A STUDY TO ASSESS THE KNOWLEDGE OF HOME CARE AMONG CAREGIVERS OF PATIENTS AFTER CRANIOTOMY IN SCTIMST, TRIVANDRUM

PROJECT REPORT

Submitted in the partial fulfillment of the requirements

For the

Diploma in Neuro Nursing

Submitted by

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November 2011

CERTIFICATE FROM THE SUPERVISORY GUIDE

This is to certify that **MR.SREEJITH.S.M** has completed the project work on "**A STUDY TO ASSESS THE KNOWLEDGE OF HOME CARE AMONG CAREGIVERS OF PATIENTS AFTER CRANIOTOMY**" under my direct supervision for the partial fulfillment for the diploma in neuro nursing in the University of SREE CHITRA TIRUNAL INSTITUTE FOR MEDICAL SCIENCES AND TECHNOLOGY, TRIVANDRUM. It is also certified that no part of this report has been included in any other thesis for processing any other degree by the candidate.

Saramma P.P

Trivandrum
November 2011

Dr. SARAMMA. P. P
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CERTIFICATE FROM THE CANDIDATE

This is to certify that the project on "**A study to assess the knowledge of home care among caregivers of patients after craniotomy in SCTIMST**", is a genuine work done by me under the guidance of Dr. Saramma. P. P, M.N, PhD, Senior lecturer in nursing, SCTIMST, Trivandrum. It is also certified that this work has not been presented previously to any other university for award of degree, diploma or other recognition.

Trivandrum,
November 2011

Mr. SREEJITH. S. M
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APPROVAL SHEET

This is to certify that Mr.Sreejith.S.M bearing code no: 6214 has been admitted to the Diploma in Neuro Nursing, in January 2011 and he has undertaken the project entitled, "A study to assess the knowledge of home care among caregivers of patients after craniotomy in SCTIMST, Trivandrum, which is approved for the Diploma in Neuro Nursing, awarded by the Sree Chitra Tirunal Institute for Medical Sciences and Technology, Trivandrum, and is found satisfactory

Place:

Date:

Examiners

(1)_____

(2) _____

Guide

(1) _____

(2) _____

ACKNOWLEDGEMENT

First of all let me thank Almighty God for unending love, care and blessing especially during the tenure of this study.

I take this opportunity to express my sincere thanks to Dr. Saramma P.P, Sr.Lecturer in Nursing, Sree Chitra Tirunal Institute for Medical sciences and Technology, Trivandrum, for the guidance she provided for executing this study. Her advices regarding the concept, basic guidelines and analysis of data were very much encouraging. Her contributions and suggestions have been of great help for which I am extremely grateful.

I express my sincere thanks to Dr.A.V.George, Registrar, SCTIMST, Trivandrum, for giving this opportunity for conducting this study.

I would like to acknowledge the contribution of all the participants who have kindly agreed to take part in the study. They generously gave their time and attention to the research. This study would have been impossible without their generosity.

Special thanks to Computer Division and library staff of SCTIMST for granting permission to utilize the computer and library facility.

Sreejith. S. M

ABSTRACT

Topic: A study to assess the knowledge of homecare among caregivers of patients after craniotomy. **Background of the study:** Craniotomy involves greater morbidity related to a wide variety of complications. The majority of survivors return back to their home with various physical, psychological, emotional, social and spiritual health disabilities after the initial period of hospitalization and rehabilitation. These disabilities are preventing the patient from functioning independently and effectively in the community. Approximately three fourths of them continue to receive assistance for meeting daily activities from family caregivers. So family caregivers play an important role as they do a substantial portion of home care**. Aim of the study**: To assess the knowledge of home care among caregivers of patients after craniotomy. **Method**: This study was conducted in Neurosurgery units in SCTIMST, Trivandrum. It was a descriptive study where in caregivers of 30 patients who underwent craniotomy were conveniently selected on the fifth postoperative day. A self prepared validated questionnaire was designed to assess the level of knowledge **Results**: The data were analyzed using Epi Info version 3.5.1.The study revealed that mean knowledge score is higher among younger adults and people with high educational status. **Conclusion**: Approximate and timely caregiver education is necessary during hospitalization .So that optimum care is given to patients after discharge.

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Chapter - 1
INTRODUCTION

1.1 Introduction

A craniotomy is a surgical operation in which a bone flap is temporarily removed from the skull to access the brain. Craniotomies are often a critical operation performed on patients suffering from brain lesions or traumatic brain injury (TBI), and can also allow doctors to surgically implant deep brain stimulators for the treatment of Parkinson's disease, epilepsy and cerebellar tremor. The procedure is also widely used in neuroscience for extra cellular recording, brain imaging, and for neurological manipulations such as electrical stimulation and chemical titration.

Neurosurgical patients are placed with a high incidence of secondary complications, because many of these patients have depressed defensive reflexes and decreased levels of consciousness and they endure prolonged periods of immobilization. Most people need to stay in the hospital from 5 to 14 days after a craniotomy. Their activity is slowly increased. It is common for people to feel tired for 6 weeks after surgery. Depending on the area of the brain affected, the person may need physical therapy, occupational therapy, or speech therapy to regain normal function. If surgery was performed for a cancerous brain tumor, radiation therapy or chemotherapy may be needed.(Howe 1983)

Complications from craniotomy include: infection, haemorrhage, seizures, stroke and may lead to permanent brain damage. The systemic factors that favors the development of infection are poor nutrition, debilitation from chronic illness, long term steroid or immunosuppressive therapy, Diabetes mellitus, systemic infections and prolonged immobilization.

