CANKIDS KIDSCAN: MANPOWER, CAPACITY & SKILL BUILDING FOR NURSES
Updated 13 Nov 2019

Introduction
Nurses are an integral part of any medical team, more so when treating the patients in an oncology unit. They are said to be the ‘heart of care’ coordinating between the doctors, patients and other support staff. They are the ones which can influence the quality of care and overall patient outcomes. Even in hospitals where trained Paediatric Oncologists are present, due to a combination of hospital resource limitations and the lack of trained manpower availability these physicians are rarely supported by trained dedicated nursing staff.

Cankids Kidscan, National Society for Change for Childhood Cancer is committed to building of manpower and capacity of the pediatric oncology community – physicians, nurses, social support teams, patient, parent, survivors and other caregivers, as well as those health sector professionals or workers who are involved in the referral or shared care of our children with cancer.

Cankids is working on 4 projects in this regard
1. Provision of dedicated nursing staff and their training, at centers treating children with cancer, where we have projects, under the Cankids JDF 100 Nurses Project – pan India, collaborating with JivDaya Foundation USA, hospitals offering Observerships and training, and treating centers.

2. Training and Capacity building of Nurses in Supportive care -under our Treatment Support Program – pan India, collaborating with Pediatric Oncologists in India, IAP PHO NTTPHO Nurses training & Elena Ladas’s IIPAM.

3. Training and Capacity building of Nurses in Pediatric Palliative Care – at our Pediatric Palliative care center – Subhita, in New Delhi. Inhouse program

4. As an “anchor” organization of Childhood Cancer International for Nurse training in Nutrition and Infection control in WHO focus country – Myanmar, under WHO Global Initiative on Childhood Cancer. Collaborating with CCI and other partners of the project.

5. Celebration of Nurses Day – with all participating centers where we work (65 currently) every year pan India. Our Education team helps children teaches kids to value and thank our Nurses. The children honor nurses with Cards and cakes, we give gifts to all Nurses and we display Banners in each hospital. (I have some lovely pics and the data for each year.)
1. **CANKIDS JDF 100 NURSES PROJECT COMMENCED IN APR, 2018.**

**Aims and Objectives:**

1. To increase the number of nurses working in childhood cancer treating centers across the country
2. To optimize the nurse to patient ratio to ensure better care for patients
3. To improve education and training of all nurses working in pediatric oncology units across India (both those funded through this grant program and those working as hospital employees) so they will:
   - enforce measures to prevent nosocomial infections
   - attend to the nutritional needs of patients, in collaboration with the nutritionist
   - educate the patient and families: explaining diagnostic tests, treatment details and side effects of chemotherapy
   - participate in discharge planning—counseling the patient and family about the discharge meds and precautions to be taken at home
   - provide psychosocial support to the patient and families, in collaboration with the social workers and psychologists
   - provide family-oriented pediatric oncology nursing care
4. To develop a pool of trained Pediatric Oncology Nurses and Pediatric Oncology Nurse Specialists
   - During the three-year project we aim to train and qualify 100 Pediatric Oncology Nurses
5. To have the Nursing Counsel of India recognize the training and the curriculum officialize the certification

**Nursing Model of CanKids-JDF 100 nurses project:**

As social support organizations CanKids...KidsCan and Jiv Daya Foundation (JDF) are providing nurses through a grant support program, to improve the standards of oncology care for children. Any pediatric oncology ward with at least 8 beds and treating at least 50 new cases of children with cancer per year is eligible to get support for a pediatric oncology nurse from CanKids/Jiv Daya. The program aims to partner with doctors, work on research through the Quality Care Research and Impact (QCRI) program and increase the standards of care through nursing. We aim through this project to look after the nurses and provide a safe working environment for them, which is facilitated by providing personal protective gear and equipment. CanKids/Jiv Daya aims to maintain an ideal nurse to patient ratio of 1:4 (or a minimum ratio of 1:6) to assure better care for patients.

