Oncology Nursing Education: Building a Specialty in Pakistan

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ABSTRACT

It is estimated that by 2030 there will be 28.4 million cancer cases expected to happen. Cancers that have become more common in the past few years are breast cancer, lung cancer, stomach cancer, liver cancer, and colon cancer. With such a high number, Pakistan, a lower middle-income country, has 19 million new cases reported in 2020. Nurses are the primary caregivers to all patients and the community. But the global nursing shortage has become an alarming concern. Oncology nursing is a specialized field needing a special set of skill competencies and knowledge for providing quality care to patients. Specialized training in Pakistan is not very common, but over the years organizations have created certain specialized training and courses for Nurses to overcome the deficiency of specialized Oncology Nursing care.

Keywords: Oncology, nusring, specialty, education, training.

INTRODUCTION

Cancer is linked with a high number of morbidities stating more than 19.3 million new cases globally in 2020 and it is estimated that by 2030 there will be 28.4 million cancer cases. According to the World Health Organization (WHO), cancers that have become more common in the past few years are breast cancer, lung cancer, stomach cancer, liver, and colon cancer [1]. With such a high number, Pakistan, a lower middle-income country, has 19 million new cases reported in 2020 [1]. According to the International Agency for Research on Cancer (IARC), the number of cancer fatalities in Pakistan is 0.11 million, while the number of prevalent cases (5 years) is 0.32 million.. It is also stated that Pakistan also has one of the highest mortality rates for breast cancer where one out of nine women are at a high risk of developing breast cancer [2].

Nurses are the primary caregivers to all patients and community. But the global nursing shortage has become an alarming concern. 27 million men and women make up 50% of the global healthcare workforce. Nurses comprise 50% of the healthcare workforce globally and the shortage is specific to nurses and midwives. To achieve the main goal of having health for all, important human resources need to be present [2]. Nurses who are well-trained, well-educated, and well-supported. According to WHO 2022, the world required an additional 9 million nurses and midwives by the year 2030 [3].

Pakistan is one of the five countries which has a massive shortage of nurses. Currently, the nurse-to-patient ratio in Pakistan is 1:50.According to a study, Pakistan has 5 nurses and midwives as compared to 10 medical

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doctors per 10,000 population. A recent picture of WHO shows that there are 0.5 nurses and midwives for the 1,000 population as compared to 1.1 physicians per 1,000 population. The number of registered nurses were 116,659 for 2020 according to the Pakistan Economic Survey 2020-2021 [4].

ONCOLOGY NURSING IN PAKISTAN

The concept of specialized nursing education is still new. Pakistan nursing council (PNC) has made it mandatory to have a midwifery diploma for girls pursuing nursing careers and then it can be followed by any other specialty of their preference. A generic bachelor's degree is considered the minimum qualification [5].

The quality of education needs to be standardized and enhance to meet the developed country's standards [6]. For this very purpose two organizations, The Indus Hospital and Health Network (Karachi) and Shaukat Khanum Hospital (Lahore) are the hospitals that have been pioneers in establishing Oncology nursing education with one-year diplomas and other certification courses.

EDUCATIONAL OPPORTUNITIES FOR ONCOLOGY NURSES

The various educational modules currently available for registered nurses in Pakistan to develop their specialty. These options include a one-year pediatric oncology diploma, a two-week workshop, a diploma specifically designed for pediatric oncology, a general oncology diploma, a bachelor's degree in oncology nursing, and continuous professional development opportunities.

ONE-YEAR PEDIATRIC ONCOLOGY NURSE TECHNICIAN COURSE

Hiring of skilled staff has always been a major concern in health care. Finding a trained pediatric hematology and oncology nurse is difficult in Pakistan. The objective of this initiative was to produce first-level nursing human resources in Pediatric oncology. The course was developed as per local need with the help of a medical educationist focused on basic knowledge and skill for general pediatrics and pediatric oncology. It also included English, basic Mathematics, and computer skills. At the end of each module, students are assessed theoretically, with skills demonstration, and formal written examination. Students are also supervised during clinical training. A final exit examination is conducted by Sind Medical Faculty. The successful candidates are required to complete a one-year internship at their respective centers to achieve a certificate.