In the last decade, the home healthcare industry has expanded significantly. The multiple groups, systems, and agencies involved in home health services and the nature of home care delivery itself, can all present special challenges in the design and implementation of quality management activities

1.2 Background of the study

Craniotomy is a surgical procedure in which an opening is made into the cranium. The location and dimension of the opening will be decided according to the site and size of the lesion. Craniotomy can be classified into two major categories-supratentorial and infratentorial. Supratentorial craniotomy involves brain structures above the tentorium including frontal lobe, temporal lobe and occipital lobe. Infratentorial craniotomy involves the structures below the tentorium including cerebellum and brain stem

Complications of craniotomy include seizures, Hemiplegia or hemiparesis, infection, stroke, DVT, pulmonary embolism, and may lead to permanent brain damage. The majority of survivors return back to home to reside in community with various physical, psychological, emotional, social and spiritual health disabilities after the initial period of hospitalization and rehabilitation. These disabilities are preventing the patient from functioning independently and effectively in the community. Approximately three fourths of patients continue to receive assistance of daily living activities from family caregivers. So family caregivers play an important role, as a substantial portion of the cost of home care is born by them.

Therefore a sustaining family caregivers and their ability to provide care at home is important. A key concern is that the continued reliance on family members, without better recognition of their own support needs, could negatively affect the ability of family caregivers to provide care in the future and result in even greater emotional, physical and financial strains. This negative impact on the care giver

likely would affect the quality of care and the quality of life of the care recipient and the rest of family. Research has shown that unrelieved caregiver depression, exhaustion, financial concerns and other care related strain are major contributing factors to institutionalization, often resulting in higher public expenditures for nursing costs.(David et al.,2006)

1.3 Need for the study

Craniotomy involves greater morbidity and mortality and has a wide variety of complications. These complications may be avoided by careful perioperative planning, strict adherence to aseptic technique, meticulous microsurgical dissection, proper wound closure, the judicial use of prophylactic agent, and proper wound care.(Dubey et al., 2006)

The incidence of craniotomy surgery and its complications are high in united states and also in India. The lack of personal hygiene, lack of adequate knowledge of patients and caregivers are the important factors in developing most of the complications such as pneumonia, DVT, wound infection and bleeding disorders.

The combination of verbal and written health information enables the provision of the standardized care information to patients and significant others, which appears to improve knowledge and satisfaction. The nature and extend of post discharge problem experienced by newly discharged patients helps as a baseline for discharge planning.(Lam et al.,2001)

In SCTIMST Surgical site infection developed in two patients during the month of May and June 2011 and one patient developed CSF rhinorrhoea. These happened probably due to improper home care management and inadequate knowledge regarding home care after craniotomy. For this reason the investigator

decided to assess the effectiveness of educational pamphlet on knowledge of care givers of patients after craniotomy.

1.4 Statement of the problem

A study to assess the effectiveness of individual health teaching versus group teaching on knowledge of home care among caregivers of patients after craniotomy.

1.5 Objectives

1) To assess the effectiveness of individual teaching over group teaching on home care among caregivers of patients after craniotomy.

2) To develop and assess the effectiveness of an educational pamphlet on the knowledge of home caregivers of patients after craniotomy.

1.6 Operational definition

Patients: Patients refers to the persons who have undergone craniotomies such as supratentorial tumour excision, aneurysm clipping and infratentorial tumour excision.

Craniotomy: It is a surgical operation in which a bone flap is removed from the skull to access the brain.

Knowledge: Knowledge is the information acquired by the caregiver regarding home care after craniotomy, which is measured as scores obtained in the knowledge test.

Home care: Home care is the health care or supportive care provided in the patients home by a family member or friend.

Caregiver: Caregiver in this study refers to a family member who provides homecare to patients after craniotomy.

Educational pamphlet: is the sheet of paper that is printed on both side and folded in half and saddle stapled at the crease to make a simple book to provide information to the caregivers on home after craniotomy.

1.7 Methodology

Settings: Neurosurgical ward and Neurosurgical ICU

Sample: Caregivers of patients undergoing craniotomy

Sample size: 30

Sampling technique: Purposive sampling.

1.8 Tool

In this study the investigator assesses the knowledge level of caregivers of patients undergoing craniotomy using a self prepared validated questionnaire. The questionnaire contains 12 questions about the home care after craniotomy. Knowledge assessment was done in the postoperative period.

1.9 Delimitations

1) Samples were selected only from SCTIMST, Trivandrum.

2) Only those who were interested and willing to participate were included in the study.

3) Only Malayalam speaking caregivers were included in the study.

1.10 Organization of the report

The report is organized with the introduction, background of the study, need and significance of study, statement of the problem, objectives, operational definitions, tool and delimitations.

Chapter - 2
REVIEW OF LITERATURE

2.1 Introduction

Review of literature is the critical summary of research on a topic of interest, often prepared to put a research problem in context. Literature reviews can serve a number of important functions for nurse seeking to develop an evidence based practice.

A crucial element of all research degrees is the review of relevant literature. So important is this chapter that its omission represents a void or absence of a major element in research.(Afolabi 1992)

The review of literature relevant to this study is presented in the following sections.

2.2 Studies related to effectiveness of discharge planning.
2.3 Studies related to complications after craniotomy.

2.2 Studies related to discharge planning

Parkes and Shepperd, et al., conducted a study on discharge planning from hospital to home. The objectives were to assess the effects of discharge planning for patients moving from hospital to home. Randomised trials and controlled trials comparing discharge planning with routine discharge for hospital patients. The outcomes were mortality, clinical complications, hospital length of stay, readmissions, discharge destination, general and disease specific health status, functional status, psychological wellbeing etc. Eight studies were included involving 4837 patients.4 studies recruited patients with medical condition;4

recruited patients with a mix of medical and surgical conditions, and one of them recruited medical and surgical patients as separate groups. There was a small reduction in hospital length of stay for elderly medical patients allocated to discharge planning. Patients with medical condition allocated to discharge planning reported increased satisfaction than those received routine discharge. The reviewer concludes with mixed results which may reflect the different study populations and the different ways the intervention was implemented. There concluded that discharge planning may lead to reduced hospital.

Henderson and Zernike (2001) conducted a study on the impact of discharge information for surgical patients. The main objective of the study was to establish whether the routine information surgical patients receive about the management of pain and wound care during their hospitalization is sufficient for them to care for themselves without seeking assistance from a health professional. A written questionnaire was distributed to 158 patients within 24hrs prior to discharge and a telephone interview was conducted 1-2weeks after discharge. At the time of discharge majority of patients had received information. The researchers found out that those patients who had received information were less likely to access a health facility than those who had not received information. The telephonic interview revealed that patients still felt well informed 1-2 weeks later. The researchers concluded that nurses need to be more aware of the patients who leave the hospital with little or no discharge advice may not be confident in the management of their health condition.

