A STUDY TO DEVELOP AND EVALUATE THE EFFECTIVENESS OF PALLIATIVE NURSING CARE STANDARDS FOR CANCER PATIENTS UPON THE PATIENT OUTCOMES AND KNOWLEDGE, PRACTICE AND SATISFACTION OF NURSES IN APOLLO HOSPITALS, CHENNAI.

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ABSTRACT

The present study was conducted to Develop and Evaluate the Effectiveness of Palliative Nursing Care Standards for Cancer Patients upon the Patient Outcomes and Knowledge, Practice and Satisfaction of Nurses in Apollo Hospitals, Chennai.

Objectives of the study

1. To develop and validate palliative nursing care standards for Cancer Patients.

2. To evaluate the effectiveness of palliative nursing care standards by assessing and comparing the knowledge and practice on palliative nursing care in the control and experimental group of Nurses.

3. To determine the satisfaction with the implementation of Palliative Nursing Care standards among the Experimental group on nurses

4. To evaluate the effectiveness of palliative nursing care standards by assessing and comparing the Patient outcomes-Quality of life, Palliative Care Outcomes and Emotional well being of control and experimental group of Cancer Patients.

5. To determine the correlation between Knowledge and Practice on Palliative Nursing Care scores in control group of nurses.

6. To determine the correlation between Knowledge, Practice and Satisfaction scores on Palliative Nursing Care in experimental group of nurses.

7. To determine the correlation between Patient outcomes- Quality of life, Palliative Care Outcomes and Emotional wellbeing scores of control and experimental group of Cancer Patients.
9. To determine the association between the level of knowledge, practice and satisfaction on Palliative Nursing Care after the implementation of palliative nursing care standards and the selected demographic variables of experimental group of nurses.

10. To determine the association between the level of Patient outcomes- Quality of life, Palliative Care Outcomes and Emotional Well being after implementation of palliative nursing care standards and the selected demographic and Clinical variables of control and experimental group of Cancer patients.

11. To identify the predictors of Knowledge and Practice of palliative nursing care of control and experimental group of nurses.

12. To identify the predictors of Patient outcomes- Quality of life, Palliative Care Outcomes and Emotional Wellbeing of control and experimental group of Cancer Patients.

The conceptual framework used for the study is the Modified “The Advanced Research and Clinical Practice through Close Collaboration (ARCC) Model (Melnyk, 2012). The ARCC model is used by health care systems and Hospitals for implementing evidence based practice. The components of ARCC model such as Assessment, Identification, Development and use of EBP Mentors, EBP implementation and Confirmation were modified and utilized in the conceptual framework.

Quantitative approach using quasi experimental research design was adopted for conducting the study. The setting of the study was Apollo Speciality Hospitals, Chennai for both the control and Experimental group of nurses and patients.

Phase –I of the study was the development of Palliative Nursing Care standards (PNCS).

Development of Palliative Nursing Care Standards was carried out by the
Investigator by systematic review and finalized by the PNCS Development Committee comprising of experts in the field of Medicine, Nursing and Psychology by the modified Delphi Process. The systematic review involved an extensive review of literature, including the search of electronic bases and identifying 24 documents on Palliative Care standards, removing duplicates, checking the inclusion criteria, language, themes etc and systematically reviewed 10 such documents.

Palliative Nursing care standards (PNCS) refers to care guidelines based on the National Consensus Project For Quality Palliative Care, National Quality Forum 2004 and NCCN Clinical Practice Guidelines in Oncology – Palliative Care. As they are mainly Performance Standards, the Nursing actions were listed from the care guidelines given for the use of the multi disciplinary team by delineating Nurses role in the team through the steps of Nursing Process using the Structure, Process and Outcome framework. It consists of 29 Standards: performance criteria in the five domains of Structure and Processes, Physical Aspects of Care, Psychological Socio–Cultural Aspects of Care, Spiritual, Religious, and Existential Aspects of Care and End of Life care among Cancer Patients.

The instruments used in the study for the nurses consisted of Demographic variable Proforma and Structured Knowledge Questionnaire developed by the researcher (r=0.93) and also standardized tools such as Practice Observation checklist adapted from ICU Palliative care quality assessment Survey (Levy & Curtis 2011) (Cronbach’s alpha 0.65) and Rating scale on the Satisfaction with Implementation of Palliative Nursing Care adapted from Meeting Family Needs – Nurse Questionnaire (Curtis & Engelberg 2011) 13 (Cronbach’s alpha 0.86) after obtaining permission from Robert wood Foundation. Clubbing of domain 3 & domain 4 was done in the tools used for nurses for scoring purposes.

Tools used for Patients included, Demographic Variable Proforma, Clinical Variable Proforma and standardized tools such as WHO Quality of Life Questionnaire.
(1995). (WHOQOL-BREF), Patient Outcome Scale by St. Christopher’s Association and RYFF’s Emotional Wellbeing Index (1995), after obtaining permission. Content validity was obtained from experts. Pretesting of the tools and was done and reliability was determined for the self administered structured Questionnaire by test-retest method \((r=0.98)\), for the practice tool by inter rater- inter observer method \((r=0.85)\) and for the satisfaction tool by split half technique \((r=0.90)\).