TWO-WEEK WORKSHOP FOR REGISTERED NURSES

Short courses have been proven to have much effect and are less time-consuming for the trainer as well as trainees. Two weeks workshop was designed to keep the need of registered nurses in mind and allowing them for hands of practice as well. The workshop is divided into two parts, the first being the theory and the second being hands-on [7]. The modules are based on pediatric cancers and their management, treatments, safe handling of chemotherapy, administration of medication, specific nursing skills such as blood transfusion, pre, intra, and post-care of bone marrow procedure, caring for central lines, infection control and prevention in pediatric oncology a brief introduction to palliative care and evidence-based practice.

DIPLOMA IN PEDIATRIC ONCOLOGY NURSING

To have specialized nursing education an infused model was implemented. A one-year program was designed and approved by Pakistan Nursing Council for those with RN diplomas or Bachelor. Two third of the course is dedicated to theory. The curriculum not only focuses on Pediatric Oncology but also on professional development [8]. Teaching was based on problembased learning, assignments, and Journal Clubs rather than lectures. The diploma consists of 240 hours of theory and 80 hours of clinical teaching. Participants are rotated in different departments of the hospital such as daycare, inpatient, outpatient, pharmacy, pain management, infection prevention, and palliative care. Every student is regularly assessed by faculty members. The exit examination is conducted by Pakistan Nursing Council (PNC) with a theory paper as well as an oral exam. This program is the first of its kind and is still in the development stage with the curriculum being worked on.

DIPLOMA IN ONCOLOGY NURSING

Diploma in oncology nursing in a post-basic specialization diploma which was initiated by Shoukat Khannum Hospital [9]. This is a one-year specialization program that has been approved by Pakistan Nursing Council (PNC). This is a 44-credit hour course (22 credit hours in each semester). The course curriculum comprises nursing of cancer care and foundation of

nursing, treatment modalities of cancer, palliative care, and communication skill; various other soft skills are also taught.

BACHELOR IN ONCOLOGY NURSING

This is a post-registered nursing bachelor's in oncology nursing which is equivalent to a bachelor's in nursing. This has provided nurses to opt for specialization in their nursing career like in high-income countries. Post RN/BS in Oncology Nursing is a two-year program consisting of four semesters that has been approved by the University of health sciences (UHS), Lahore and PNC, Shaukat Khanum Hospital Lahore is offering the degree program and participants are awarded a degree upon successful completion. A comprehensive curriculum has been developed consisting of an advanced concept of cancer nursing focusing on adults and pediatrics, biostatistics and epidemiology, leadership and professional research/evidence-based development, elective projects, and other basic essential courses comprising 64 credit hours.

CONTINUOUS PROFESSIONAL DEVELOPMENT (CPD)

Continuous professional development is essential for nurses to keep their practices and knowledge up to date with recent information. This phase of learning should be provided in various modes of learning; various forms of formal education, courses, workshops, self-reflections, journal clubs, case studies, and peer feedback [10]. Pakistan Nursing Council (PNC) has also initiated an approach to the professional development of nurses. Extensively planned CPD and educational activities are provided to in-house hospital nurses. The themes and topics are based on areas of improvement identified by the clinical nurse instructors. A minimum of 8-10 hours of CPD are essential for nurses.

CHALLENGES TO SUSTAINING SPECIALIZED NURSING EDUCATION

There are educational opportunities available in Pakistan although not as many as there should be looking at the rates of Oncological disease in the population there is also a concern for sustainability as many young nursing professionals seek one-year specialization for their higher studies they seldom choose Oncology as their priority, could be many factors like easy access to educational opportunities, employment, difficult curriculum and Oncology being an emotionally draining field that they relate to [11]. Due to a smaller number of students applying for these sub-specialties, it is difficult for schools to sustain such programs. Pakistan Nursing Council and Institutions can only offer, but nursing practitioners must also take this as a chance to broaden the scope of oncology nursing care.

