

Assess the Side Effects and Coping Strategies Adopted by Cancer Patients Receiving Radiation Therapy

IJSN
Volume 2, Number 3
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Abstract

Background: Cancer affects everyone and represents a tremendous burden on patients, families and societies. The principal means for treating cancer (surgery, Chemotherapy and radiation therapy) are very effective; however, all such therapies come with the risk of substantial side effects. **Aims and Objectives:** The present descriptive study was conducted to assess for side effects experienced and the coping strategies adopted among 50 cancer patients receiving Radiation therapy treatment at Pravara Rural Hospital. The data were collected by using the self prepared; and validated rating scales. The results were analyzed and interpreted using descriptive and inferential statistics. **Results:** Result revealed that patients receiving Radiation therapy had variety of side effects with wide range; and patients followed many things to make the side effects more acceptable and easier to adopt with. There was Significant association was found between the side effects and type of cancer; coping strategies with sex and type of cancer (Pd^{0.05} level). There was significant positive relationship were found between side effects and coping strategies. **Conclusion:** It is essential to raise awareness on cancer treatment and its impact on health; and develop health seeking behaviors among the patients and caregivers to provide better cancer care and improve the quality of life.

Keywords: Side effects; Coping strategies.

Introduction

It is stated that side effects are unwanted reactions to medications or therapy these effects can happen when you start a new medication, decrease or increase the dose of a therapy, or when you stop using a medication or therapy.[1]

More than 60% of all clients with cancer receive Radiation therapy at some point during the course of their disease. Radiation therapy may be used as a primary, an adjuvant, or a palliative treatment. Primary-it is the only treatment used and aims to achieve local cure of the cancer (E.g. early- stage Hodgkins diseasae, skin cancer, prostate cancer, carcinoma of the cervix and cancer of larynx). An adjuvant treatment- based on either preoperatively or postoperatively to aid in the destruction of cancer cell (e.g. colorectal cancer, early breast cancer).[2]

The symptoms and its impact on quality of life among 57 cancer patients receiving radiation therapy; findings revealed that the most frequently reported as severe (score >7) before radiotherapy were fatigue (17%), pain (15%), and lack of appetite (15%). During radiotherapy fatigue (32%), pain (24%), and sleep disturbance (24%) were most frequently reported as severe. The impact of symptom. Severity on function was significantly worst during radiotherapy. Specifically, general activity and work reported to be most impaired prior to and during radiotherapy.[3]

However the experience of fatigue and self – management of cancer patient undergoing radiation therapy; study finding shows that for relief of fatigue, five categories of self –management were used:

1. Getting moral support from family and friends;
2. Practicing religion, reciting prayer, doing merit, mediating
3. Practicing self –care for symptomatic problems;
4. Accepting the situation and doing the best of one's life; and
5. Consulting with doctor and nurse.[4]

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Thus the purpose of this study was to assess the severity of side effects and coping strategies adopted by cancer patients receiving radiation therapy treatment according to different demographic characteristics.

Material and Methods

This descriptive explorative study was conducted among 50 cancer patients receiving Radiation Therapy treatment at Pravara Rural Hospital, Loni (Bk). Before commencement of the study, ethical approval was obtained from the Institutional Ethical Committee, and official permission was received from the authority. Patients who were above 18 years of age, receiving radiation therapy treatment, able to read Marathi and willing to participate in the study were included in the study by using the non – probability; purposive sampling method.

The patients who are below 18 years of age and not willing to participate in the study were excluded from the study. The purpose of the study was informed and explained to the participants and those who voluntarily agreed to participate in the study and gave an informed consent for the same were asked to fill the rating scale according to the response

format provided in the questionnaire. Material used is self prepared; and content validated rating scale as questionnaire to collect the data. For data analysis, each response like ‘very often’, ‘often’, ‘sometimes’, ‘rarely’ and ‘never’ were given a score 5, 4, 3, 2 and 1 respectively. Individual scores were summed up to yield a total score. The collected data was tabulated and analyzed using appropriate statistical methods like descriptive statistics (mean, SD and mean percentage) and inferential statistics (chi – square test).

