



DEVELOPMENT OF FAMILY INTERVENTION PACKAGE AND DETERMINING ITS EFFECTIVENESS ON COPING AND FAMILY FUNCTIONING OF CAREGIVERS OF CANCER PATIENTS IN SELECTED HOSPITAL OF LUDHIANA, PUNJAB, INDIA

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Abstract

Aims: Family nursing practice is evolving area of Nursing and continuous to be significant aspect of health care. The purpose of this study was to develop and determine the effectiveness of family intervention package on coping and family functioning of cancer care providers.

Methodology: Quantitative approach and quasi experimental research design was considered on sample size of 30 caregivers selected by convenience sampling technique from selected hospital. Standardized tools were used to collect data. Psychoeducation sessions delivered to experimental group.

Results: In experimental group, Mean pre coping score (50.07 ± 14.88) increased to (74.93 ± 11.53) post intervention 1 and (88.20 ± 9.72) post intervention 2, Mean pre family functioning score (2.64 ± 0.48) reduced in post intervention 1 (2.02 ± 0.39) and post intervention 2 (1.34 ± 0.26). In control group, mean pre coping score (43.33 ± 7.70) increased to (59.53 ± 9.09) post intervention 1 and (68.00 ± 10.17) post intervention 2, mean pre family functioning score (2.86 ± 0.53) reduced in post intervention 1 (2.61 ± 0.42) and post intervention 2 (2.04 ± 0.34). ($p < 0.05$)

Conclusions: Family intervention package was effective in enhancing coping and family functioning of caregivers.

Keywords: Coping, family functioning, caregivers

Introduction

Approximately 1.6 million new cases of cancer are expected to be diagnosed in the United States.¹ Many cancer patients will ultimately need help of a key family member.² Care providers have their own emotional responses to patients' diagnoses and predictions, and they may need special training and emotional help other than that offered to patients.³ Patient's prognosis, stage of illness, and intended goals influence caregiver roles broadly.⁴ Direct care, aid with daily tasks, case management, emotional support, companionship, and medication supervision are all expected from caregivers of

cancer patients.⁵ Many caregivers play various roles, such as that of parent, employee, and carer for the elderly. According to the theory of role strain, having a large number of social roles is always correlated with rising burden.⁶

Family caregivers are crucial to the management of cancer; getting their cooperation and treating them as the primary unit of care from the start are seen to be essential components of successful cancer management. The majority of oncology teams are aware of this and make an effort to involve family caregivers in the development, selection, and execution of treatment plans.⁷

Caregiving in home settings involves a collaboration between caregivers and patients, according to a caregiver who participated in a study by Hendrix C. and Ray C. (2006). This is why it is crucial for medical practitioners to incorporate the patient's family in their care strategy. Any symptom management training or counseling offered to the patient should also be given to the caregiver in the family. When a patient's symptoms develop and they are unable to take care of themselves, it frequently falls to family carers to manage their symptoms. It's critical that these family members believe they have the knowledge necessary to take on the position of symptom manager.⁸

Both the good and bad sides of caregiving are influenced by the caregiver's psychological health and willingness to continue delivering care.⁹ By receiving psychological support and practical help in problem resolution from healthcare professionals, the positive parts of caregiving can be strengthened.¹⁰ Through one-on-one interactions with medical professionals or more structured training programs, carers can be made aware of relevant parts of cancer management and community resources.

By supporting medical education initiatives and encouraging a proactive role for caregivers in the care plan, nurses can contribute to the integration of caregivers into the care plan. Medical practice should make it standard practice to educate caregivers about cancer, the logic for choosing a treatment strategy, how to recognize potential side effects, and how to address those side effects. Additionally, the majority of caregivers claim to have learned non-pharmacological management strategies on their own or via trial and error. The proper application of these techniques and instructions for the use of heat, cold, massage, positioning, imaging, distraction, and other strategies can be provided via a brief educational session by a nurse, reinforced with printed or electronic resources.¹¹

Cancer patients and their families who are caring for them suffer greatly from the disease and the medicines used to treat it. Compared to the patient and family, cancer patients experience significantly greater symptoms and side effects from the treatment. The care of the cancer patient has been moved to the homes, boosting informal care providing and making the family member the primary care provider, because of shorter hospital stays and an increase in outpatient provided-care.¹² Family caregivers are frequently expected to take on the responsibilities of managing symptoms and giving personal care.¹³ Research reveals, however, that relatives often feel unprepared to offer both physical and psychological care.¹⁴

With family caregivers receiving palliative care, McMillan SC (2006) conducted one RCT on the coping skills intervention. Caregivers were randomly assigned to one of three groups: standard palliative care (n=109 pairs); standard palliative care and three supportive visits (n=109 pairs); or standard palliative care and three supportive visits plus coping skills instruction (n=111 pairs). In comparison to the other groups, the coping skill intervention group had improved QOL (p=0.03), less patient symptom burden (p0.001), and reduced caregiver task burden (p=0.038).¹⁵

