
- Mothers who are single parents, who have marital history of divorce, death of spouse, or remarriage
- Mothers whose more than one child is substance dependent.
- Mothers whose educational qualification is lower than Pre-Degree/Plus Two

Sources of Data

Data was collected by the researcher by directly administering the interview schedules and scales on the selected respondents.

Pilot Study

In order to understand the feasibility of the study, the researcher went to the hospitals where she planned to collect data and conducted a focus group discussion with mothers of the young patients admitted there. She explored the psychological and social condition and functioning of the group members. She pre-tested her tools of data collection with three respondents. They were able to comprehend the questions and answer them without much assistance from the researcher.

Tools of Data Collection

The data was collected using the following tools

Interview Schedule

The researcher prepared an interview schedule to collect information about socio-demographic background of respondents and their experiences of caregiving the son who is substance dependent.

Beck's Depression Inventory (BDI 1961)

The **Beck Depression Inventory** (**BDI),** created by Aaron T. Beck, is a 21 question multiple choice self-report inventory. There are three versions of the BDI—the original BDI, first published in 1961 and later revised in 1978 as the BDI-1A, and the BDI-II, published in 1996. The researcher plans to use the original version BDI (1961) for her study, as it is widely used as an assessment tool by health care professionals and researchers in a variety of settings. It takes approximately 10 minutes to complete (Groth-Marnat, 1990). The BDI had a one-week test–retest reliability of r = 0.93 (Beck, Steer, & Garbin, 1988). The BDI demonstrates high internal consistency also, with alpha coefficients of 0.86 and 0.81 for psychiatric and non-psychiatric populations respectively (Beck et al., 1988).

Multidimensional Scale for Perceived Social Support (1988)

Multidimensional Scale for Perceived Social Support is developed by Gregory D Zimet, Nancy W Dahlem, Zara G Zimet and Gordon K Farley and was first published in 1988. MSPSS is a 12 item self- administered questionnaire, designed to measure the perceived adequacy of social support from three sources: family, friends and a significant other. Each of these three dimensions is assessed with four items. The reliability of MSPSS has been evaluated in terms of stability of responses over time, as well as the internal consistency of items. The test-retest reliability values for family, friends and significant other subscales were 0.85, 0.75 and 0.72 respectively. For the whole scale, the test-retest reliability coefficient was 0.85. Cronbach's alpha coefficient for the total scale ranged from 0.77 to 0.92 (mean = 0.87); Cronbach's alpha values ranged from 0.81 to 0.93 (mean = 0.87) for family subscale; from 0.78 to 0.94 (mean = 0.88) for friends subscale and from 0.79 to 0.98 (mean = 0.88) for the significant other subscale; according to the studies done by Cecil et.al (1995). Construct validity of the scale is established by the publications of Zimet et.al in 1990.

COPE Inventory (1989)

The COPE inventory developed by Carver, Scheier, and Weintraub (1989) is a frequently cited generic measure of coping intended to measure a wide range of potential coping strategies. The unique ability of the COPE to measure both situational and dispositional coping has contributed to its popularity. It has 60 items classified in fifteen subscales: Five scales (of four items each) measure conceptually distinct aspects of problem-focused coping (active coping, planning, suppression of competing activities, restraint coping, seeking of instrumental social support); five scales measure aspects of emotion-focused coping (seeking of emotional social support, positive reinterpretation, acceptance, denial, turning to religion); three scales measuring coping responses that arguably are less useful (focus on and venting of emotions, behavioral disengagement, mental disengagement) and two scales measuring coping responses based on distraction (substance use and humor). Reliability and validity of COPE inventory has been established by various studies. Carver et al. (1989) reported Cronbach's alphas for the situational form of the COPE between 0.68 and 0.91, with the exception of the Mental Disengagement subscale. Alpha reliabilities for the dispositional form of the COPE ranged from 0.45 to 0.92, with six of the subscales having alphas less than 0.70, but only one below 0.60 (i.e., Mental Disengagement, 0.45). Fontaine et al. (1993) described COPE as highly acceptable for research purposes. The internal consistency estimates of COPE was found ranging from 0.46 to 0.93, (Cook & Heppner, 1997). Carver et. al. (1989) reported test-retest reliabilities for the dispositional form of the COPE ranging from 0.42 to 0.89 at 6 weeks, and from 0.46 to 0.86 at 8 weeks.