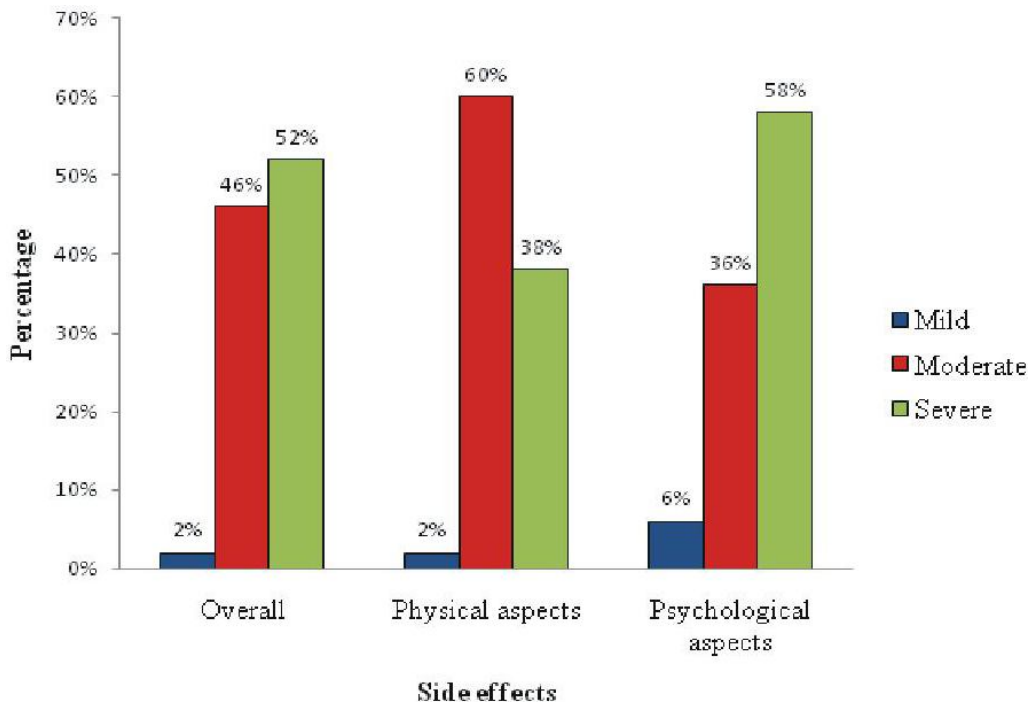
Results

Findings Related to Socio Demographic Variables

Highest percentage (36%) were in the age group of ≥ 58 years, (52%) of patients were females, (48%) were males, (34%) were illiterate, (36%) had Agricultural work, (74%) belongs to joint family, (46%) had per capita income of Rs.501-1000/- and (80%) were Hindus.

Findings Related to Clinical Characteristics

Bar Diagram Showing the Level of Side Effects Experienced by Cancer Patient Receiving Initial Course of Radiation Therapy



Majority (94%) had no family history of cancer, (36%) had habits use of tobacco misers, (40%) had head and neck type of cancer, (66%) had less than 6 months duration of cancer, (94%) of patients belongs to carcinoma category, (44%) had Stage-III cancer, (64%) had adjuvant therapy treatment and most (96%) of patients had information on radiation therapy via health care professionals.

Severity of Side Effects Experienced

The study finding shows that the overall side effects mean score was (32.4±6.2) which is 64.8% of the total score, indicates cancer patients had moderate level of side effects. However the cancer patients had severe level of side effects on 'psychological side effects' with the mean score of (7.3±2.3) which is 73%, and in relation to 'physical side effects' patients had moderate level side effects with mean score of (25.1±4.1) which is 62.9%.

Coping Strategies Adopted

The study finding shows that the overall coping strategies score was (156.9 ± 21.05) which is 62.76 % indicates cancer patients had 'partially adaptive coping'. However the highest mean score (34.8± 4.9) which is 69.6 % for the coping strategies of psychological side effects, shows patients had 'completely adaptive coping' whereas the physical side effects mean score (122.1± 17.2) which is 61.1% indicates patients had 'partially adaptive coping'.