Pieper, et al.,(2007) evaluated a study on the discharge knowledge and concerns of patients going home with a wound. The objective was to examine patients wound care knowledge and concerns prior to discharge from an acute care hospital. The study was a comparative descriptive study. There was 67 persons with acute wounds and 9 with chronic wounds. The researchers prepared a questionnaire which included demography, admission and discharge, health, wound care, pain and wounds, discharge concerns etc. The results were many

patients did not know the dressing (38.2%) or solution to cleanse a wound (58.7%) at home. Most had taken care of a wound before (67.1%),could see(68.4%) and reach(69.7%) the wound and had looked at it (64.5%) during hospitalization. Patients with acute and chronic wounds is needed about patients' wound care knowledge and discharge concerns. did not differ significantly in their concerns about their wound or their fear of taking care of their wound. Participants generally had appropriate knowledge about wounds and hand washing, nutrition, going out of the home, and cigarette smoking. They had incorrect information about drying out wounds and leaving them open to breathe the air. The researchers concluded that patients were able to verbalize their concerns about going home with a wound. Teaching literature could include the most common concerns, as well as ways to avoid misinformation about wound care. Discharge teaching needs to begin early so that patients feel they have adequate time to learn and ask questions.

Toren, et al.,(2006) conducted a study on patient's knowledge regarding medication therapy and the association with health services utilization. The objective of the study was to assess the patients knowledge about their long term medication therapy and to measure the association between knowledge and health service utilization in the community. The prospective study with home telephone interviews was conducted 1 week and 1 month after discharge. The study population included 130 patients discharged to the community with new prescriptions for long term medications. The researchers concluded that about 60% of patients reported receiving no counseling regarding their new medication. About 30% utilized 3 or more types of service.18% visited the ER during the month after discharge, of whom 35% visited twice or more. Higher levels of patient knowledge predicted higher levels of health services utilization. The younger patients tended to utilize a larger variety of health services compared to the older patients.

Johnson,et al .,(2003) conducted a study on written and verbal information versus verbal information only for patients being discharged from acute hospital settings to home. The objective was to determine the effectiveness of providing written health information in addition to verbal information for patients and or significant others being discharged from acute hospital settings to home. The researchers included patients discharged from acute hospital settings to home; the patient and or significant others received written health information and verbal information in the intervention group; and verbal information only in the control group and the intervention was provided at discharge. The method was randomized control trials or controlled clinical trials. The participants in the two trials were parents of children's hospitals, one in the united states (n=197)the other in Canada(n=123).Provision of verbal and written health information significantly increased knowledge and satisfaction scores. The reviewers concluded that the use of both verbal and written health information when communicating about care issues with patients and or significant others on discharge from hospital to home.

Gehlback, et al ; (2011) conducted a study on patient related factors associated with hospital discharge to a care facility after critical illness. The objective was to identify patient-related factors associated with hospital discharge to a care facility after critical illness and to estimate the magnitude of risk associated with each factor. The researchers used the method of retrospective cohort study of 548 survivors of critical illness in a medical intensive care unit. Multivariable logistic regression was used to identify independent risk factors for discharge to a care facility. Only the first 72 hours of intensive care were analyzed. The results were approximately one-quarter of the survivors of critical illness were discharged to a care facility instead of to home. This event occurred more commonly in older patients, even after adjustment for severity of illness and comorbid conditions (odds ratio [OR] 1.8 for patients $\geq$ 65 years of age Vs patients < 65 years; 95% confidence interval [CI], 1.1-3.1; P = .02). The risk was greatest for patients who received mechanical ventilation (OR, 3.4; 95% CI, 2.0-5.8; P < .001) or had

hospitalizations characterized by severe cognitive dysfunction (OR, 8.1; 95% CI, 1.3-50.6; P = .02) or poor strength and/or mobility (OR, 31.7; 95% CI, 6.4-157.3; P < .001). The model showed good discrimination (area under the curve),0.82; 95% CI, 0.77-0.86). The reviewers concluded the model, which did not include baseline function or social variables, provided good discrimination between patients discharged to a care facility after critical illness and patients discharged to home. These results suggest that future research should focus on the debilitating effects of respiratory failure and on conditions with cognitive and neuromuscular sequelae.

2.3 Studies related to complications after craniotomy

Am korinek, et al., evaluated incidence and risk factors of postoperative meningitis with special emphasis on antibiotic prophylaxis, in a series of 6243 consecutive craniotomies. They conducted the study from may 1997 to march 1999 out of which no antibiotic prophylaxis was prescribed for scheduled, clean-contaminated, or longlasting whereas emergency, clean-contaminated or long lasting craniotomies received cloxacillin. From April 1999-dec 2003 prophylaxis was given to every craniotomy. They used a multivariate analysis to study independent risk factors for meningitis. The results were the overall meningitis rate was 1.52%.Antibiotic prophylaxis reduced incision infections from 8.8-4.6 %(P<.0001)but did not prevent meningitis.:1.63% in patients without antibiotic prophylaxis and 1.50% in those who received prophylaxis. Finally they concluded that peripoperative antibiotic prophylaxis does not prevent meningitis and tends to select prophylaxis resistant microorganisms.

Sireland, et al., conducted a pilot study on shampooing after craniotomy. The main objective was to assess the effect of postoperative hair washing on incision infection and health related quality of life in craniotomy patients. They used a randomized method in which 100n patients were subjected to hair washing 72 hrs

postoperatively.(n=48) or no hair washing until suture or clip removal.(n=52).At 5 to 10 days postoperatively sutures or clips were removed, incision was assessed using ASEPSIS scale. The results they found out was no differences were found between hairwashing and no hairwashing groups for asepsis scores at 5-10days and 30 days. They concluded that postoperative hairwashing resulted in no increase in incision infection scores when comparing to no hairwashing in patients undergoing craniotomy.

