



## EFFECTIVENESS OF SELF-INSTRUCTIONAL MODULE ON KNOWLEDGE OF STAFF NURSES REGARDING PALLIATIVE CARE OF CANCER PATIENTS

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### **Abstract**

The World Health Organization estimates that non-communicable diseases will be as prevalent as communicable diseases, which have been the Main cause of high morbidity and mortality among the world population. It is a major undertaking for health systems worldwide to deliver appropriate palliative care. Many countries have experienced dramatic improvements in population life expectancy. The proportion of elderly people, and particularly those over 80, has increased significantly in recent decades. As populations age, people die in greater numbers after long illnesses from heart disease, cerebrovascular disease including stroke, chronic respiratory disease and respiratory infections, and cancer. Palliative care is concerned both with patients and their families and with the enhancement of quality of life from an early stage in a life-threatening illness. The objectives of the study was to assess the effectiveness of self-instructed module on palliative care, To find out the association between post-test knowledge scores of staff nurses and selected demographic variables such as age, sex, religion, education, clinical experience, marital status. Evaluative research approach was selected for the study. Pre-Experimental with one group pre-testpost-test design was research design. The sample of study comprises of 60 staff nurses of cancer hospital& research institute Gwalior [M.P.] and underwent self-instructional module, fulfilling the sample criteria. Convenient sampling technique was adopted to select the sample of this study. Structured knowledge questionnaire was used for the study. Result showed that **H1 is accepted that means SIM is effective & there is significant difference between the pre-test and post scores of the staff nurses.** The mean of pre-test and post test score are 9.98 and 19.88 respectively and standard deviation of pre-test and post-test are 4.24and 6.94 respectively. The overall mean post-test knowledge score (19.88) of staff nurses of cancer hospital is apparently higher than overall mean Pre-test score (9.98) and is significant.

## Introduction

It is estimated that around 3.4 million people (2006) ICMR suffer from cancer at any given time in India. Eight lakh persons were diagnosed to have cancer in the year 2000 and of this 550,000 died in the same year. 80% of patients reach hospital in advanced stages of the disease. The majority needs palliative care, whereas only minority of the needy receive this input. Palliative care was started for care of cancer patients, now it is been used for many other chronic diseases like renal failure, COPD etc. Indian history, the Eighteen institutions built in India by king Ashoka (273 -232 BC) had characteristics very similar to modern hospices. In 1986 professor D 'Souza opened the first hospice, Shanti Avedna Ashram in Mumbai.

At the same time pain centres were established at the regional cancer centre Trivandrum, Kerala with the assistance of WHO subsidy and at Kidwai Memorial Institute of Oncology, Bangalore, and Karnataka. From the 1990s onwards there was a significant increase in the movement of development of Hospice and Palliative care. But even today there are many states in India where Palliative care facility do not exist.<sup>5</sup>

At the 6<sup>th</sup> annual meeting of Indian Association of Palliative Care (Calicut 1999) over 300 delegates met to learn more from each other and some of the tasks to be tackled in the immediate future were. Implementation of home based palliative care in India, Ethical base of palliative care and introduction of palliative care principles into medical And Nursing curriculum.

## Objectives

Objectives of the study were to assess the effectiveness of self-instructed module on palliative care. And to find out the association between post-test knowledge scores of staff nurses and

selected demographic variables such as age, sex, religion, education, clinical experience, marital status.

## **Review of Literature**

### ***Effectiveness of self-instructional module***

A study was investigated conducted to evaluate the effectiveness of using Self Clinical Instruction Modules in teaching palliative care to undergraduate medical students of Palliative Medicine, School of Medicine and Pharmacology, University of Western Australia where student evaluation of the palliative care attachment highlighted certain shortcomings. A 2-hour Self Clinical Instruction Module (SCIM) workshop was designed and implemented to address these issues. Pre workshop and post workshop questionnaires showed a marked increase in self-rated competence and suggested this improvement was directly attributable to the workshop. A follow-up survey of a small number of students demonstrated this increase was sustained over time. SCIMs appeared to be an effective instructional format in the small group setting. The study showed a broad range of topics in a cost-effective manner and with minimal tutors and resources.

A study was conducted on the self-instruction module as a tool for improving students' understanding of breast cancer by the Department of Surgery, University of Kentucky. The Self Instruction Module (SIM) is a novel format for teaching clinical skills. A multidisciplinary SIM was presented to 30 medical students to improve their understanding of breast cancer. The SIM consisted of 12 10-minute stations, each covering a different aspect of the diagnosis and management of breast cancer. All ratings were positive. The students agreed most that the small-group format was an effective instructional method (mean, 4.6). Both students and faculty agreed that the SIM increased students' clinical skills (mean, 4.4 in both evaluations).