Discussion

The overall side effects mean score was (32.4±6.2) which is 64.8% of the total score indicates cancer patients had moderate level side effects. However the higher mean score (7.3±2.3) which is 73% for 'psychological side effects' indicates patients had severe level of side effects and the lower mean score (25.1±4.1) which is 62.9% for 'physical side effects' indicates patients had moderate level side effects. This findings were supported by Chen SC, Lai YH, liao CT, Lin CC and Chang JT (2010) reported that the cancer patient receiving radiation therapy had moderate level overall symptoms and the severity of symptoms significantly related to dose

and duration of radiation therapy.[5]

The highest mean score (168.4±21) which is 68.1% was obtained by the cancer patients who were secondary educated had completely coping. This finding consistent with the study carried out by Wilson *et al.*(2000) that cancer patients need more education about cancer and its treatment, needs more emotional support.[6]

Conclusion

These results mean that radiation therapy has adverse effects (Physical and psychological) because of the changes in cell biology and toxicity. The findings revealed that though the cancer patients had severe psychological side effects, the side effects vary from mild to severe level. It was found that patient receiving initial course of radiation therapy had partially adaptive coping strategies for the therapy related side effects. So it is emphasized that the cancer patients and their care takers should have knowledge (assessment and care) and positive attitude to compact cancer and its related health consequences and to improve the quality of life.

References

1. Bihari M. Definition of side effect. Aug 2008. Available on URL [http:// drugs. about.com/od/sdrugandmedicalterms/g/side-effects_df.htm](http://drugs.about.com/od/sdrugandmedicalterms/g/side-effects_df.htm).
2. Black JM and Hawks JH. Medical Surgical Nursing, 7th (1) ed. Published by Elsevier: 2005; 360 – 65.
3. Reyes-gibby C, Mendoza T, Wang X, Easley M and Cleeland C. Symptoms and its impact on quality of life among cancer patients receiving radiation therapy. Houston: Anderson Cancer Center; 2001, 713-45.
4. Lundberg PC and Rattanasuwan O. Experiences of fatigue and self-management of Thai Buddhist cancer patients undergoing radiation therapy. *Cancer Nurs.* 2007; 30(2): 146-55.
5. Chen SC, Lai YH, Liao CT, Lin CC and Chang JT. Changes of symptoms and depression in oral cavity cancer patients receiving radiation therapy. *Oral Onco.* 2010; 46(7): 509–13.
6. Wilson SE, Anderson MR and Meischke H. Meeting the needs of rural breast cancer survivors: What still needs to be done? *Journal of Women's Health and Gender Based Medicine.* 2000; 9: 667-77.

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Learning Needs of the Post Operative Neurosurgical Patients and of their Relatives Regarding the Care after Discharge

IJSN
Volume 2, Number 3
© Red Flower Publication Pvt. Ltd

N. Meenakshisundaram

Abstract

Objective: To assess the learning needs of the Post Operative Neurosurgical patients and of their relatives regarding the care after discharge. **Materials and Methods:** A descriptive design was used. Orem's Supportive - Educative Nursing Model provided the conceptual framework for this study. Dr Achanta Lakshmi pathi Neurosurgical Centre (ALNC), Voluntary Health Services, Chennai was the setting for the study. Samples meeting the inclusion criteria were selected from patients undergoing Cranial and Spinal surgeries and their relatives using Non probability convenient sampling. The learning needs under the aspects namely Therapeutic care, Self care, Psychosocial care and Rehabilitative care were assessed using a structured interview schedule. The data were analysed using descriptive and inferential statistics. **Results and Discussion:** Almost all the patients (96%) and Majority (84%) of the relatives had more learning needs regarding Rehabilitative care. A little above half (56%) of the patients and three fourth (76%) of the relatives had moderate learning needs regarding Therapeutic care. There was a significant association ($P < 0.05$) found between the Educational status and learning needs of the patients. Among the relatives there were statistical associations between the Sex ($P < 0.01$), Occupation ($P < 0.05$) and their learning needs since majority of them were females (64%) and unemployed (60%). **Conclusion:** The findings of this study provided the base line information needed to design the discharge planning and teaching.

Keywords: Learning needs; Post operative neurosurgical patients; Relatives and care after discharge.