C Lietard, et al., conducted a study on risk factors for neurosurgical site infections. It was a 18 month prospective study. The purpose of the study was to determine the incidence rate and risk factors of surgical site infections in neurosurgery for any type of surgery. The authors took a 18 month survey including patients who underwent neurosurgery. A 30 day follow up was completed in patients whose surgery didn't involve placement of prosthesis or implant and 1 yr follow up was completed who underwent surgery to place prosthesis or implant. Univariate and multivariate analysis were conducted. Stepwise multiple logistic regression method was used. The results were of the 844 patients studied 35 Surgical site infections were diagnosed, yielding an incidence rate of 4.1%.A lack of antibiotic prophylaxis was not found to be a risk factor. They concluded that infection risk factors occur mainly during the postoperative period.

J Koninger, et al., conducted a study on postoperative wound healing in wound water contact. In general taking a bath or shower is not allowed before wound stitch removal under the idea that early water contact may lead to a higher wound infection rate. In a prospective trial 170 patients operated in their surgery unit were allowed to take a shower 24 hrs after surgery. Full water contact of the fresh uncovered wound was accepted. The wound infection rate in this group was compared with the infection rate of historical group from their department.(n=956).The results were in the water contact group no case of wound infection was observed while we were observing a wound infection rate

of 0.6% in the other group. The authors concluded that water contact of the fresh operation wound 24hrs after surgery did not increase the postoperative wound infection risk in this study

2.4 Summary

Review of literature enabled the investigator to have a deep knowledge and insight into the problem. This chapter covered introduction, review of literature related to effectiveness of the discharge planning, complications after craniotomy. From this review of literature the investigator understand that nurse designed discharge planning is effective and this will reduce problems in patients discharged from hospital to home.

Chapter - 3

METHODOLOGY

3.1 Introduction

Research methodology is the systematic way to solve the research problems. It includes the step that researcher adopts his problem with the logic behind (Kothari 1990). It indicates the general pattern of organizing the procedure of gathering valid and reliable data for an investigation. This chapter contains research approach, study design, the sample and sampling technique, development and description of the tool, pilot study, data collection and plan of analysis.

3.2 Research approach

The survey approach was selected as the objectives of the study were (1) to assess the knowledge about home care among caregivers of patients after craniotomy. (2) to find association between the knowledge on home care among caregivers and selected variables.

3.3 Research design

To accomplish the objective of the study the investigator collected data from 30 caregivers by self prepared questionnaire including 12 questions based on various aspects of home care after craniotomy. Each correct answer carries 1 mark and the total knowledge score in the group assesses the knowledge.

3.4 Setting of the study

The study was conducted in the neurosurgical ward and neurosurgical units of Sree Chitra Tirunal Institute For Medical Sciences and Technology, Trivandrum.

3.5 Study population

Populations of the study were the caregivers of patients in neurosurgery ICU and neurosurgery ward of SCTIMST, those who have undergone craniotomy.

3.6 Sample and sampling technique

Purposive sampling technique was used to select the samples for the study. This study constituted 30 caregivers of patients who have undergone craniotomy. Data was collected from 30 caregivers regarding the knowledge about home care. The pilot study was conducted on 7 patients. The total period of the study is from 28-9-2011 to 2-11-2011.

3.7 Inclusion criteria

- Caregivers of patients within this study period
- Caregivers who know Malayalam.

3.8 Exclusion criteria

- Caregivers those who are not willing to participate.

3.9 Development of the tool

Self prepared questionnaire was used to assess the knowledge of caregivers of patients who have undergone craniotomy in SCTIMST Trivandrum. Several journals and textbooks helped the researcher to develop the tool and experts in SCTIMST validated it. The self prepared questionnaire contains 12 questions regarding several aspects of home care after craniotomy.

3.10 Description of the tool

The used in this study contains the following parts

- Consent
- Demographic data
- Questions about the different aspects of the home care of patients after craniotomy.

3.11 Pilot study

Pilot study was conducted in the month of September 2011 after obtaining permission from the authorities. The study was conducted in 7 caregivers both male and female between the age group 20 to 60 yrs of age with the self prepared questionnaire.30 caregivers were selected on the 5^{th} postoperative day and the knowledge level was assessed through the questionnaire.

3.12 Data collection procedure

Formal permission obtained from the authorities for the study. The period of data collection was from September to November 2011.The data was collected from neurosurgical ward and neurosurgical intensive care unit of SCTIMST Trivandrum. The investigator first introduced him and explained the need and purpose of the study. After getting consent from the caregiver the knowledge level was assessed through the questionnaire.

3.13 Plan for analysis

The investigator plans to analyze the data in terms of frequency, percentages, mean, standard deviation and p value and represent them in terms of tables and bar diagrams.

3.14 Summary

This chapter contains objectives, research approach, research design, and setting of the study, study population, sample and sampling technique, inclusion criteria, exclusion criteria, development of the tool, description of the tool, pilot study, data collection procedure and plan of analysis.

Chapter - 4

ANALYSIS AND INTERPRETATION OF DATA

4.1 Introduction

Analysis is the process of organizing and synthesizing data so as to answer questions and test hypothesis. This chapter deals with the analysis and interpretation of data collected in the present study. Data collected from 30 caregivers of patients who have undergone craniotomy in SCTIMST Trivandrum. The data collected were analyzed using Epi Info version 3.5.1 and the findings of the study were arranged under the following sections.

4.2 Section 1-Distribution of sample according to demographic data

4.3 Section 2- Relationship between caregiver's knowledge regarding home care after craniotomy and selected variables.

4.4 Summary

4.2 Section 1- Distribution of sample according to demographic data

In this section an attempt is made to study the demographic characteristics of sample's information collected on sex, education, marital status and economic data.