**Nursing project:**

In an effort to improve the quality of the capacity& skill building and monitoring the impact of providing nurses across India CanKids and Jiv Daya have agreed to formalize this project and run it for an initial term of three years starting from April 1st 2018 until 2021 to be continued thereafter after suitable review. Moving forward, the provision of support of all nurse by Jiv Daya and CanKids will be as part of this project. In those hospitals
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where CanKids-Jiv Daya is already providing a nurse(s), the details of the Nursing Project will be shared with all treating doctors where ongoing partnerships exist, and they will be asked to sign on to the project. At that time all existing sites will be evaluated and if they do not already comply with our requirements, they will be given 12 months’ time to do so. At the completion of 12 months, a representative from either Jiv Daya or CanKids will visit the site to evaluate the impact of the nurses provided by CanKids/ JivDaya and the project till date and a report will be submitted to the joint nursing advisory committee who will determine if the nursing project should be continued at that site or not.

- **Outcomes and Impact:** Project Impact will ultimately be measured based on the following:
  - The quality of work carried out by the nurses- monitored by critically analyzing the data from weeks reports as well as by periodic site visits by a physician or nurse trainer.
  - The Impact of the program in the overall care of children with cancer will be measured by
    - Reduction in mortality of patients with febrile neutropenia*
    - Reduction in induction deaths*
    - Improvement in the survival rates of common childhood cancers **Based on baseline data and annual data of the survivor provided by the institution

Caveats in measuring outcome:

- It should be noted that any improvement in survival or reduction in mortality from neutropenic infections or in induction deaths cannot be wholly attributed to improved nursing care alone. Other factors like physicians’ role (selection of proper protocols, anticipatory management of neutropenia, improvement in supportive medical care) will also improve survival outcomes.
- In order to measure these outcomes, accurate data keeping is critical, which depends upon the quality of the work of the social worker/data managers.
- Baseline data on mortality of febrile neutropenia are not available in most centers, and retrospective collection of this data will not be reliable. We can only start collecting this data with the help of CK/Jiv Daya nurse, once such a nurse joins duty. On the other hand, baseline data for induction deaths and overall survival of common malignancies can be obtained from already available data on IndiaPOD, VCan or other data formats.
Dedicated Nurse provided: Total request of Nurses from the treating centers are 58 out of which 54 were sanctioned and total number of nurses position filled by Cankids/Jiv Daya are 50.

<table>
<thead>
<tr>
<th>CanKids TOTAL</th>
<th>Nurse positions requested</th>
<th>27</th>
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<tbody>
<tr>
<td>Nurse positions sanctioned</td>
<td>23</td>
<td></td>
</tr>
<tr>
<td>Nurse positions Filled</td>
<td>21</td>
<td></td>
</tr>
</tbody>
</table>

| Nurse positions sanctioned | Nurse Positions requested | 58 |
|---------------------------|----------------------------|
| Nurse positions Filled | Nurse Positions Sanctioned | 54 |
| Nurse positions filled | Nurse Positions Filled | 49 |

Nurses Training: Capacity building and training of the nurses as a critical component of the CanKids/ Jiv Daya nurses project and may involve both on-site and off-site training opportunities for those staff supported by CanKids/ Jiv Daya as well as hospital-based staff. Capacity building of nurses is a responsibility that lies both with CanKids/Jiv Daya and the concerned hospital regardless of whether the nurse is employed through a Jiv Daya or CanKids grant or through a non-grant option.

At the time of initiating this project there are 5 partnering centers for conducting in observerships/onsites: Apollo Hospital Delhi, Rajiv Gandhi Cancer Centre Delhi, Super-specialty Pediatric Hospital, Noida, Delhi. Apollo Hospital Chennai, Meenakshi Mission Hospital Madurai, Tata Medical Centre Kolkata, PGI Chandigarh and Tata Memorial Hospital Mumbai.