Introduction

The prognosis of Neurosurgical patients vary from full recovery to chronic health conditions such as cognitive and functional deficits. [1] Chronic illnesses are defined as conditions of long term duration, not curable and/or having some residual features that impose limitations on an individual's functional capabilities (Diamond & Jones, 1983). Today 400 million people (WHO estimate) suffering from mental or neurological disorders (cerebral trauma, aneurysmal rupture, stroke and brain tumours) are currently surviving due to phenomenal advances in technology and medical surgical care. The consequences of survival are sequelae of chronic health conditions such as cognitive deficits, functional

deficits in activities of daily living, pain syndromes and recreational and vocational limitations. The impact of such deficits on the person's quality of life and independence creates a need for life long health care and support from the family or significant others. Continuity of care after the discharge from the hospital depends on successful transition from hospital to home. [2] A transition is best managed when patients and their relatives receive a well designed comprehensive teaching based on their learning needs.

Statement of the Problem

A study to assess the learning needs of the post operative neurosurgical patients and of their relatives regarding the care after discharge from the Neurosurgical Department of Voluntary Health Services, Adyar, Chennai - 600 113.

Objectives of the Study

(1) To assess the learning needs of the post

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operative neurosurgical patients and of their relatives regarding the care of the patient after discharge.

- (2) To provide the base line information for designing the discharge teaching programme for the neurosurgical patients and their relatives.
- (3) To associate the selected demographic variables of the patients and their relatives with their learning needs on care after discharge.

Methodology and Materials

A descriptive design was used to assess the learning needs of the Post operative neurosurgical patients and their relatives regarding the care after discharge. Orem's Supportive - Educative Nursing Model provided the conceptual framework for this study. The samples included for the study were from Dr Achanta Lakshmipathi Neurosurgical Centre (ALNC), Voluntary Health Services, Chennai. The samples meeting the inclusion criteria were selected using Non probability convenient sampling. The data were collected using the structured interview schedule. The learning needs under the aspects namely Therapeutic care, Self care, Psychosocial care and Rehabilitative care were assessed. The data were analyzed using Descriptive and Inferential statistics.

Criteria for the Selection of Sample

Inclusion Criteria

1. Both males and females
2. Patients who have undergone cranial or spinal surgeries and are 18 years of age and above during the period after the seventh post operative day.
3. Relatives of such patients who directly involve in the patient care in the hospital and at home.
4. Patients and their relatives who can understand Tamil or English.

Exclusion Criteria

1. Patients with altered level of consciousness

and their relatives.

2. Patients with cognitive deficits and their relatives.
3. Patients who have undergone neurosurgery for more than once and their relatives.
4. Patients who are readmitted after discharge and their relatives.

Development and Description of the Tool

Separate interview guides for the patients and relatives were developed. Interview guide had two parts as mentioned below:

Part I: Demographic data

Part II: Guide to elicit answers regarding the learning needs.

There were dichotomous questions having 'Yes' or 'No' responses under the following aspects of care of Neurosurgical patients.

1. Therapeutic care (14 items for Patients & 14 times for relatives)
2. Self care (22 items for Patients & 23 items for relatives)
3. Psychosocial care (4 items for patients & 4 items for relatives)
4. Rehabilitative care (5 items for patients & 5 items for relatives)