4.2 a) Distribution of sample according to age

TABLE 4.1

Age	Frequency	Percentage
<40	14	47
41-50	10	33
51-60	3	10
>60	3	10
TOTAL	30	100

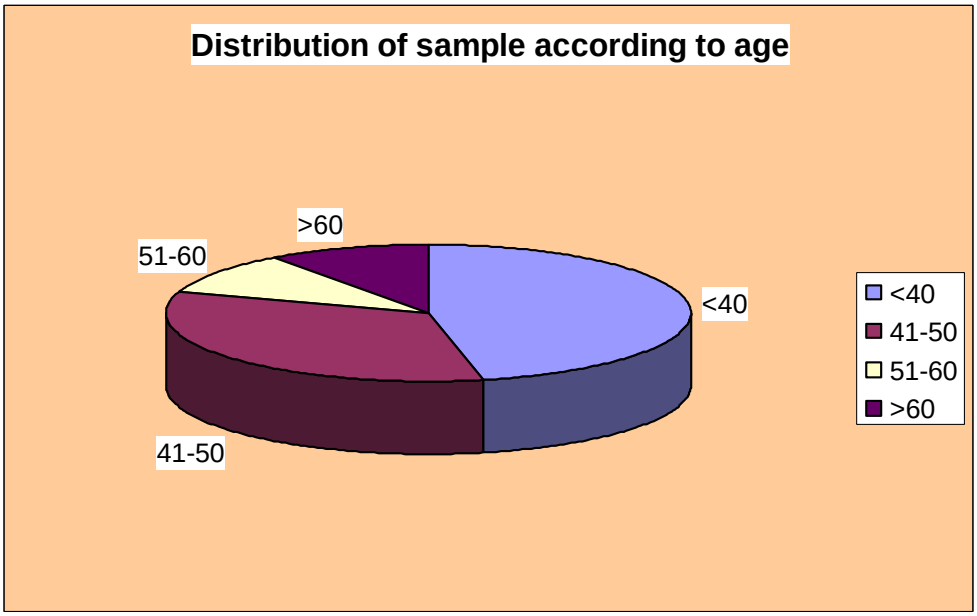

FIGURE 4.1

DISTRIBUTION OF SAMPLE ACCORDING TO AGE

The age of the sample is ranged between 21 and 70 yrs with a mean age of 43.5.The data also shows that the majority of the caregivers were below 40 yrs same data is represented in FIGURE 4.1.

4.2 b) Distribution of sample according to sex

TABLE 4.2

Sex	Frequency	Percentage
Male	12	40
Female	18	60
TOTAL	30	100

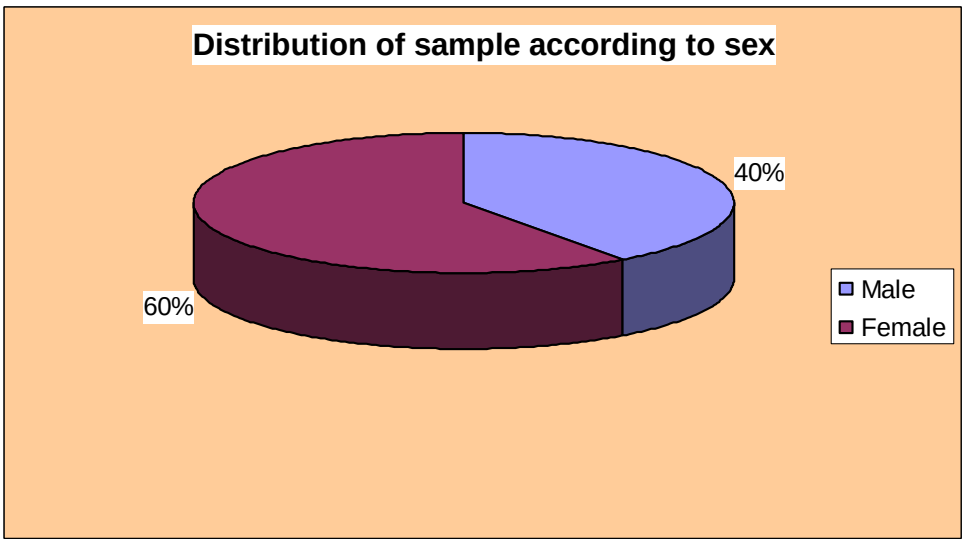

FIGURE 4.2

DISTRIBUTION OF SAMPLE ACCORDING TO SEX

Table 4.2 shows that majority of the caregivers were females(60%). Same data is represented in figure 4.2

4.2 c) Distribution of sample according to educational status

TABLE 4.3

Education	Frequency	Percentage
10th or Below	16	53
Plus2/Predegree	2	7
Degree/PG	12	40
TOTAL	30	100

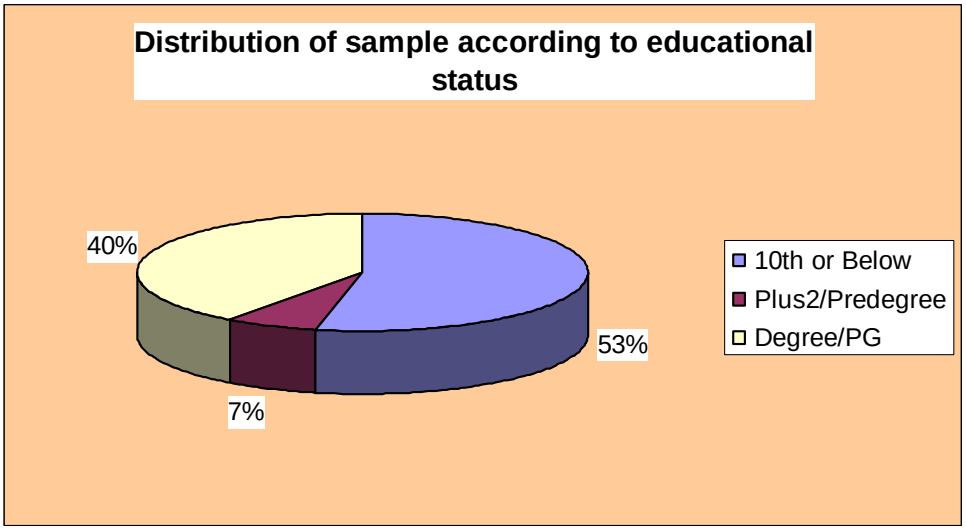

FIGURE 4.3

DISTRIBUTION OF SAMPLE ACCORDING TO EDUCATIONAL STATUS

TABLE 4.3 shows that majority of the samples were upto 10th std or below. The same data is represented in FIGURE 4.3

