Effectiveness of Certificate Program on Oncology Nursing

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Abstract- Oncology nursing is a specialty practice. Continuing Nursing education on knowledge and clinical skills will enable the nurses to provide high-end quality care. Oncology certificate program impart training to nurse to develop knowledge and skill have on regarding chemotherapy management, care to patients receiving radiation therapy, and acquire competency in central line management, etc. One month certificate program on Oncology Nursing Center of Excellence (COE) with the title “Fight the Fight” was organized in discussion with consultants to enhance the knowledge and skill of the nurses for the specialty practice across the Apollo group. A customized tool kit was designed to serve as a guide for the COE activities of the month. Six Apollo hospital across the country who has specialized oncology unit has taken up the program simultaneously. A quasi - experimental one group pretest and posttest were done to assess the effectiveness of the program in Apollo Hospital, Delhi. The campaign enhanced the knowledge of nurses about cancer and its treatment, to improve the quality of life of patients. The study showed that there was a significant difference in the Pre-test and post-test knowledge score of the staff nurses. Therefore the certification program on oncology Nursing was found to be effective.

Keywords: oncology, nursing, staff nurses, cancer, survivors, certificate program.

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Abstract- Oncology nursing is a specialty practice. Continuing Nursing education on knowledge and clinical skills will enable the nurses to provide high-end quality care. Oncology certificate program impart training to nurse to develop knowledge and skill have on regarding chemotherapy management, care to patients receiving radiation therapy, and acquire competency in central line management, etc. One month certificate program on Oncology Nursing Center of Excellence (COE) with the title “Fight the Fight” was organized in discussion with consultants to enhance the knowledge and skill of the nurses for the specialty practice across the Apollo group. A customized tool kit was designed to serve as a guide for the COE activities of the month. Six Apollo hospital across the country who has specialized oncology unit has taken up the program simultaneously. A quasi-experimental one group pretest and posttest were done to assess the effectiveness of the program in Apollo Hospital, Delhi. The campaign enhanced the knowledge of nurses about cancer and its treatment, to improve the quality of life of patients. The study showed that there was a significant difference in the Pre-test and post-test knowledge score of the staff nurses. Therefore the certification program on oncology Nursing was found to be effective.

Keywords: oncology, nursing, staff nurses, cancer, survivors, certificate program.

I. INTRODUCTION

The nursing profession is unique among the health care professions and has the potential capacity to implement wide-reaching changes in the health care system. Nursing is the largest workforce in the health care segment and has an immense need of well-trained nurses who are not only technically sound but also specialized in various fields and abreast with the latest health care technologies.

Nursing is one of the professions that is evolving rapidly. Lifelong learning is inevitable in the nursing profession. Nursing knowledge gets transformed through research evidence and the incorporation of theory in to nursing practice. Nursing research utilization of nursing process hones the clinical nursing practice. Evidence based nursing interventions focus on influencing the health status and quality of life of the cancer patients. Nursing continuing education create an opportunity for nurses to learn and advance their techniques in safe patient care. Nurses attain the ability to deliver quality nursing care through education incorporated with clinical experience. Moreover on job training and education is also considered as an imperative strategy for the retention of nurses.

Center of excellence campaign on Oncology Nursing was conducted in September 2018 as a part of clinical differentiation, a lever of Annual operating plan. Oncology nursing is a specialty practice. The training has focused on the knowledge and practice of providing care to cancer patient. Continuing nursing education on knowledge and clinical skills will enable the nurses to provide high end quality care. The educational program impart training to nurse to develop knowledge and skill have on regarding chemotherapy management, care to patients receiving radiation therapy, and acquire competency in central line management, etc.