Validation of the Tool

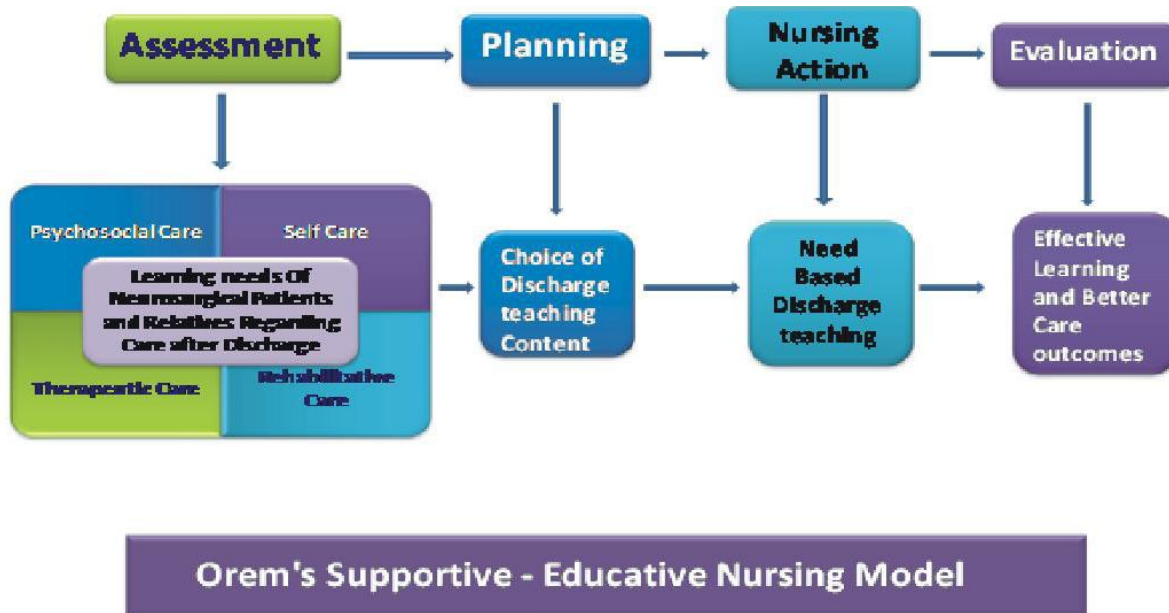
The tool was validated by the experts in the field of nursing and neurosurgery. The corrections recommended by these experts were incorporated and the tool was refined.

Scoring

The items in the tool had "Yes" or "No" responses "Yes" was scored as 0 and "No" was scored as 1. The total scores of the patients and the relatives were 45 and 46 respectively.

Conceptual Framework

Orem's Supportive - Educative Nursing Model provided the conceptual framework for this study