CONCLUSION

Oncology nurse educational opportunities are available in Pakistan for multiple levels of professionals. Nurses,

being the pillar of organizations are essential to be trained for the services that are offered to patient care. It is the need of time for the system to prioritize specialized Oncology nursing care as they have recognized the importance of other specialty nursing like cardiac and mental health. Organizations also must encourage the specialty education and competencies to improve level of care which will ultimately help improve patient satisfaction and decrease mortality and morbidity. Licensure bodies have to encourage more organizations to develop such courses so it is more accessible and educational institutes need to pay extra attention to develop evidence based robust training in order to build Oncology Nursing specialty which will ultimately result in improved patient outcome.

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CONFLICT OF INTEREST

The authors declare no conflict of interest.

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AUTHORS' CONTRIBUTION

All the authors contributed equally to the publication of this article.

REFERENCES

- WHO. Latest global cancer data: Cancer burden rises to 19.3 million new cases and 10.0 million cancer deaths in 2020. 2020. Available from:
 - DOI: https://www.iarc.who.int/news-events/latest-global-cancer-data-cancer-burden-rises-to-19-3-million-new-cases-and-10-0-million-cancer-deaths-in-2020/

- WHO. Nursing and Midwifery: World Health Organization; 2022. Available from:
 - DOI: https://www.who.int/news-room/fact-sheets/detail/nursing-and-midwifery
- 3. The greatest threat to global health is the workforce shortage [press release]. Available from:
 - DOI: https://www.icn.ch/news/greatest-threat-global-health-workforce-shortage-international-council-nurses-international
- Khuwaja HMA. Phasing out diploma in nursing: Merits and implications on nursing education in Pakistan. J Pak Med Assoc 2021; 71(3): 1047-8.
 DOI: https://doi.org/10.47391/JPMA.463
- Huda SU, Alsbinati ASA. Nursing education in Pakistan: challenges and trends in degree program. Int J Nurs Educ 2015; 7(4): 59-62. DOI: https://doi.org/10.5958/0974-9357.2015.00194.4
- Liu X, Zheng J, Liu K, Baggs JG, Liu J, Wu Y, et al. Associations of nurse education level and nurse staffing with patient experiences of hospital care: A cross sectional study in China. Res Nurs Health 2020; 43(1): 103-13.
- Challinor JM. Addressing the global pediatric oncology nursing workforce gap: An overdue imperative. Asia Pac J Oncol Nurs 2022; 9(2): 77-8.
 DOI: https://doi.org/10.1016/j.apjon.2022.01.006
- Pediatric Oncology Nursing Education In Low Middle Income Countries: SIOP PODC Supportive Care Education. Available from: https://siop-online.org/wp-content/uploads/2015/11/July-2015
 - https://siop-online.org/wp-content/uploads/2015/11/July-2015-Pediatric-Oncology-Nursing-Education-In-Low-Middle-Income-Countries.pdf
- Khamum S. Diploma in Oncology / Cancer Nursing: Shaukat Khanum Memorial Trust. Available from: DOI: https://shaukatkhanum.org.pk/diploma-oncology-nursing/.
- Mlambo M, Silén C, McGrath C. Lifelong learning and nurses' continuing professional development, a metasynthesis of the literature. BMC Nurs 2021; 20(1): 62. DOI: https://doi.org/10.1186/s12912-021-00579-2
- Challinor JM, Alqudimat MR, Teixeira TOA, Oldenmenger WH. Oncology nursing workforce: challenges, solutions, and future strategies. The Lancet Oncol 2020; 21(12): e564-e74. DOI: https://doi.org/10.1016/S1470-2045(20)30605-7