II. MATERIALS AND METHODS

a) Research approach
The study was conducted using quantitative research approach.

b) Research design
Quasi-experimental one group pretest-posttest research design.

c) Research setting
In September 2018 the study was conducted in Indraprastha Apollo Hospital New Delhi.

d) Sample and sampling technique
The sample size is 40. Convenient sampling technique was used to select staff only from the units where Oncology patient are treated.

e) Tool
The knowledge of the staff nurses before and after the certificate program was assessed with structured knowledge questionnaire.

One month certificate program was designed for Oncology Nursing Center of Excellence in discussion with consultants to enhance the knowledge and skill of the nurses for the specialty practice across the Apollo group. The theme of the program is “Fight the fight”. A customized tool kit was designed to serve as a guide for the COE activities of the month. Eminent consultants of the oncology department and HODs of dietary and radiation department has taken classes. Health care
company personnel were also involved in special training of Ostomy care and biomedical equipment management.

**CALENDAR FOR ACTIVITIES**

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<tr>
<th>Sunday</th>
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<td>2</td>
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</table>

**Fig. 1:** Showing oncology nursing toolkit of activities

The implementation details regarding the classes and activities are as follows:

- **Opening Ceremony:** The Oncology COE started with an opening ceremony. Oncology Doctors/ Unit Head/ HOD’s/ Nurses from relevant areas/ Nursing leadership team were invited. The calendar of activities of the month was showcased. Pre-test was conducted to all the participants.

- **Awareness about Common cancers in India and Apollo Hospital:** The session covered Cancer Statistics in the country, their geographical distribution, age groups, Contributing factors, Traditions, taboos, cultural beliefs, early detection and Common cancers seen at Apollo in the last three years and some success stories.

- **Investigations & Diagnosis (Lab., Radiology etc.):** The speaker discussed in detail regarding Images & Biopsy reports interpretations and recent advances in diagnostic tools.

- **Medication Management:** Chemotherapy drugs their preparation, administration, monitoring and disposal and recognition of ADRs their management safety & custody of high - cost medications.

- **Care of invasive lines:** Management of Chemo port, PICC line, and normal peripheral lines care of extravasation and its prevention.

- **Care of Thalassemia patients:** Thalassemia and its treatment. Administration and management of blood and blood products.

- **Pre & post-operative management of Cancer patients:** The Focus was given on common surgical intervention and dos and don’ts in the care of the post-operative patients including home care was taught to the nurses. Observational Visit to the operation theatre was arranged for the nurses from the wards.

- **Case presentation on common cancers:** The participants discussed the common cancers in their unit.

- **Panel discussion on BMT:** A panel of nurses working in Bone marrow transplant along with their consultants has done a discussion on types of BMT, Infection control, care of patients with bone marrow transplant and health education about home care and management.

- **Food the way you want (Activity):** It is exclusively for pediatric patients. With the consent of the consultant the favourite meal of the children was provided with the help of food and beverage department.

- **Workstation on colostomy care:** Companies like Coloplast & Hollister took classes for nurses about stoma care and gave hands -on training for nurses in work stations.

- **The Case study on the top two complicated surgeries:** Oncology surgeons have discussed the top two complicated surgeries of their unit like Commando surgery, Whipple’s surgery, etc.
• Importance of diet for onco patients (Dietary department): The Chief dietician or Dietary HODs have taken the class on the importance of dietary management for cancer patients and also about the foods that prevent cancer.

• Radiation Oncology: Radiation safety officers/radiation oncologists have explained all modalities, care of the patient receiving radiation and Radiation safety program. Visits were arranged to the radiation department.

• Biomedical equipment: Biomedical engineers of the company like Baxter, Fresenius took sessions on the common equipment used and focus was given on trouble shooting and highlight was given on patients who go home with pumps.

• Engage with pediatric group: A fun event was organized exclusively for the pediatric patients like a poster, poem writing, drawing, coloring, magic shows, etc. Gifts were given as a token of appreciation for all the children who participated. The posters were displayed in the notice board in the ward and prominent places as advised by the management.

• Health Camp: The participants along with the help of the marketing department have organized health camps for screening and created awareness about cancer.