Numbers trained -- 49

Dr. Somasundaram Jayabose is regularly doing capacity building of the Nurses once in a month on Zoom platform. Numbers trained- 28 Wadia hospital nurses – A total of 7 nurses were training on pediatric oncology on 2nd November 2019 at B.J. Wadia Hospital Mumbai.
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2. TRAINING AND CAPACITY BUILDING OF NURSES IN SUPPORTIVE CARE - UNDER CANKIDS TREATMENT SUPPORT PROGRAM - PAN INDIA, COLLABORATING WITH SIOP PODC NUTRITION GROUP

Cankids recognises nurses as a valuable resource in providing supportive care to patients and families faced with cancer. This is owing to the fact that nurses have maximum interaction time with the patient during their treatment course. Considering this, need based sessions and trainings to enhance the knowledge and skill have been provided to collaborating hospitals and identified nurses. This need based trainings and sessions started in September 2016.

Opportunities to train and sensitize nurses were tapped at nursing workshops, individual hospitals to conduct in house training, as well as collaborate with other organisations to enhance the knowledge and skill set of their nurses and supportive care staff.

Till date, Cankids has been able to reach 245 nurses and supportive care staff and enabled them to be sensitised to nutrition during cancer treatment and improved their knowledge and skill set associated to the same. (See annexure 1)

Need based training resources have been developed for the sessions like handouts, ready reckoners and audio visual aids

All the trainings or sessions held till now were need based and the content of the sessions was decided based on the requirement of the specific hospital and their need stated by the treating physician.

The need for standardised supportive care training module was identified by cankids and we are currently in the process of developing a standardised training module for nurses with following three modules:

a. Anthropometry
b. Basics of nutrition
c. Hygiene and Infection control
<table>
<thead>
<tr>
<th>Module 1: Anthropometry</th>
<th>Module 2: Nutrition Basics</th>
<th>Module 3: Hygiene and Infection Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Anthropometry (IIPAN) Height Weight MUAC BMI Growth charts Look up tables</td>
<td>• Basics of Nutrition • Food pyramid • Macronutrients • Micronutrients • Emergency nutrition support • Qs and protocols (specific to situations where nurse may get a child in absence of dietician for next 24 hrs) Diarrhoea Loosemotions Vomitting Fever Blood in stools Constipation Emergency RT feed plan</td>
<td>Hand Hygiene Personal Protective Equipment Personal Protective Practices Decontamination and Cleaning of Instruments Disinfection &amp; Sterilization of Instruments Spill Management Isolation and Barrier Nursing Infection Control Program Hospital/Facility Acquired Infection and surveillance Environment Control</td>
</tr>
<tr>
<td>TRAINING PROVIDED AT</td>
<td>TRAINING PROVIDED</td>
<td>ORGANISED BY</td>
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<tr>
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<tr>
<td>Rajiv Gandhi cancer institute</td>
<td>Anthropometry techniques and basics of nutrition</td>
<td>Dr. Gauri Kapoor</td>
</tr>
<tr>
<td>PICU, Gautam nagar Delhi</td>
<td>Anthropometry techniques and basics of nutrition</td>
<td>Ms. Huma Anis (Head, pediatric palliative care program)</td>
</tr>
</tbody>
</table>
# Cankids Kidscan: Manpower, Capacity & Skill Building for Nurses

*Updated 13 Nov 2019*

<table>
<thead>
<tr>
<th>Training Provided at</th>
<th>Training Provided Organised By</th>
<th>Duration</th>
<th>Number of Attendees</th>
<th>Topics Covered</th>
<th>Handouts Provided</th>
<th>Tools and Technique</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st national oncology nursing conference, held at wadia children's hospital Mumbai</td>
<td>Anthropometry techniques, Dr Sangeeta Mudillar</td>
<td>2.5 hours (5 sessions of 30 min each were held one after other. Each batch had 22-25 nurses)</td>
<td>104 nurses</td>
<td>1. Topics covered: 1. Nutritional assessment (using IJPN training manual) Hands on training on: Height (using stadiometer) Weight (using digital weighing scale) MUAC (using Shakir’s tapes and Non stretchy inchtapes) BMI for height and weight charts Plotting growth charts (WHO BMI for age Z scores) Weight calculation of amputed child 2. Basics of tube feeding Differences between silicon and PVC tubes (pros and cons) 3. FAQs on RT feeding by parents and how to answer them</td>
<td>1. BMI for age z score charts 2. BMI for height and weight look up tables 3. Calculation of weight of amputed child 4. UNICEF colour coded tapes for MUAC</td>
<td>Verbal session with demonstration and use of Handouts (Conducted in bilingual as an interactive session)</td>
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</tbody>
</table>
As a member and Anchor organization of Childhood Cancer International, (CCI) a Non State actor of WHO, Cankids has collaborated in the projects undertaken in Myanmar – a WHO Focus country for pediatric oncology.