4.2 d) Distribution of samples according to economic category

TABLE 4.4

Economic category	Frequency	Percentage
A(<400)	4	13
B1(401-700)	6	20
B(701-1300)	5	17
C(1301-2000)	8	27
D(>2000)	7	23
TOTAL	30	100

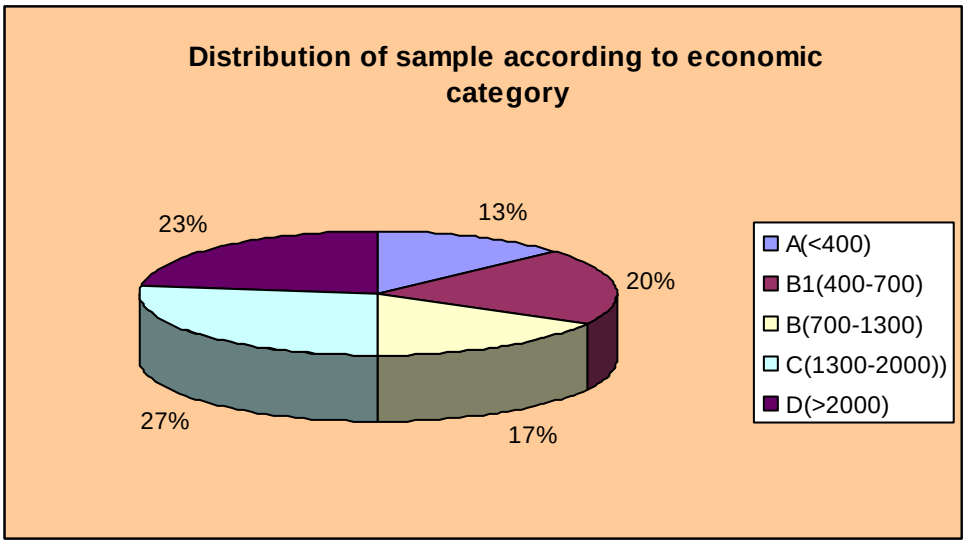

FIGURE 4.4

DISTRIBUTION OF SAMPLE ACCORDING TO ECONOMIC CATEGORY

TABLE 4.4 shows that majority of samples belong to C category. The same data is represented in FIGURE 4.4

4.2e) Distribution of samples according to knowledge of caregivers

TABLE 4.5

Knowledge Score	Frequency	Percentage
6 or below 6	7	23
7-9	15	50
10-12	8	27
TOTAL	30	100

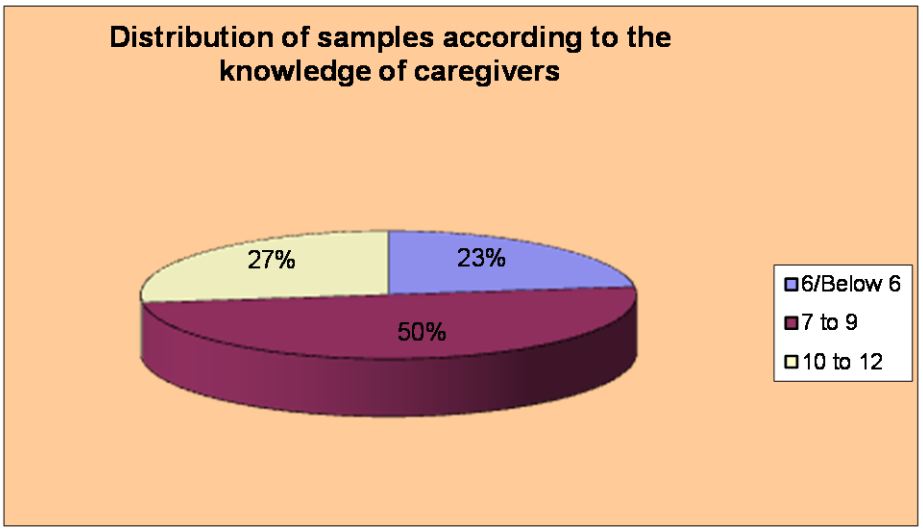

FIGURE 4.5

DISTRIBTION OF SAMPLE ACCORDING TO KNOWLEDGE OF CAREGIVERS

TABLE 4.5 shows that majority (77%) had above average knowledge regarding home care after craniotomy as represented in figure 4.5.

4.3 Section-2 Relationship between caregiver's knowledge regarding home care after craniotomy and selected variables

4.3 a) Mean, standard deviation and p value of knowledge based on age

TABLE 4.6

Age	**Frequency**	**Mean**	**Standard deviation**	
43.5 or below	15	9.2	1.93	0.0002
Above 43.5	15	6.6	1.4	

The younger adults had a knowledge range of 4-12 with a median and mode of 10 and older adults had a knowledge score of 3-9 with a median and mode of 7. The data given in table 4.6 shows that the younger adults had significantly higher knowledge than older adults regarding home care after craniotomy. (P= 0.0002)

4.3 b) Mean, standard deviation and p value of knowledge Based on sex

TABLE 4.5

Sex	**Frequency**	**Mean**	**Standard deviation**	
Male	12	8.17	2.66	0.58
Female	18	7.72	1.74	

The males have a knowledge range of 3-12 with median of 8.5 and mode of 10 while females have a knowledge range of 4-11 with median of 7.5 and mode of 7.The data given in table 4.7 indicates that there is no statistically significant relationship between the sex and knowledge level of the caregivers. (P=0.58)

4.3 c) Mean, standard deviation and p value of knowledge based on educational status

TABLE 4.8

Educational status	Frequency	Mean	Standard deviation	
<10 yrs of schooling	16	6.69	1.85	0.0003
Above 10 yrs of schooling	14	9.29	1.49	

Those who have passed 10th std or below had a knowledge score of 3-10 with a median and mode of 7 and those who have a qualification above 10th std had a knowledge range of 7-12 with a median and mode of 9.The P Value is significant and caregivers who had a higher qualification had a significantly greater knowledge than others.