Cancer patients in Stages II & above get admitted to acute care setting for a variable period with a minimum 3-4 days and are more symptomatic during the first three days since admission here and require assessment of palliative care needs and care planning by nurses. Hence to ensure uniformity, the practice of nurses is observed for three days and data with regard to patient outcomes such as Quality of Life, Palliative care Outcomes and Emotional Wellbeing, and satisfaction of nurses is collected at the end of 3 days of nursing care.

Quantitative Research approach using a quasi experimental was adopted for conducting the study. The setting of the study for both control and experimental group of nurses and patients was Apollo Speciality Hospitals, Chennai. The study was conducted among 230 Cancer patients and 230 Nurses admitted in Apollo Speciality Hospital, Chennai, selected through purposive sampling technique. The estimated sample size estimated was 115+115 patients and nurses in both control and experimental group. Data was collected from 120+120 samples in the control and experimental group of nurses, considering the possibility of attrition. As expected, 5 nurses and 5 patients were not available for post test. Hence the final sample size is 230+230 (i.e. 115 nurses and 115 patients in the control group and 115 nurses and 115 patients in the Experimental group.

At first, 120 Nurses working in the wards were selected for the control group by purposive sampling. The pretest was conducted by administering the Structured
Questionnaire on Knowledge regarding palliative Nursing care. Then post test was conducted after four weeks to reassess the knowledge. In Patients who fulfilled the inclusion criteria such as a diagnosis of type of malignancy in TNM stage II and requiring palliative nursing care were assigned for patient care to the control group of nurses and were selected as the control group patients.

The practice of Nurses was assessed using the Practice Observation checklist. Self administration method was used to collect data from patients, after three days of care on QOL using the WHOQOL-BREF, Palliative Care Outcomes (PCOS) using Patient Outcome Scale by St. Christopher’s Association and Emotional Wellbeing by RYFF’s Emotional wellbeing index (1995).

This was followed by data collection among the 120 Nurses selected for the experimental group by purposive sampling. Pretest was conducted by administering the Structured Questionnaire on Knowledge regarding palliative Nursing care. Administration of Palliative Nursing care Standards to the Nurses in the experimental Group was by six sessions Palliative Nursing Care Standard and Criterion. A module was prepared and the content was loaded in pdf in the computer systems and Monograph was displayed in all the inpatient units. Kardex system for assessment and care printed and added to the nursing care documents. Post test was conducted to reassess the knowledge by administering the same Questionnaire.

Those cancer patients, who fulfilled the inclusion criteria and assigned for patient care to the experimental group of nurses, were selected as the experimental group of Patients. Only those patients who were not included in the control group were taken as experimental patients. The practice of Nurses was assessed using the Practice Observation checklist. Satisfaction of Nurses on palliative nursing care was assessed using the Rating scale on the satisfaction. Data was collected from patients, after three days of care on QOL, PCO and
Emotional Wellbeing. Hence, there was no duplication or overlapping of nurses and patients

**Major findings of the Study**

The profile of nurses has shown that a majority of the nurses were in the age group of 20-24 years (58.2%, 60.9%), females (97.4%, 100%), Hindus (74.8%, 69.6%), Unmarried (80%, 74.8%), having <2 years of experience (89.6%, 87.8%), qualified with B.Sc Nursing (58.2%, 65.2%) in control and experimental group respectively.

The demographic profile has shown that Cancer Patients were in age group between 51 to 65 (47.8%, 54.8%), females (58.3%, 60.9%), belonged to Hindu religion (86.1%, 81.7%), non-vegetarians (67.8%, 73.9%), had family care givers (95.65%, 98.3%), belonged to upper middle class (93.9%, 90.4%) in control and experimental group respectively.

The clinical variables of cancer patients has identified that a majority of Cancer Patients were in the category of European Co-operative Oncology Group (ECOG) score of 6 to 8 (73.04%, 76.52%), had normal weight (46.9%, 42.6%), no co-morbid conditions existed (65.2%, 66.09%), suffering from cancers of the Gastro intestinal tract in the Control Group (26.1%, 29.6%) and cancers of the Reproductive tract in (22.6%, 19.1%), were in the clinical staging II, (72.5%, 76.5%), undergoing chemotherapy (48.7%, 54.8%), had pain (56.58%, 46.96%), needed assistance for ADL (46.9%, 61.74%), had breathlessness and on Oxygen (22.6%, 18.3%), had nausea (61.7%, 55.7%), on NG, Gastrostomy/ Jejunostomy (16.5%, 20.9%), had hair loss (39.1%, 36.5%), had constipation (27.8%, 40%), had sleep problems of early insomnia (35.7%, 31.3%) and complaints of fatigue (46.9%, 50.4%) in the Control and Experimental group respectively.