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Nahomi Clement (2008), a study was conducted to identify residential aged care nurses' current knowledge of palliative care for older residents in need of end-of-life care. It was an analytical study using a validated questionnaire tool - Palliative Care Quiz for Nursing combined with a demographic survey of Registered Nurses and assistants in nursing working in five high care residential aged care facilities in inner city region of Sydney, Australia. The results revealed that the mean score for Registered Nurses was 11.7 (SD 3.1) and for AINs 5.8 (SD 3.3), the difference between scores being significant ( $t = 8.7$ ,  $df 95$ ,  $P = 0.000$ ). Misconceptions in



palliative care were identified for both the groups of care givers. This research has highlighted the need for ongoing palliative care education for both the groups of primary care givers.

Ronaldson S, et.al(2007) A cross-sectional descriptive survey was conducted in 2007 to determine the knowledge, attitude and practice of physicians and nurses towards palliative care in Lebanon and to assess the need and model for service delivery using self-administered questionnaire. 1873 nurses and 1884 physicians participated in the study. The response rate was 51% for nurses and 13% for physicians. Around 93% of nurses and 96% of physicians were able to identify the goals of PC. The majority (94% to 99%) believed that terminally ill patients and their families should be informed of the diagnosis and prognosis. Only 19% percent of physicians routinely informed terminally ill patients about their diagnosis

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group format was an effective instructional method (mean, 4.6). Both students and faculty agreed that the SIM increased students' clinical skills (mean, 4.4 in both evaluations).

An experimental study was conducted at St. John's Medical College Hospital, Bangalore in 2001. The aim of the study was to introduce Palliative care into under graduate medical and nursing education, and ascertain if such training improves student's knowledge of Palliative care. A total of 39 medical students (4<sup>th</sup> year) with a control group of 45 students obtained average scores of  $9.08 \pm 2.5$  on pre-test,  $10.43 \pm 1.63$  on post-test 1, and  $8.43 \pm 1.36$  on post-test 2. A total of 30 nursing students (3<sup>rd</sup> year) with control group of 32 students obtained scores of  $8.7 \pm 1.80$  on pre-test,  $10.73 \pm 2.63$  on post-test 1 and  $8.23 \pm 4.10$  on post-test 2. The study revealed that there was no lasting improvement in the knowledge of 4<sup>th</sup> year medical and 3<sup>rd</sup> year nursing students following five weekly lectures. It also has revealed that inclusion of Palliative care in the undergraduate teaching of Medical and Nursing students in India is feasible, but needs to be given the curriculum content, teaching methods and evaluation techniques.

NIOSH ALERT A survey was conducted in Australia, on "Nurses knowledge of Palliative care in the Australian Capital Territory". Four hundred and fifty five registered and enrolled nurses were given the questionnaire of which only 247 returned it. The overall mean score obtained was 12.4 of 20. It also revealed that nurses with Oncology or Palliative experience have better knowledge of Palliative care than others and there is lack of knowledge of complex symptoms found in Palliative care patients.

An experimental study conducted among 134 nurses in Japan on self-reported practice, confidence, and knowledge of nurses on Palliative care found that after 1 yr activity of Palliative care team, in some areas of Palliative care nurses did not adhere to the recommended practices and had knowledge deficit. However daily Palliative care team activities including educational programs and clinical consultation service could improve their practice and knowledge level

## **Research Methodology**

The research design selected for the present study is Pre-Experimental with one group pre-test post-test design. **Research design one group pre-testpost-test research design**

The study was conducted in the cancer hospital research institute Gwalior, Madhya Pradesh. Target population for the study was staff nurses of cancer hospital& research institute, Gwalior, receiving self-instructional module during the period of study. The sample of study comprises of 60 staff nurses of cancer hospital& research institute Gwalior [MP] and underwent self-instructional module, fulfilling the sample criteria. Convenient sampling technique was adopted to select the sample of this study. **Description of tool**The tool comprised of two sections:**section a**Demographic data consisting of items seeking information about background data such as age, gender, religion, education, clinical experience, marital status, oncological experience, palliative care workshop. **Section b**Structure questionnaire was prepared on knowledge regarding palliative careIt consists of 30 items all of which are scored. The total score was 30 and each question contains of four answers out of which one answer is correct. The correct answer is given a score of 'one' and each wrong response a score of 'zero'.

**Validity and Reliability** Content validity of tool was established by 4experts who were from the expert. The tool was tested for reliability on 6 peoples from the JAH hospital Gwalior [M.P.].

For structured knowledge questionnaire the reliability of tool was computed by Karl Pearson's correlation formula. The reliability coefficient was found to be 0.93 which showed that the tool was reliable.Before collecting the data, permission was obtained from the concerned authority. Keeping in mind the ethical aspect of research, the data was collected after obtaining the informed consent of the sample. The samples were assured anonymity and confidentiality of information provided by them. Pre-test was conducted by administration of SIM. The duration of the session was 30 minutes. Post-test was conducted to evaluate the effectiveness of self-instructional module.

The method of data collection adopted for the study was structured self-administered Questionnaire. The participants of the study were 60 staff nurses who were selected as per the convenient sampling method; good rapport was established with the staff nurses of cancer

hospital. Consent to participate in the study was obtained from the samples. *I:* With prior informed consent, pre-test was conducted through structured knowledge questionnaire and for the treatment group. *Phase II:* The investigator issued the self-instructed module in the form of informational book. *Phase III:* After which day post-test conduct (in final study) to the same treatment group. All the people were cooperative and the investigator expressed her gratitude for their co-operation.