Cankids Treatment Support team has worked in the project at Yangon Children’s Hospital Myanmar with CCI, the team of Boston Children’s hospital, and WCC in development of training resource as well as supporting in conducting hands on session of anthropometry for Nurses at Yangon children hospital, Myanmar in June 2018. 12 nurses of the paediatric oncology ward were trained on following:

(i) Height recording
(ii) Growth chart plotting
(iii) MUAC recording
(iv) Weight recording

The session also gave insights on barriers faced by nurses in implementing the anthropometry and nutrition management program in the ward of the hospital. Need based training is being planned for the nurses and other supportive care staff by Cankids to support the multi stakeholder Nutrition project at Yangon children’s hospital.

| 19 June 2018 | Yangon children hospital Yangon Myanmar | Anthropometry techniques for nutritional assessment | 1.5 hours | 12 | Collaborated with Team of Boston children’s hospital with training resource as well as supporting in conducting hands on session of anthropometry recording:
(i) Height recording
(ii) Growth chart plotting
(iii) MUAC recording
(iv) Weight recording
The session concluded with nurses voicing the barriers they fear they would face like inappropriate recording of data and excess workload. It was decided that:
• A specific format would be created and pasted on the patients books and nurses were supportive to fill data in it.
• Appropriate equipment would be bought (by CCI or BCH)
• Appropriate training would be conducted for the staff
• If need assessed, permanent and dedicated staff would be hired (by BCH or CCI) | UNICEF MUAC colour coded bands | PPT with handouts and demonstration techniques (Conducted in bilingual as an interactive session) |
4. **EDUCATION PROJECT FOR NURSING STAFF AT PEDIATRIC PALLIATIVE CARE CENTER SUBHITA (PPCC)**

**Aim:** The aim of this Project is to provide an opportunity to the Pediatric Palliative Care Center Subhita Nursing Staff to upgrade their knowledge and skills in responding to the needs of pediatric patient and their families. This training program has been designed to fill in the gaps of the nursing services provided to the pediatric patients at the Cankids Pediatric Palliative Care Center Subhita (PPCC).

**Project Objectives:**
1. Imparting Education & empowering of PPCC Nursing staff to manage symptoms and pain during treatment and in terminal stages.
2. Increase in capacity for the Nursing staff to deliver quality palliative care to children at PPCC. This compulsory Team Education would be the best way to make it a routine part of the monthly activity.

**Timeline:** Started from August 2018 till October 2019 (Ongoing).

**Geography:** Pediatric Palliative Care Center Subhita (PPCC) New Delhi.

**Methodology and Activities:**
1. Development of training tools taking into account the capacities of the Nursing staff members.
2. Fixed protocol Training sessions through interactive tools for maximum understanding.
3. Following observation of practical care using checklists.
4. Developing IEC Material hand out for the Nursing staff- a Formal Training module/ Blue Book.
5. Post Training performance evaluation to be done by the PC Physician on duty.
6. Formal Certification on Completion of Program.

**Desired outcomes/deliverables:**
1. To promote understanding of cancer diagnosis and prognosis, identify sources of support and provide on-going learning and education for the staff.
2. Increased awareness and empowerment of Nursing staff to manage patient’s symptoms and pain during treatment and in terminal stages.
3. To develop a Formal Training module and Blue Book based on the MDT Training. A leaflet can also be created

**Beneficiaries:** PPCC Nursing Staff.

**Faculty:**
1. PPCC Nursing staff
2. PC Physicians

**Mentors for the Nurses:** External PC Consultants, Psychologists and Physiotherapist (For topics related to Psychological and Physiological issues).