4.4 Summary

This chapter deals with analyses and interpretation of data collected from 30 caregivers of patients undergoing craniotomy, SCTIMST, Trivandrum. Descriptive statistics were used for analysis. Bar and pie diagrams were used to illustrate the findings of the study.

Chapter - 5

SUMMARY, CONCLUSION, DISCUSSION AND

Limitations

This chapter gives a brief account of the present study including conclusions drawn from the findings and possible applications of the result, recommendations for the future research and suggestions for improving the present study is also included.

Summary

This study was conducted with the objective to assess the knowledge of caregivers regarding the home care after craniotomy and to find association between the knowledge on home care and selected variables.

The study was conducted in NSICU, NSW of SCTIMST; the size of the sample was 30. Self prepared questionnaire consists of 12 questions regarding home care after craniotomy were used to assess the knowledge of sample. Pilot study was done prior to the main study. The obtained results were analyzed using Epi Info 3.5.1. Tables and bar diagrams were used to illustrate the findings of the study.

Major findings of the study

The study revealed that percentage of females was greater than males. And the major group was below the age of 40 yrs and the educational status was less than 10 yrs of schooling. Other findings were younger adults had a significantly higher knowledge than older adults and those samples that had a higher education (above 10^{th} std) had a higher knowledge than others who had a lower qualification. The level of knowledge remained approximately same for both the sexes.

Discussion

Mistiaen et al., (2007) conducted a study on interventions aimed at reducing problems in adult patients discharged from hospital to home. They summarized that discharge planning and discharge support interventions have a positive impact on patient status at hospital discharge. The authors concluded that if the discharge planning is effective the complications that can occur because of improper home care could be minimized. The researcher in this study found that discharge planning and interventions were increasing the knowledge level of the caregivers. Parkes and Shepperd conducted a study on discharge planning from hospital to home. They conducted randomised trials and controlled trials comparing discharge planning for patients moving from hospital to home. They concluded that patients with medical condition allocated to discharge planning reported increased satisfaction than those received routine discharge.

Limitations

- ♠ Study was limited to SCTIMST, Trivandrum.
- ♠ The sample size was limited to 25.

Recommendations for the future study

1. Similar study can be repeated by increasing the size of the sample.
2. A true experimental study can be undertaken.

Conclusion

Based on findings of the study, the following conclusions were drawn. The study lacks generalization with the limited number of sample. Therefore studies using more number of samples might be useful to validate the findings. However this study concludes that it has helped the caregivers to provide a high quality care to patients after craniotomy at their home and more education was needed for older adults and low educational status.

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APPENDIX

SECTION- A

INFORMED CONSENT

I here by agree to participate in the research study " A study to assess the knowledge of home care among care givers of patients after craniotomy" conducted by Mr.Sreejith.S.M 1st year Diploma in Neuro Nursing of SCTIMST, Trivandrum. I understand that the data given by me will be kept confidential and be used only for research purpose.

Place Signature of the caregiver

Date Name of the patient

SECTION B

Demographic data

1. Name of the caregiver:
2. Age:
3. Sex:
4. Educational qualification:
5. Occupation:
6. Relationship to the patient:
7. Name and Age of patient:
8. Socioeconomic category: A B1 B C D
9. Surgery:

SECTION C

Questionnaire to assess the knowledge of caregivers of patients undergoing craniotomy

1.Which of the following method is suitable for wound care?

a. Clean with tap water
b.Clean with lukewarm water
c.Clean with boiled cooled water.
d.I don’t know.

2.How can we identify an infected wound ?

a. Itching around the wound.
b.High grade fever, drainage from the wound.
c.Fatigue, loss of appetite
d.I don’t know.

3.How long will it take the patient to reach a state of complete health?

a.1 month
b.2 months
c.3 months
d.I don’t know.

4.Which type of room should be provided for the patient?

a. Adequately ventilated room
b. Non-ventilated room

c. Dim lighted room

d. I don’t know.

5.Which type of persons contact should be avoided by the patient?

a.Hypertensive

b.Common cold and cough

c.Other operated cases

d.I don’t know.

6.Which type of diet should be given to the patient?

a.Fruits and Vegetables

b.Meat,egg and butter

c.Fish Fry

d.I don’t know.

7.Which type of food should be given to the patient to prevent constipation?

a. Milk

b. Vegetables and fruits

c. Banana chips

d. I don’t know.

8.Can you change the regularity of medicine of the patient?

a.Yes,the dose can be changed.

b.Yes,the time can be changed

c.No,it can’t be changed

d.I don’t know.

9.Which type of exercise is to be practiced?

a. Very heavy
b. Moderately heavy
c. Light exercise
d. I don’t know.

10.Which medicine should be taken continuously?

a. Analgesics
b. Antibiotics
c. Antiseizure medications.
d. All medicines

11.How should you prevent urinary tract infection in your patient?

a. Give more fluids
b. Use diapers
c. Give medications
d. I don’t know.

12.To prevent bedsores you should keep the patient in

a. Hard surface
b. Water /air mattress
c. Cotton mattress
d. I don/t know.

Answer key:1(c),2(b),3(c),4(a),5(b),6(a),7(b),8(c),9(c),10(c),11(a),12(b)

സമ്മതപത്രം

ക്രേനിയോട്ടമി ശസ്ത്രക്രിയ കഴിഞ്ഞ് വീട്ടിൽ പോകുന്ന രോഗിയുടെ പരിചാരകർ അറിഞ്ഞിരിക്കേണ്ട വസ്തുതകൾ പറഞ്ഞ് മനസ്സിലാക്കിത്തരുന്നതിനും അതുമായി ബന്ധപ്പെട്ട് എന്റെ അറിവ് വിലയിരുത്തുന്നതിനും തിരുവനന്തപുരം എസ്.സി.ടി. ഹോസ്പിറ്റിലിലെ ന്യൂറോനഴ്സിംഗ് വിദ്യാർത്ഥിയായ ശ്രീജിത്ത്.എസ്.എം. നടത്തുന്ന പഠനത്തിൽ സഹകരിക്കാൻ ഞാൻ സമ്മതിക്കുന്നു. എപ്പോൾ വേണമെങ്കിലും ഈ പഠനത്തിൽ നിന്ന് എനിക്ക് പിന്തിരിയാമെന്നും എന്റെ സഹകരണമോ നിസ്സഹകരണമോ രോഗിക്ക് ലഭിക്കുന്ന ശുശ്രൂഷയെ ബാധിക്കുകയില്ലെന്നും ഞാൻ മനസ്സിലാക്കുന്നു. ആയതിനാൽ സ്വമനസ്സാലെ ഞാൻ ഈ പഠനത്തിന്റെ ഭാഗമാകാമെന്ന് സമ്മതിക്കുന്നു.