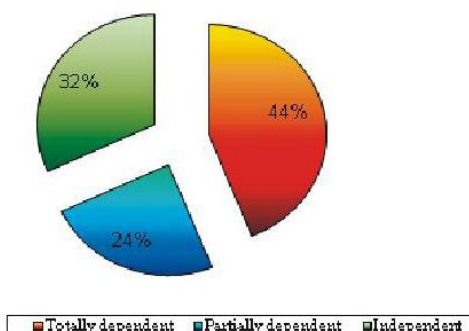


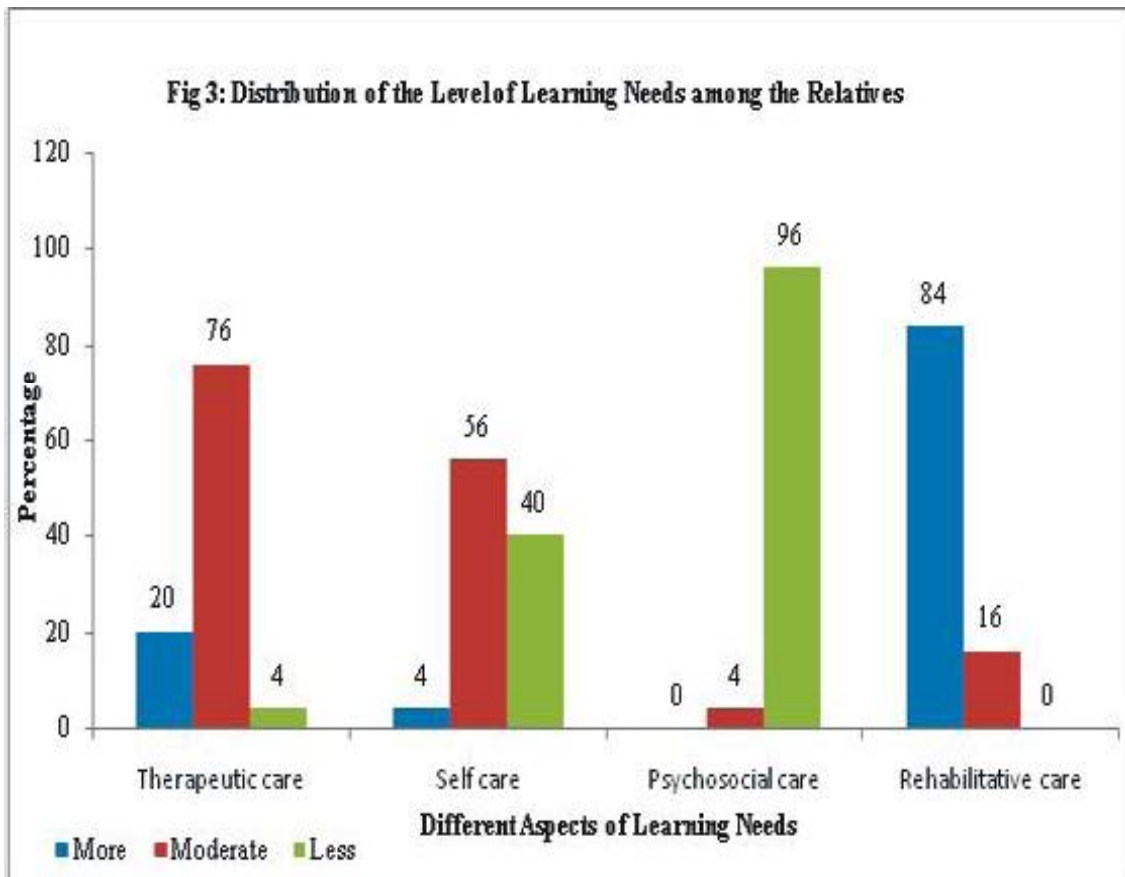
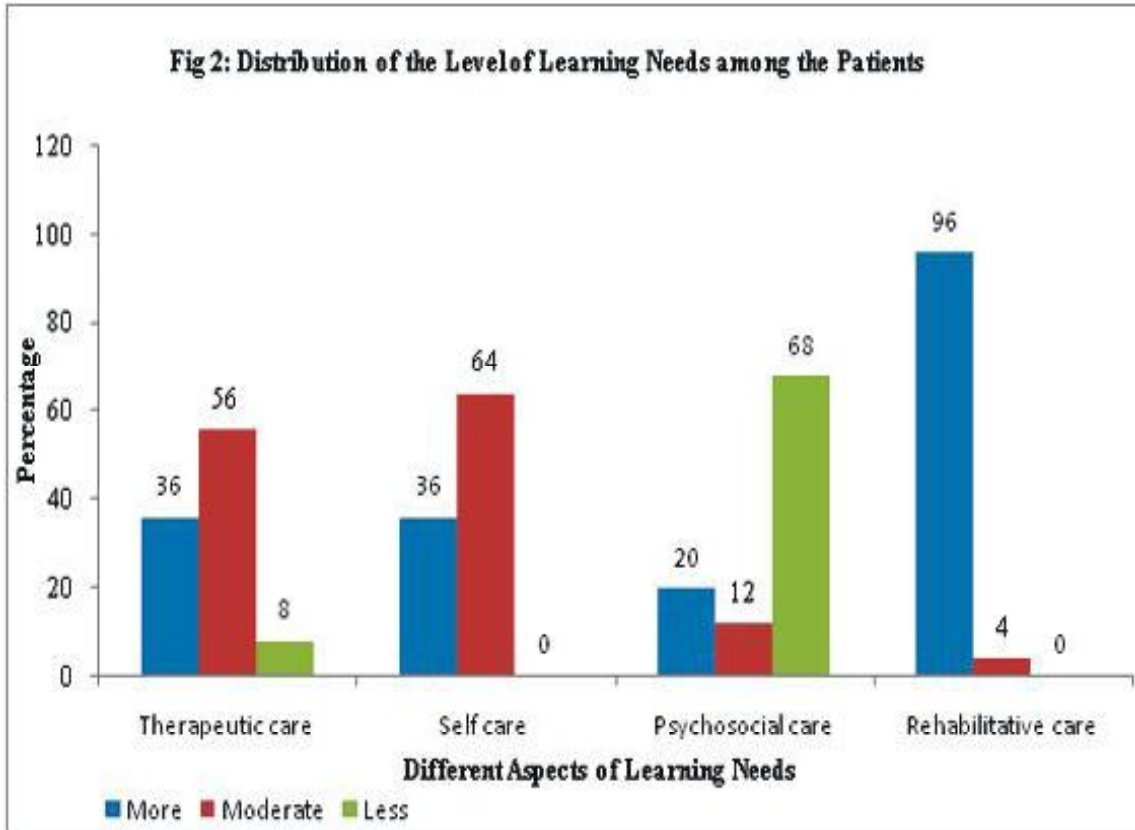
(Fig 1). This model demonstrates that the person should learn to perform required measures of externally or internally oriented therapeutic self care.[3] The patient's requirements for help are confined to decision making, behaviour control and acquiring knowledge and skills. Like the nursing process, the teaching process requires assessment. The investigator assessed and analyzed the learning needs of patients and relatives in relation to therapeutic care, self care, psychosocial care and rehabilitative care.