When a family member is diagnosed with a chronic illness, the homeostasis, or regular dynamic and routine, that has developed within that family is upended. The roles, responsibilities, and boundaries of family members do change as a result of chronic illness. The age and developmental stage of the ill person, the strength and coping skills of the family, and the family life-cycle stage all influence how a family handles a chronic disease. Family life can be severely disrupted by chronic disease. But by employing the various coping mechanisms at hand and getting assistance when required, it may be feasible to keep a homeostasis.¹⁶

The stress, strain, and responsibility of caring for a sick family member is great for the caregiver. Interventions aimed for family caregivers can help them as clients, reducing their overall stress and

the negative effects it has on their health and wellbeing. Most of the published studies regarding caregiver needs and problems from India has been conducted in area of psychiatric disorders. Very few studies have examined prevalence of psychological distress, diagnosis-awareness and disturbances in family functioning following cancer diagnosis. Family nursing practice is a growing field of nursing and will continue to play a big role in the future of health care. Recently, nursing has become aware of the link between family dynamics and health and sickness, whereas most nursing research has previously concentrated on the individual rather than family health care which instigated the researcher in exploring the family system strengths by means of family coping intervention package for the families presenting with cancer, thereby the family structure, family function and coping will be enhanced. Family interventions that aims to improve caregiver coping skills and family functioning, also imperative for enhancing life quality of their care recipient.

The aims and objectives of this study are:

1. To assess the baseline coping and family functioning of caregivers and quality of life of cancer patients.
2. To develop and validate family intervention package for caregivers of cancer patients.
3. To determine the effectiveness of family intervention package on coping and family functioning of caregivers of cancer patients.

Hypothesis

H1: There will be statistically significant difference between pretest and posttest coping and family functioning score of caregivers among experimental and control group after administration of family intervention package.

H₀1: There will be no statistically significant difference between pretest and posttest coping and family functioning score of caregivers among experimental and control group after administration of family intervention package.

Delimitations: The study was delimited to:

1. Caregivers above the age of 18 years.
2. Caregivers who provide continuous care for at least 3 months to cancer patients.

Subjects and Methods

A Quantitative approach and quasi experimental pretest posttest control group research design was employed to carry out this study to develop and determine the effectiveness of family intervention package on coping and family functioning of caregivers of cancer patients. The study was conducted in radiation therapy and chemotherapy wards of Mohan Dai Oswal Hospital, Ludhiana, Punjab. Sample was selected by convenience sampling technique and sample size of 30 caregivers were taken for study. The sample size was calculated by Raosoft considering 5% margin of error, confidence interval 95%.

Inclusion criteria-

1. Caregivers who are willing to accompany with cancer patients in selected hospital for intervention sessions.
2. Caregivers whose cancer patients receive chemotherapy and radiation therapy in selected hospital.
3. Caregivers who are able to speak and understand in local language (Hindi or Punjabi)

Exclusion criteria

Caregivers whose cancer patients are terminally ill or receiving palliative treatment.

Research variables

Independent variables: - Age, Gender, marital status, educational status, occupation, socioeconomic status, habitat, family type, relation with patient, prior experience of caregiving, duration of providing care, family intervention package

Dependent variables: - Coping and family functioning of caregivers

Development and description of tools

Following tools will be used for conducting the study:

Part A: Sociodemographic variables of caregivers

Part B: Brief Coping Scale: This scale was used to assess the coping skills of caregivers. The scale was developed by Carver C.S in 1997. This scale comprised 28 questionnaires items. Each item of scale has 4 rating options (1-not doing at all: 4-doing this a lot).

Part C: The McMaster Family Assessment Device, General Functioning Scale: This scale was used to assess the family functioning of caregivers. There are 12 statements about family support and communication in this assessment. When it comes to their personal family interactions, respondents are asked to indicate whether they "strongly agree" (score 1), "agree" (score 2), "disagree" (score 3), or "strongly disagree" (scoring 4) with each of these statements. The more troublesome the family member considers the functioning of the family as a whole, the higher the score.

Part D: Development and description of Family intervention package

It involves five faces to face sessions and one telephonic psychoeducation session for four weeks on five content areas i.e., Family involvement, Optimistic attitude, Coping effectiveness, Uncertainty reduction and, Symptom management (FOCUS). In Family involvement, Caregivers were urged to be upfront with one another about the condition, offer one another support, and function as a cohesive unit in the family. Caregivers were urged to take part in initiatives that foster hope and an upbeat attitude.

In Coping effectiveness, caregivers were urged to employ coping mechanisms and adopt healthy living practices, such as stress-reduction approaches. In Uncertainty reduction, Caregivers were provided with information about the disease and treatment. Symptom management aspect focused on strategies for managing common side effects.

The psychoeducation sessions will be delivered by using PPT slides, Demonstration and Booklet.

The content validity of Research tools and Family Intervention Package has been established by circulating them to the professionals in the field of Medical Surgical Nursing, Psychiatric Nursing and Oncology department.

Data collection procedure: Permission from Ethics Committee/ Institutional Review Board (IRB) had been obtained.