## Result and Discussion

*Frequency and percentage of staff nurses of cancer hospital according to age, gender, education, clinical experience, religion, marital status, oncological experience.*

- **Age:**-Distribution of the subject by age revealed that majority of the subject, i.e. 32 were between 21-25 (53.33%), 23 were between 26-30 (38.33%), 5 were between 31-35 (8.33%) and 0 were between 36-40 (0%) and were 0 between 41 years & above (0%) years of the age group.
- **Gender:**-As per the finding of the study, the majority of the subject, i.e. 26(43.33%) were male and 34(56.66%) were female.
- **Education:**-With regard to the education 5(8.33%) were from ANM, 9(15%) were from GNM, 46(76.66%) were from B.sc nursing, 0(0%) were from Post B.sc.
- **Clinical experience:**-In clinical experience 15(25%) were from less than 1 yrs, 45(75%) were from 2-5 yrs, 0(0%) were from 6-10 yrs, 0(0%) were from 11-15 yrs, 0(0%) were from 16-20 yrs.
- **Religion:**-In relation to the religion most of the subjects were from Hindu 44(73.33%), 3(5%) were from Muslim, 13(21.66%) were from Christian, 0(0%) were from other.
- **Marital status:**-In relation to the marital status 18(30%) were from married, 42(70%) were from unmarried and 0 (0%) were from separated, 0(0%) were from divorce.
- **Oncological experience:**-Regarding the source of clinical experience 14(23.33%) were from less than 1 year, 46(76.66%) were from 2-6 year and 0(0%) were from 7-11 yrs, 0(0%) were from 12-15 yrs, 0(0%) were from 17 yrs & above.

**Effectiveness of SIM on knowledge of staff nurses regarding palliative care by using ‘Z’ Test value.** pre-test and post-test knowledge score which were obtained by the use of structured questionnaire on of prevention of dengue fever. The effectiveness of SIM in term of knowledge increased. The data were compiled into master sheet and analysed.

This section is further classified into subsection:

- a) Mean and standard deviation of pre-test and post-test knowledge score of staff nurses regarding palliative care.
- b) Values of mean, standard deviation, mean%, Z test and p.

The hypothesis is formulated in this regard as

Knowledge	Mean	Standard Deviation	Mean difference	Sed	Z value
PRE TEST	9.98	4.24	5.74	0.60	4.04
POST TEST	19.88	6.94			

## HYPOTHESIS

*H<sub>1</sub>- there will be significant effectiveness of SIM on knowledge of staff nurses regarding palliative care of cancer patient at cancer hospital.*

### ➤ The Effectiveness of SIM regarding palliative care.

Comparison between the pre-test and post-test knowledge Z test value =4.04. Tabulated value of Z test at 5% level of significance. So Z test of pre-test and post-test of calculation > 0.05 level of significance .Z calculated > Z tabulated. **Hence H<sub>1</sub> is accepted that means**

**SIM is effective & there is significant difference between the pre-test and post scores of the staff nurses.** The mean of pre-test and post test score are 9.98 and 19.88 respectively and standard deviation of pre-test and post-test are 4.24 and 6.94 respectively.

❖ Association between the Demographic Variable and the Post Test Knowledge Score. Association was done between Post Test Scores and Selected Demographic Variable such as age, sex, religion, education, experience, marital status, religion, oncological experience. Result shows there is significant association between subject religion of post test scores and Demographic variables. Research hypothesis H<sub>2</sub>- “There will be significant association between post test score of staff nurses regarding palliative care in cancer patient at cancer hospital and selected demographic variables (ie religion) is accepted.

### **Nursing Practice**

There is several implication of the present study for nursing practice. Administration of SIM on palliative care for staff nurses at cancer hospital to improve the knowledge of palliative care. To educate the staff nurses of cancer hospital regarding palliative care.

### **Nursing Administration**

The administration has the responsibility to provide nurses with substantial continuing education opportunities. This will enhance the knowledge of health professionals and will help them to lead the patient in a correct direction in leading an excellent quality of life and managing their treatment and complication, which is the toughest vital part in case of palliative care.

### **Nursing Education**

Nursing curriculum should take initiative to public book and articles in journals and conduct health education, demonstration, and skit regarding palliative care. They should also motivate staff nurses to take patient care properly. Continuing nursing education programme, state and



national conferences, workshop, seminars and symposium can be held for all nursing personal, patients/attenders to update their knowledge.

### **Nursing Research**

Promote more research in innovative area of nursing practice. Nursing researches can conduct interactive sessions for maintaining healthy practice related to palliative care, the protocol may be developed as guidelines for future research in different setting.

### **Conclusion**

The main purpose of the study was to assess the effectiveness of self-instructed module regarding palliative care in cancer patient at the cancer hospital. Finding of this study in relation to other earlier conducted studies also showed that other teaching strategies like video assisted teaching programme, pamphlets, computer assisted learning etc are helpful in increasing the knowledge of the staff nurses.

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