Results and Discussion

The second objective of the study was to provide the base line information for designing the discharge teaching programme for the neurosurgical patients and their relatives. It was found that 36% of patients and 20% of relatives had more learning needs regarding therapeutic care, 36% of patients and 4% of relatives had more learning needs regarding self care and 96% of patients and 84% of relatives had more learning needs regarding the rehabilitative care(Fig 2& 3). It was also found that 56% of patients

Fig 1: Percentage Distribution of the Level of Dependency of the Patients





and 76% of relatives had moderate learning needs regarding therapeutic care, 64% of patients and 56% of relatives had moderate learning needs regarding self care and 68% of patients and 96% of relatives had less learning needs regarding psychosocial care(Fig 2& 3). These findings supports the survey report on the need for information on various aspects (personal hygiene, change in position, feeding and keeping a therapeutic environment) of care conducted by M.Joseph and Dr.S.Sharma among relatives of patients with medical surgical conditions.[4] It also highlights the fact that preparing the patients and their relatives on the aspects of rehabilitative care requires more attention while preparing them for discharge which seems to be often neglected. A little above half (56%) of the patients and three fourth (76%) of the relatives had moderate learning needs regarding Therapeutic care. It was observed that the patients' mean scores (31.16) on all aspects of the learning needs were more than that of relatives (26.28). This was because the patients demonstrated interest in equipping themselves with the necessary skills and knowledge which would enhance health promotion positively. This supports the statement given by Potter and Perry that the patients have the ability to identify learning needs based on the implications of living with their illness.[5] There was a significant association ($P < 0.05$) found between the Educational status and learning needs of the patients. This was supported by Joanne V Hickey that the patients' educational background and intelligence should be considered while individualizing a teaching plan that is appropriate to his learning needs.[6] Among the relatives there were statistical associations between the Sex ($P < 0.01$), Occupation ($P < 0.05$) and their learning needs since majority of them were females (64%) and unemployed (60%).

Conclusion

Discovering what an individual wants to know is essential for effective learning and teaching. The findings of this study provided the base line information needed to design the discharge planning, teaching and develop an instructional manual on care after discharge for the post operative neurosurgical patients and their relatives. In turn the effective discharge teaching would ensure smooth transition from one level of care to another without sacrificing the progress that has already been achieved.

References

1. Neil -Dwyer *Get al.*, The realities of post operative disability and the cases burden. *Surgery*. 2001;83(3):215.
2. Trudy L Lanigan, The patient-family learning centre. *The Canadian nurse*.2000; 96(3):18-21.
3. Martha Raile Alligood and Ann Marriner Tomey. Nursing theory utilization and application. First edition. Missowri: Mosby Publication; 2002, 239-262.
4. Joseph M and Sharma.S, Assessing information needs of patients relatives.*Nursing Journal of India*.1996;LXXXVII(3):53-54.
5. Potter and Perry,Fundamentals of Nursing, Fifth EditionSt Louis: Mosby Publications, 2001, 470-483.
6. Joanne V Hickey. The clinical practice of neurological and neurosurgical nursing. Third Edition. Philadelphia: JB Lippincott Company; 1992, 181, 202 & 207.