The posttest knowledge of nurses on Palliative nursing Care was higher in the Experimental group (16.09 + 2.55) compared to the post test knowledge of nurses in the
control group (10.49 + 3.2) at p<0.01.

The comparison of practice of palliative nursing care scores of control group of nurses (40.67 + 10.33) with the practice scores of experimental group of nurses (68.23 + 6.70) found a “t” value of 24.00 at p<0.001. The Experimental group of Nurses caring for cancer patients had satisfaction scores (38.60 +.5.02) and a majority of them were moderately satisfied (86.1%) with the implementation of Palliative nursing care standards.

Overall QOL scores of experimental group of Cancer patients was higher (70.74 + 5.74) compared to the QOL of control group of Cancer patients (35.96 + 8.91) with t value of 35.74 at p<0.05) and shows the effectiveness of PNCS upon QOL scores. The Palliative Care Outcome scores, an indication of unmet palliative care need was higher in the control group (30.53 + 2.84) when compared to the experimental group (11.97 + 6.12) with t value of 29.12 with p<0.001. This finding establishes that the intervention is relieving unmet Palliative Care needs. The emotional wellbeing scores of experimental group (M= 76.55 + 5.75) were higher compared to the control group (M= 22.29 + 5.75) which infers that the implementation of PCNS is effective in improving the Emotional Wellbeing of cancer patients inspite of having similar physical problems.

The variables of nurses such as knowledge, practice and satisfaction are strongly linked to each other. There was a significant positive correlation between Practice and Satisfaction of Nurses on Palliative Nursing Care with “r” value of 0.92 at p<0.01 in the “Structure and process of Care” domain of palliative nursing care standards. There was also significant positive correlation between Satisfaction on Palliative Nursing Care and Knowledge in the domain, ”Care of cancer patient during dying phase” of palliative nursing care standards with “r” value of 0.69 at p<0.05 in the experimental group of nurses.

Interrelationships were also observed between the dependent variables of patients. There was significant correlation of QOL and PCO scores with “r” value= 0.25 (p<0.01) in
the control group of patients and “r” value= 0.35 (at p<0.05) in the experimental group of patients. The correlation of PCO scores and Emotional Wellbeing was significant (“r” value= 0.69 at p<0.001) in the experimental group of patients. There is significant positive correlation between QOL and Emotional Wellbeing (“r” value=0.25 (at p<0.01) in the experimental group of patients and this establishes the totalistic effect of PNCS on patient outcomes.

Palliative care nursing aspects like nutrition, activities of daily living, control of pain with pharmacological management; body image related self concept and self-competence are all hypothesized to influence the quality of life from the pathway analysis to logistical regression by the investigator. The focus should be on the development of a new theory and Empirical studies to test these theories. The development and dissemination of Standards, Guidelines, Pathways etc determine the criteria for the audit cycle, and eventually improve quality of care. Implementation of palliative nursing care standards sensitizes nurses to anticipate and assess patients for pain and refractory symptom and to meet the palliative needs of patients ensuring autonomy and decision making. Specialist Palliative Nurses and Palliative Nurse Practitioners can perform specialist practice with credentialing and developing the competence in caring for various educations to nurses, caregivers, patients and families.

The results shows that there was significant association between post test knowledge on Palliative Nursing care and Qualification of experimental group of nurses at p<0.05. There was also significant association between the practice of palliative Nursing Care and total years of experience at p<0.05 in the experimental group of nurses. It can also be observed that there was association between level of satisfaction and number of years of experience in caring for cancer patients at and curriculum as a source of information of palliative nursing care at p<0.05 in the experimental group of nurses.
Significant association was also observed between QOL and selected demographic variables such as Language, diet and residence at p<0.05 among experimental group of Cancer patients. Interestingly, a significant association was observed between PCO and level of Education at p<0.001 among the control group of cancer patients. There was significant association between Emotional Wellbeing and Language at p<0.001 among the control group of Cancer patients. There was significant association between the Emotional wellbeing of experimental group of cancer patients and selected demographic variables such as age p<0.05, Education p<0.01 and diet at p<0.01.

Thus Educators must plan for integrating palliative Nursing in the curriculum at the undergraduate level, develop programs for specialization, and internship for hands-on practice. Nursing policy-makers are responsible for framing proactive policy on palliative care and appropriate nursing workforce and continuing education. Disseminating and implementing the findings of research in the basic, translational and clinical research, in the area of pain and symptom management, advance directives, end of life care and bereavement care and Collaborative research with other specialties. More survey and evaluate Palliative Nursing Care Standards in areas like End Stage diseases : CLD, CCF, Neuro Motor illnesses, Geriatrics and HIV-AIDS Etc.

The implementation of Palliative Nursing Care Standards has improved knowledge, practice and satisfaction levels of nurses and hence is able to perform better Palliative Nursing Care. Hence, cancer patients had better QOL, positive Emotional Wellbeing and reduced Palliative Care Outcomes.