• Role of a Nurse in OT during Oncology surgery: The observational visit to the operation theatre for the nurses form wards and classes on instrumentation, preparation, complications during surgery & its readiness and pre & post-op care.

• Common mistakes Nurses make: The incidences, common complaints that consultants make and feedback from quality team, nursing leaders and staff nurses of the last one year was analysed. Based on the analysis report the importance of error reporting and ways to prevent the errors were discussed by the consultants.

• End of life care & Palliative management: The pain management team along with the social workers has taken classes on Palliative care of the cancer patients and End of life care.

• Cancer survivor’s meet: The department have arranged a meeting for the cancer survivors with the support of their consultants and marketing team and invited motivational speakers to address the patients and their care givers.

• Caring for the care giver: To replenish the positive energy among the nurses a sessions like ZUMBA, aerobics, Yoga were arranged for the participants.

• Post test: All the participants were made to write the post-test

• Closing ceremony: All the units have organized a closing ceremony and felicitated the participants with certificates and the participants who scored highest in pre& post-test were given a token of appreciation.

### III. Results

The pretest and post score was analyzed to assess the effectiveness of the certificate programme.

**Table 1:** Frequency Percentage distribution of the knowledge score of the staff nurses before and after the program N=40

<table>
<thead>
<tr>
<th>S/No.</th>
<th>Knowledge score</th>
<th>Pretest</th>
<th></th>
<th></th>
<th>Post test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Frequency</td>
<td>Percentage</td>
<td>Frequency</td>
<td>Percentage</td>
</tr>
<tr>
<td>1.</td>
<td>Poor Knowledge [0-16]</td>
<td>2</td>
<td>5%</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2.</td>
<td>Average Knowledge [17-32]</td>
<td>38</td>
<td>95%</td>
<td>14</td>
<td>35%</td>
</tr>
<tr>
<td>3.</td>
<td>Good Knowledge [18-50]</td>
<td>0</td>
<td>0</td>
<td>26</td>
<td>65%</td>
</tr>
</tbody>
</table>

**Fig. 2:** Shows the percentage distribution of the increase in knowledge score after the certificate program
Table 2: Effectiveness of the structured teaching program ['t' test]

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean</th>
<th>Standard deviation</th>
<th>Mean difference</th>
<th>Standard error of mean difference</th>
<th>&quot;t&quot; test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre test</td>
<td>23.5</td>
<td>4.16</td>
<td>10.15</td>
<td>1.36</td>
<td>7.46</td>
</tr>
<tr>
<td>Post test</td>
<td>33.65</td>
<td>7.6</td>
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</table>

The calculated 't' value 7.46 is more than the table value 1.990 at df 78 reveals that the mean difference between the pretest and posttest score is significant at 0.05 level of significance and not by chance. So the one month certification program on oncology nursing was effective in increasing the knowledge of the staff nurses.

IV. Conclusion

The campaign enhanced the knowledge of nurses about cancer and its treatment, to improve the quality of life of patients. It enhanced the competency of nurses for providing better nursing care to the patients. The nurses gained knowledge about cancer, risk factors, screening, and the importance of early diagnosis. An awareness was created among the nursing staff about Palliative care, Pain management for ONCO patients, Handling of invasive lines, infection control practices, Handling of biomedical equipment. There was significant improvement in the knowledge of nurses on chemotherapeutic drugs its administration and complications. Nurses gained more insight into the radiation oncology procedures and side effects. Nurses gained a better understanding of the fears and barriers faced by people when talking about cancer. Nurses were able to confidently communicate and promote cancer awareness; highlighting key messages clearly and appropriately. They were able to guide people to relevant health and information services. They were empowered to include cancer awareness conversations in their role and made difference in their clinical areas. The nurses were able to impact of lifestyle on cancer risk and able to encourage people to make healthy lifestyle changes.

References Références Referencias

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