To Assess the Knowledge and Attitude of Nursing Officers Towards Cancer Care in A Selected Hospital in Mumbai

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Abstract

Background: Cancer care requires competent and knowledgeable nursing officers who play a crucial role in prevention, treatment, symptom management, and palliative care. Adequate knowledge and a positive attitude among nursing officers are essential for delivering quality cancer care.

Objectives:
1. To assess the pre-test knowledge and attitude of nursing officers towards cancer care.
2. To evaluate the effectiveness of a structured teaching programme on knowledge and attitude regarding cancer care.
3. To find the association between pre-test knowledge and attitude scores with selected demographic variables.

Methodology: An experimental one-group pre-test post-test research design was adopted. A total of 60 nursing officers working in a selected hospital in Mumbai were selected using convenience sampling technique. Data were collected using a structured knowledge questionnaire and a Likert scale for attitude. A structured teaching programme on cancer care was administered, followed by a post-test after 7 days.

Results: The mean post-test knowledge and attitude scores were significantly higher than pre-test scores. The calculated t value showed a statistically significant improvement at $p < 0.05$. Significant association was found between knowledge scores and selected demographic variables such as years of experience and previous exposure to cancer care.

Conclusion: The structured teaching programme was effective in improving the knowledge and attitude of nursing officers towards cancer care. Continuous education and training programs are recommended to enhance oncology nursing practices.

Keywords: Cancer care, Knowledge, Attitude, Nursing officers, Experimental study.

Article

Introduction: Cancer is one of the leading causes of morbidity and mortality worldwide. According to the World Health Organization, cancer cases are increasing rapidly, particularly in developing countries like India. Nursing officers play a vital role in cancer prevention, early detection, treatment administration, symptom management, psychological support, and palliative care.

Adequate knowledge and a positive attitude among nursing officers are crucial for providing holistic and compassionate cancer care. Lack of knowledge and negative attitudes may adversely affect patient outcomes, quality of care, and patient satisfaction. Hence, assessing and improving the knowledge and attitude of nursing officers towards cancer care is of paramount importance.

Need for the Study: With the rising incidence of cancer in India, hospitals are increasingly managing cancer patients across various departments. Nursing officers often serve as the primary caregivers, yet many lack formal oncology training. This gap highlights the need to assess their knowledge and attitude and to implement educational interventions to improve cancer care services.

Objectives of the Study:
1. To assess the pre-test knowledge of nursing officers regarding cancer care.
2. To assess the pre-test attitude of nursing officers towards cancer care.
3. To evaluate the effectiveness of a structured teaching programme on knowledge and attitude.

4. To find the association between pre-test knowledge and attitude with selected demographic variables.

Hypotheses:

* H_1: There will be a significant difference between pre-test and post-test knowledge scores of nursing officers regarding cancer care.
* H_2: There will be a significant difference between pre-test and post-test attitude scores of nursing officers towards cancer care.
* H_3: There will be a significant association between pre-test knowledge and attitude scores and selected demographic variables.

Review of Literature: A review of relevant literature provides insight into previous research conducted on knowledge and attitude of nurses towards cancer care and helps in identifying research gaps.

A quasi-experimental study was conducted by Sharma et al. (2018) in a tertiary care hospital, Delhi, to assess the knowledge and attitude of staff nurses regarding cancer care. The study included 80 staff nurses selected through convenience sampling. The findings revealed that majority of nurses had moderate knowledge and neutral attitude in the pre-test, which significantly improved after a structured teaching programme. The study emphasized the need for continuous oncology education for nurses.[1]

A descriptive study conducted by Rani and Lakshmi (2019) at a government hospital in Chennai assessed the knowledge of 100 staff nurses regarding cancer management. The results showed that 62% of nurses had inadequate knowledge, especially related to chemotherapy side effects and palliative care. The study recommended periodic in-service education programs.[2]

A pre-experimental study by Patil et al. (2020) in selected hospitals of Bengaluru evaluated the effectiveness of a structured teaching programme among 60 nursing officers. The post-test knowledge and attitude scores showed statistically significant improvement ($p < 0.05$), indicating the effectiveness of educational interventions in improving cancer care competencies.[3]

Kulkarni et al. (2020) conducted a cross-sectional study in Pune among 75 staff nurses working in oncology and medical wards. The study revealed that although nurses had a positive attitude towards cancer pain management, there were significant knowledge gaps related to opioid administration and pain assessment tools.[4]

A descriptive correlational study conducted by Thomas and George (2021) in a tertiary care hospital in Kerala assessed the attitude of 90 staff nurses towards caring for cancer patients. The study findings indicated that nurses with prior oncology exposure demonstrated significantly more positive attitudes compared to those without oncology experience.[5]

A study conducted by Joshi et al. (2022) in selected hospitals of Mumbai assessed the knowledge and attitude of 120 nurses regarding palliative care in cancer patients. The results showed that nurses possessed limited knowledge but favorable attitudes, highlighting the need for formal palliative care training programs.[6]

A quasi-experimental study by Reddy et al. (2023) among 70 nursing officers in Hyderabad reported a significant increase in post-test knowledge scores following an educational intervention on cancer care. The study concluded that structured teaching programs are effective in enhancing oncology nursing knowledge.[7]

A cross-sectional study conducted by Mehta et al. (2024) in Ahmedabad assessed knowledge and attitude regarding cancer screening among 110 nurses. The study revealed inadequate knowledge related to screening guidelines, although nurses showed a positive attitude towards early detection and prevention of cancer.[8]

Research Methodology:

Research Approach: Quantitative research approach.

Research Design: Experimental one-group pre-test post-test design.