Burden Scale for Family Caregivers (English version 1999)

The Burden Scale for Family Caregivers (BSFC) (English Version) is a 28 item Questionnaire developed by Elmar Grasel, Teresa Chiu and Rosemary Oliver in 1999. The original author developed BSFC in the early 1990’s in Germany. In 1999, the English version of BSFC was introduced in Canada. Studies done by Grasel (2001), Grasel et.al (2003), Chiu (2003) and Hecht et.al (2003) indicate that BSFC has the suitable psychometric properties to be used for both research and clinical purposes. The inter-item Correlation of BSFC ranged from minus 0.10 to plus 0.69. The split half reliability values were higher than 0.80. The test-retest reliability of BSFC was found to be 0.94. Construct validity of BSFC was examined by comparing the scores of Perceived Stress Scale. Carl Pearson's Correlation coefficient was 0.56.

Method of Data Collection

The data was collected directly by the researcher, by applying two methods - by administering the self- report scales and through her one-to-one interactions with the respondent - after getting an informed consent.

Data Analysis

The researcher used statistical techniques to analyze the collected data. Descriptive statistical analysis was used to understand and explain the nature and properties of respondents. The researcher tested her hypotheses and to establish correlation, between the independent variables. *Z* test was used to test the hypotheses and Karl Pearson's correlation coefficient for establishing significant correlations. Thematic analysis was used to analyze the qualitative data and triangulation was done to combine the results of both methods.

Ethical Issues

The information collected from the respondents was used only for research purpose. The ethical rights of the patients and their families were respected. Permission was sought from the respective hospitals to carry out the study and also to interact with the respondents. An informed consent was taken from the respondents before imbibing them into the study. Necessary psychosocial interventions and referrals were provided to the respondent by the researcher. Even though, the separate files were kept for the respondents and the respective patient during the time period of the study, those files were merged with the original hospital file and the identifying information were detached from the original medical record, in order to maintain anonymity and confidentiality. The participants were informed of their right to withdraw from the study at any point of the interview and that their reluctance will not affect their routine treatment protocols.

Documentation

The entire research report is divided into six chapters in the sequential order in order to facilitate easy understanding and progression of the study. The Chapterization is done in the following manner:

Chapter I- Introduction

This chapter explains the background of the research, magnitude of the problem, problem statement, a brief review of existing literature, concepts and variables involved in the research, theories and models regarding the concept of the research and the conceptual framework of the research.

Chapter II- Review of Literature

This chapter deals with the vast and detailed review of literature regarding various concepts and variables included in the study. The review is categorized into seven main axes- prevalence, caregiving and burden of caregiving, family as a functional unit, gender, social support, coping and parents. A critical review of the gaps in the existing literature is also mentioned in order to emphasize the relevance and scope of the current research.

Chapter III- Research Methodology

A detailed description of the research methodology adopted in the current study is given in this chapter. It includes, problem formulation, scope of the study, aims and objectives of the study, hypothesis, conceptual and operational definitions, study design, methods and tools of data collection and ethical issues.

Chapter IV- Data Analysis and Interpretation

This chapter gives a comprehensive analysis of the collected data. As the study utilizes mixed methods of qualitative and quantitative research, quantitative and qualitative data were analyzed separately. These were then triangulated to synthesis a collective picture of the respondents.

Chapter V- Findings and Discussion

This chapter provides a detailed description of the discussion and interpretation of the analyzed data. Here, the researcher provides her logical explanations to justify the trends found in the study and also compares her results in the context of existing scientific evidences.

Chapter VI – Conclusion and Suggestions

This final chapter includes social work implications, conclusions and suggestions.