Data collection of study was done in the months of January 2022 to May 2022. The data was collected from 30 caregivers of cancer patients (15 in each group) in chemotherapy, radiation therapy departments in Mohan Dai Oswal Hospital, Ludhiana. Pre intervention coping and family functioning of caretakers in both groups were assessed. Six intervention sessions of family intervention package were conducted in 4 weeks for experimental group. Booklet of family intervention package was also given to subjects. On the 5th day of 4th week post-test 1 was taken from both groups and post-test 2 was taken after 3 months from both groups.

Results

The data was analyzed in accordance with the study's objectives using descriptive and inferential statistics like mean, standard deviation, t-test, chi-square, and ANOVA to determine the effectiveness of family intervention package on caregiver's coping and family functioning.

The data was divided into the following sections and presented:

Section I: The frequency, percentage distribution, and homogeneity of the demographic factors of the experimental and control groups' carers of cancer patients.

Section II: A comparison of the pre- and post-effects of a family intervention package on caretakers' coping and family functioning.

Major findings of the study

Both the experimental and control groups shared the homogenous demographic characteristics as chi-square and fisher test were non-significant at 0.05 level of significance.

In Experimental group, in regard to coping, majority of subjects had maladaptive coping in pre intervention, whereas in post test 1 and post test 2, majority of subjects had adaptive coping. In regard to family functioning, majority of subjects had unhealthy family functioning in pre intervention and post test 1, whereas in post test 2, majority of subjects had healthy family functioning. (TABLE 1)

Table 1. Frequency, percentage of pre intervention and post intervention levels of coping and family functioning of caregivers in experimental group

N=15

| | | Caregivers | | |
|---------------------------|------------------|-----------------|--------------------|--------------------|
| Levels | Scoring criteria | Pretest f(%) | Post test1 f(%) | Post test2 f(%) |
| Coping ability | | | | |
| Maladaptive | 28-70 | 12 (80%) | - | - |
| Adaptive | 71-112 | 3 (20%) | 15 (100%) | 15 (100%) |
| Family functioning | | | | |
| Healthy | <2 | 1 (6.7%) | 6 (40%) | 15 (100%) |
| Unhealthy | ≥2 | 14 (93.3%) | 9 (60%) | - |

In Control group, in regard to coping, majority of subjects had maladaptive coping in pre intervention and post intervention 1 where as in post intervention 2, majority of subjects had adaptive coping. In regard to family functioning, majority of subjects had unhealthy family functioning in pre intervention, post intervention 1 and also in post intervention 2. (TABLE 2)

Table 2: Frequency, percentage of pre intervention and post intervention levels of coping and family functioning of caregivers in control group

N=15

| | | Caregivers | | |
|---------------------------|------------------|-----------------|---------------------|---------------------|
| Levels | Scoring criteria | Pretest f(%) | Post test 1 f(%) | Post test 2 f(%) |
| Coping ability | | | | |
| Maladaptive | 28-70 | 15 (100%) | 11 (73.3%) | 8 (53.3%) |
| Adaptive | 71-112 | - | 4 (26.7%) | 7 (46.7%) |
| Family functioning | | | | |
| Healthy | <2 | - | - | 5 (33.3%) |
| Unhealthy | ≥2 | 15 (100%) | 15 (100%) | 10 66.7%) |

In experimental group, Mean pre coping score (50.07±14.88) increased to (74.93±11.53) post intervention 1 and (88.20±9.72) post intervention 2, Mean pre family functioning score (2.64±0.48) reduced in post intervention 1 (2.02±0.39) and post intervention 2 (1.34±0.26). In control group, mean pre coping score (43.33±7.70) increased to (59.53±9.09) post intervention 1 and (68.00±10.17) post intervention 2, mean pre family functioning score (2.86±0.53) reduced in post intervention 1 (2.61±0.42) and post intervention 2 (2.04±0.34). The differences in pre and post intervention mean coping score and pre and post intervention mean family functioning score in experimental group was found to be statistically highly significant at p<0.01 level of significance. Consequently, it can be demonstrated that family intervention package was effective in enhancing coping and improving family functioning of caregivers and therefore, null hypothesis (H₀) is rejected.

Discussion

The findings of the study that family intervention package was effective in enhancing their coping and family functioning are supported by Nympha MM, Joseph MV, Thomas B (2014) which demonstrated the intervention program's viability and value to both cancer patients and their caregivers.¹⁷ The results of a previous study by Cameron JI, Shin JL, Williams D, and Stewart DE (2004), which revealed that even a quick problem-solving session may be helpful for family caregivers of people with advanced cancer, confirm the findings of the current study.¹⁸ McMillan SC (2006) found that the family caregiver group that received the coping skill intervention had greater QOL ($p=0.03$), a lower burden of patient symptoms ($p0.001$), and a lower burden of caregiver task ($p=0.038$) compared to the other group, supporting the study's conclusions.¹⁵

Conclusion

The findings of the current study concluded that majority of subjects from both the groups were having maladaptive coping and unhealthy family functioning in pretest. Based on the study findings it can be concluded that Family intervention package was effective in enhancing coping and also improving family functioning of care providers of cancer patients.

Limitations

Only patients hospitalized to a particular hospital who were willing to engage in the study were included in the current investigation. Since the study was conducted in clinical setting where there was possibility of treatment effect coming in between as extraneous variable.

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