Study Setting: Selected hospital, Mumbai in the year of 2025

Population: All nursing officers working in the selected hospital.

Sample Size: 60 nursing officers.

Sampling Technique: Convenience sampling technique.

Inclusion Criteria:

• Nursing officers willing to participate

• Nursing officers with minimum 6 months of experience

• Nursing officers available during data collection

Exclusion Criteria:

• Nursing officers on leave

• Nursing officers working exclusively in oncology wards

Variables:

• Independent Variable: Structured Teaching Programme (STP) on cancer care

• Dependent Variables: Knowledge and attitude of nursing officers

• Demographic Variables: Age, gender, educational qualification, years of experience, previous exposure to cancer care

Tools for Data Collection

1. Demographic Proforma
2. Structured Knowledge Questionnaire

• 30 multiple choice questions

• Score: 0–30

3. Attitude Scale

• 20 statements (5-point Likert scale)

• Score: 20–100

Intervention

A Structured Teaching Programme on:

• Basics of cancer

• Risk factors and prevention

• Early detection and screening

• Treatment modalities

• Nursing management and palliative care

Post-test conducted after 7 days.

Data Analysis

• Descriptive statistics: frequency, percentage, mean, SD

• Inferential statistics: paired t test, chi-square test

Results and Data Analysis

Section I: Demographic Characteristics of Nursing Officers (N = 60)

Demographic Variable	Category	Frequency (f)	Percentage (%)
Age (years)	21–30	28	46.7%
	31–40	22	36.6%
	>40	10	16.7
Gender	Female	42	70.0%
	Male	18	30.0%
Educational Qualification	GNM	25	41.07%
	BSc Nursing	30	50.0%
	MSc Nursing	05	8.3%
Years of Experience	<5 years	24	40.0%
	5–10 years	21	35.0%
	>10 years	15	25.0%
Previous Exposure to Cancer Care	Yes	26	43.3
	No	34	56.7%

Section II: Assessment of Pre-test and Post-test Knowledge Scores

Knowledge Level	Pre-test f (%)	Post-test f (%)
Inadequate (0–10)	22 (36.7%)	4 (6.6%)
Moderate (11–20)	30 (50%)	14 (23.4%)
Adequate (21–30)	8 (13.3%)	42 (70%)

Mean, SD and Paired t Test for Knowledge Scores

Test	Mean	SD
PreTest	14.2	4.1
PostTest	23.6	3.8

Paired t test value = 14.87

$p < 0.05$ (Significant)

This indicates a statistically significant improvement in knowledge after the structured teaching programme.

Section III: Assessment of Pre-test and Post-test Attitude Scores

Level of Attitude

Attitude Level	Pre-test f (%)	Post-test f (%)
Unfavorable (20–46)	18 (30%)	5 (8.3%)
Neutral (47–73)	28 (46.7%)	10 (16.7%)
Favorable (74–100)	14 (23.3%)	45 (75%)

Mean, SD and Paired t Test for Attitude Scores

Test	Mean	SD
Pre-test	58.4	8.2
Post-test	82.1	7.6

Paired t test value = 16.25

$p < 0.05$ (Significant)

This shows a statistically significant improvement in attitude towards cancer care.

Section IV: Association between Pre-test Knowledge and Selected Demographic Variables, Chi-Square Test Analysis

Demographic Variable	χ² value	Table value	p value Significance
Age	4.62	5.99	>0.05 Not significant
Gender	1.84	3.84	>0.05 Not significant
Educational qualification	6.78	5.99	<0.05 Significant
Years of experience	7.92	5.99	<0.05 Significant
Previous exposure to cancer care	8.34	3.84	<0.05 Significant

Section V: Association between Pre-test Attitude and Demographic Variables

Demographic Variable	χ² value	Table value	p value Significance
Age	3.91	5.99	>0.05 Not significant
Gender	2.10	3.84	>0.05 Not significant
Educational qualification	7.21	5.99	<0.05 Significant
Years of experience	6.85	5.99	<0.05 Significant

Summary of Findings:

- Majority of nursing officers had moderate knowledge and neutral attitude in pre-test
- Post-test knowledge and attitude scores significantly improved
- Structured teaching programme was effective
- Knowledge and attitude were significantly associated with education, experience, and exposure to cancer care

References:

1. Sharma R, Gupta S, Verma M. Effectiveness of structured teaching programme on knowledge and attitude of staff nurses regarding cancer care. Indian J Nurs Stud. 2018;9(2):45–50.
2. Rani P, Lakshmi K. Knowledge regarding cancer management among staff nurses in a tertiary care hospital. Nurs J India. 2019;110(6):260–263.
3. Patil S, Desai A, Kulkarni R. Effectiveness of structured teaching programme on knowledge and attitude regarding cancer care among nurses. Int J Community Health Nurs. 2020;7(1):33–38.
4. Kulkarni P, Jadhav S, More R. Knowledge, attitude and practice regarding cancer pain management among nurses. Indian J Palliat Care. 2020;26(3):356–361.
5. Thomas A, George L. Attitude of nurses towards caring for cancer patients in a tertiary care hospital. Asian J Nurs Educ Res. 2021;11(4):482–486.
6. Joshi S, Mehra P, Kulkarni V. Knowledge and attitude regarding palliative care among nurses in Mumbai. Indian J Palliat Nurs. 2022;28(2):98–104.
7. Reddy S, Kumar P, Naik R. Impact of educational intervention on oncology nursing knowledge. Int J Nurs Educ. 2023;15(1):22–27.
8. Mehta D, Shah N, Patel R. Knowledge and attitude of nurses towards cancer screening. Gujarat Med J. 2024;79(1):41–46