**Project in charge:** Dr Sorabh Garg, Senior Palliative Care Physician
Administrative coordinator: Admin In charge for the project is Kartika Paneer, PPCC Nurse Assistant and Patient Support Coordinator who has also received a three days ECHO Training on “Observation and evaluation of the process of co-management and clinical monitoring within the ECHO model framework”. She is the keeper of the Training Calendar, does session coordination and maintains the documentation and logistics.

Curriculum for the training:
1. Anxiety
2. Assessment of pain
3. Bad news
4. Bedridden
5. Bereavement
6. Bleeding
7. Cancer pain
8. Care of malignant wound
9. Chronic pain
10. Colostomy care
11. Communication
12. Constipation
13. Cpr/ anaphylaxis
14. Delirium
15. Depression
16. Dyspnoea
17. Empathy
18. End of life wishes
19. Euthanasia and physician assisted suicide
20. Fatigue, cachexia, anorexia
21. Final days
22. Hydration
23. Hypercalcemia
24. Lymphedema
25. Nausea vomiting
26. Neoplastic pain
27. Obstruction – bowel tumour
28. Opioids usage / records
29. Palliative care
30. Palliative sedation
31. Pathophysiology of pain
32. Pressure sore / bed sore
33. Pruritus
34. Seizures
35. Agitation.

Impact assessment:
1. Development of appropriate tools for measurable impact measurement.
2. Feedback collected during the training sessions.
3. Data of participants from training sessions.
4. Analysing the impact of the capacity building initiatives carried out.
5. Assessments by staff on how the training has affected their nursing practices.
6. Assessments by senior management on how staff capacity has increased.
7. Expert review of the course curriculum.

Outcome and results:
1. A training calendar was developed after taking feedback from the Staff Nurses and PC Physicians.
2. The topics were categorized into 6-8 categories. Each Nurse and Doctors were assigned with the topics. They were told to do a literature review on the assigned topics, prepare the presentations and take training sessions for their peer group (Nursing Team).
3. Twenty four (24) topics were assigned among the Nurses.
4. The other 12 Topics were assigned to the PC Doctors.
5. The presentations are made by the allotted members. There is one moderator for every topic (an expert who has good knowledge about that specific topic). All the queries raised by the attendees are answered by the Nurse conducting the session. The Session Moderator’s job is to help the presenter and supervise that topic should contain relevant facts evidence.
6. It is mandatory for off duty nurses/ staff also attend the session. So the session day is decided according to the duty roster on the staff Nurses. The moderator makes a feedback report about participation of all attendees and provides an insight about skills gained by attendees.
7. Every topic is followed by a week of observation to ensure that clinical skills taught are to be followed with best standards. Eg. I’ve cannulation, wound dressings, maintaining sterility.
8. It is the duty of the presenter to overview / observes whether his/her teaching reaches to everyone and is followed in same fashion. Eg if Sister Jubilee (Head Nurse) has taken a topic – wound dressing and she observed that laxmi Devi (Nursing Aide) has gained everything correctly then we have two experts now both can observe and then there will be more and more members,
our goal is – everyone should be expert by the end of the training. If not then this curriculum will wait for next topic till the time everyone gains that particular skill.

9. From August 2018 till September 2019, 13 Training sessions were conducted with an attendance of 98. The sessions were attended by 6 Nurses, 1 Nurse Assistant, 1 Nursing Aide, 2 PC Physicians and 8 Social Support Team members including the Psychologists, Physiotherapist and Patient Navigators. Topic included Pain assessment (Done twice), Oral care, Palliative care, Bleeding, Bed Sores, Colostomy care, Breathlessness, Care for Bedridden patients, Chronic Pain, Neuropathic pain, Pathophysiology of pain and constipation.

10. Incentives: We also provide complimentary Lunch and Tea to the Nursing staff attending the sessions and the off duty staff is provided with additional hours payment/Transport to attend the session.

This is an ongoing training program. At the completion of the 36 topics we will analyze the impact of the capacity building initiatives carried out on how the programmes have affected their nursing practice. An Expert review of the course curriculum will also be done. Based on the results we will also develop a Formal Training module and Blue Book to be used a practice Model for pediatric Palliative Care at Cankids.