വിവരം നൽകുന്ന വ്യക്തിയുടെ

സ്ഥലം: ഒപ്പ് :

തീയതി :

പേര് :

വ്യക്തിഗത വിവരങ്ങൾ

പരിചാരകന്റെ പേര് :

വയസ്സ് :

ആൺ ☐ പെൺ ☐

വിദ്യാഭ്യാസം :

തൊഴിൽ :

രോഗിയുമായുള്ള ബന്ധം :

രോഗിയുടെ പേരും വയസ്സും :

താമസ സ്ഥലം : നഗരം ☐ ഗ്രാമം ☐

വരുമാന കാറ്റഗറി :

ശസ്ത്രക്രിയ :

1) താഴെ പറഞ്ഞിരിക്കുന്നവയിൽ ഏത് രീതിയാണ് മുറിവ് പരിചരണത്തിന് അനുയോജ്യമായിട്ടുള്ളത്?

a) പച്ചവെള്ളത്തിൽ കഴുകുക

b) ചെറുചൂടുവെള്ളത്തിൽ കഴുകുക

c) തിളപ്പിച്ചു ആറ്റിയ വെള്ളത്തിൽ കഴുകുക

d) അറിയില്ല

2. മുറിവിൽ അണുബാധയുടെ ലക്ഷണങ്ങൾ എന്തെല്ലാം?

a) മുറിവിനു ചുറ്റും ചൊറിച്ചിൽ
b) പനി, നീരൊലിപ്പ്
c) ക്ഷീണം, വിശപ്പില്ലായ്മ
d) അറിയില്ല

3. ശസ്ത്രക്രിയ കഴിഞ്ഞ് രോഗിക്ക് എത്രനാൾ വിശ്രമം ആവശ്യമാണ്?

a) 1 മാസം
b) 2 മാസം
c) 3 മാസം
d) അറിയില്ല

4. രോഗിക്ക് ഏത് തരത്തിലുള്ള മുറിയാണ് നൽകേണ്ടത് ?

a) നല്ല വായു സഞ്ചാരമുള്ള മുറി
b) വായു സഞ്ചാരം കുറഞ്ഞ മുറി
c) മങ്ങിയ വെളിച്ചമുള്ള മുറി
d) അറിയില്ല

5. രോഗി ആരുമായുള്ള സമ്പർക്കമാണ് ഒഴിവാക്കേണ്ടത് ?

a) പ്രമേഹമുള്ളവർ
b) ചുമയും ജലദോഷവും ഉള്ളവർ
c) മറ്റ് ശസ്ത്രക്രിയകൾ കഴിഞ്ഞവർ
d) അറിയില്ല

6. ഏത് രീതിയിലുള്ള ആഹാരമാണ് രോഗിക്ക് നൽകേണ്ടത് ?

a) പഴങ്ങളും പച്ചക്കറികളും
b) ഇറച്ചി, മുട്ട, വെണ്ണ
c) മത്സ്യം വറുത്തത്

d) അറിയില്ല

7. ഏത് രീതിയിലുള്ള ആഹാരമാണ് മലബന്ധം ഉണ്ടാകാതിരിക്കാൻ രോഗിക്ക് നൽകേണ്ടത് ?

a) പാൽ

b) എണ്ണയിൽ വറത്തെടുക്കുന്ന പദാർത്ഥങ്ങൾ

c) പഴങ്ങളും പച്ചക്കറികളും

d) അറിയില്ല

8. രോഗി കഴിച്ചുകൊണ്ടിരിക്കുന്ന മരുന്നിന്റെ ക്രമത്തിൽ മാറ്റം വരുത്താമോ?

a) അളവിൽ മാറ്റം വരുത്താം

b) സമയത്തിൽ മാറ്റം വരുത്താം

c) മാറ്റം വരുത്താൻ പാടില്ല

d) അറിയില്ല

9. ഏത് തരത്തിലുള്ള വ്യായാമമാണ് രോഗി ചെയ്യേണ്ടത് ?

a) വളരെ ആയാസമുള്ളവ

b) സാമാന്യം ആയാസമുള്ളവ

c) ആയാസം കുറഞ്ഞവ

d) അറിയില്ല

10. ഏതൊക്കെ മരുന്നുകളാണ് രോഗി മുടങ്ങാതെ കഴിക്കേണ്ടത് ?

a) വേദന സംഹാരികൾ

b) ആന്റിബയോടിക്സ്

c) ജന്നിതടയാനുള്ള മരുന്നുകൾ

d) അറിയില്ല

11. താഴെപറഞ്ഞിരിക്കുന്നവയിൽ നിങ്ങളുടെ രോഗിയിൽ മൂത്രാശയ അണുബാധ വരാതിരിക്കാൻ ഏത് രീതി സ്വീകരിക്കും?

a) വെള്ളം ധാരാളം നൽകുക

b) ഡയപ്പർ ഉപയോഗിക്കുക

c) മരുന്നു നൽകുക

d) അറിയില്ല

12. ശയ്യാവ്രണം തടയാൻ താഴെപറഞ്ഞിരിക്കുന്നവയിൽ നിങ്ങളുടെ രോഗിയിൽ ഏത് രീതി ഉപയോഗിക്കും?

a) കട്ടികൂടിയ പ്രതലത്തിൽ കിടത്തുക

b) വെള്ളവും വായുവും നിറച്ച കിടക്ക ഉപയോഗിക്കുക

c) കോട്ടൻ കിടക്കകൾ ഉപയോഗിക്കുക

d) അറിയില്ല

31/12/11