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# The Global Perspective of Oncology Nursing and Its Challenges

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## Abstract:

Cancer is a highly prevalent and deadly disease in current times and the most common contributor to premature mortality globally. It is imperative that more sophisticated and specialized treatment options be made available in response to the rising incidence of cancer. It is evident through many studies that the care provided by oncology nurses improves patient outcomes and care quality. An oncology nurse provides essential nursing care (i.e., education and support; administering, monitoring, and evaluating treatment outcomes); identify and manage complications; supportive and palliative care; and leading and collaborating on clinical research. Various obstacles, such as a lack of qualified personnel, recruitment barriers, burnout, frequent addition of newer innovations, lack of research mentors, inadequate funding for services, low representation of oncology nurses in decision-making, frequently changing workforce, economic and linguistic disparities etc. are frequently faced by oncology nurses. An efficient oncology nursing workforce can be acquired through specialized education, research, and clinical training which ensure professional growth and, a say in decision-making. Governments and policymakers should take initiatives for mapping cancer care resources and the adequate oncology workforce before it is too late.

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## Introduction

Cancer is a highly prevalent and deadly disease in current times. It is the most common contributor to premature mortality in most developing countries, too. On account of the major types of cancer, it is predicted that cancer incidence will double in the next fifty years.<sup>[1-3]</sup> There are disparities and heterogeneity in the burden of cancer in developed and developing countries. Current cancer incidence in developed countries is three times higher than in developing countries, but at the same time, most of the increase in cancer incidence and mortality due to cancer is in developing countries.<sup>[4-5]</sup> A large gap has been observed between developing countries (which are struggling for proper infrastructure and resources for diagnostic and treatment modalities and underdeveloped support services) and developed countries (which are focusing on genome-targeted therapies and immunotherapy).<sup>[2,4,6-7]</sup> It is imperative that more sophisticated and specialized treatment options be made available in response to the rising incidence of cancer and that positions support patients from the time of diagnosis through treatment, survivorship, end-of-life care, and bereavement services.<sup>[1,8]</sup> To meet all specialized needs, there is a dire need to develop a specialized field of oncology nursing. In 2022, the World Health Organization released a report stating that nurses accounted for approximately half of all healthcare practitioners.<sup>[1]</sup> Keeping an eye on the increasing incidence and high mortality in incident cases, now is the right time to channel this skilled workforce into providing specialized, focused care in anticipation. It is evident

through many studies that the care provided by oncology nurses improves patient outcomes and care quality.<sup>[1]</sup> The spectrum of services provided by an oncology nurse is very wide; it provides essential nursing care (i.e., education and support; administering, monitoring, and evaluating treatment outcomes; identifying and managing complications; providing supportive and palliative care; and leading and collaborating on clinical research) not only to the patient but also to their family and community.<sup>[1]</sup> The field of cancer care encounters various obstacles, such as a lack of qualified personnel, inadequate funding for services, low representation of oncology nurses in decision-making, and numerous others.<sup>[7,9]</sup> With the rising incidence of cancer and the need to improve survival rates, it is necessary for more nurses to be trained in cancer care and to retain them.<sup>[10]</sup>

## The global perspective of oncology nursing

The field of oncology nursing is changing to meet the needs of increased cancer incidence, more advanced and sophisticated treatment options, and the rise of specialized positions that support patients from the time of diagnosis through treatment, survivorship, and end-of-life care. Moreover, the global oncology nursing workforce is also essential to achieving Sustainable Development Goals like 3.4 (reduce non-communicable disease morbidity by a third by 2030) and 3.8 (universal health coverage).<sup>[11]</sup>

Global perspectives in oncology nursing will be discussed in this article within the framework of

evidence-based practices, specialized education, research, policy, the profession, and practices.

### **Evidence-Based Practice**

Evidence-based practice (EBP) is a newer perspective for modern and advanced practices. These are vital to enhancing patient outcomes in terms of decreasing morbidity and mortality and the standard of healthcare. It involves gathering the best available research and engaging patients about their individual preferences to make decisions about health care.<sup>[5]</sup> Providing options to the patient for choosing their treatment preferences is a way to empower the patient in their decision-making. This all required global access to information for tapping the best evidence available through quality research throughout the globe. In the present era of information technology, things could be shaped in a better way by utilizing technology.<sup>[7]</sup> The practices of cancer care developed through various research evidence available and are a result of knowledge translation efforts. These are important to improve patient outcomes, harmonize measures, and accelerate the translation of evidence into practice in cancer care services.<sup>[12]</sup>

### **Specialized education**

It is a source of capacity-building for oncology nurses through access to both basic and specialized nursing education. Earlier, nurse education was shaped by dominant ideologies that they were assistants to physicians, but now this is heavily influenced by power relations, effective partnerships, effective, efficient, cost-effective, and equitable population

health policies, advocacy strategies, proper handling of information and communication technologies, etc.<sup>[1]</sup> Numerous studies have demonstrated the advantages of bachelor's degree-level education for nurses in terms of improving patient outcomes. In the context of creating global nurses, the education imparted to them must be based on national and international standards and competency frameworks. This guides the fundamental knowledge, skills, and competencies required by oncology nurses. A shift is required to cater to diversity in learning styles and enhance access to (and accessibility of) basic and specialist education in nursing. As the world is very diverse in resources, some countries have pools of resources while others are deficient. For developing equity-based societies in terms of health care services, it is necessary to promote equity in the distribution of knowledge, resources, and power to promote inclusivity in nursing education and professional growth.<sup>[13]</sup> To promote equity in nursing education, particularly at the graduate level, it is required that there be enhanced accessibility of education, recognition of specialist cancer nursing qualifications, and the development and co-design of open access education for oncology nurses.

### **Research**

A new nursing workforce is capable of teaching, learning, research, and scholarly activities as the global nursing competency shift in nursing qualifications to university-level education has happened. As a basic nursing competency, she can critique and interpret research while being competent

in the design and conduct of clinical research. She has the ability or core skill to translate evidence at the specialist and advanced practice levels. Nursing research plays a major role in improving our understanding of what it is like to live with and recover from cancer, as well as in developing and implementing treatments meant to improve quality of life throughout the whole cancer journey. Future investigations should focus on the sustainability of practice changes and the de-implementation of no longer effective interventions, which could be a challenge in the rapidly changing healthcare environment. Future efforts should be toward harmonizing measures toward increasing the quality and advance of cancer care delivery and accelerating the uptake of evidence into clinical practice. <sup>[12]</sup>

## **Policy**

A policy is a definite course or method of action selected from among alternatives and considering given conditions to guide and determine present and future dreams. Policies provide guidance, consistency, accountability, efficiency, and clarity of vision. They do have the potential to be important change agents. Various national and international organizations have supported the idea that there are increased possibilities for nurses to impact policy and increase engagement within the nursing profession as they possess the necessary skills and experiences in addition to specialized, higher-level education. Good policies always help navigate through the better developmental opportunities of a profession. Inception and development of any new program

require good policy formation, which will help in the future.

## **Profession and practice**

Continuous newer developments in cancer treatment modalities and care models, such as complex and personalized cancer treatments, nurse-led models of care, and transitions to outpatient-based care, are opening new opportunities and arenas for work. <sup>[1]</sup> All these care models have influenced the expansion and diversification of oncology nursing roles. There is a lot of evidence to support the beneficial effects of nurse-led interventions on cancer patients, supportive care outcomes, and symptom control. While mentioning specialized oncology nurses, one should not forget about the contribution of registered nurses in patient care settings in the face of emerging workforce challenges. It is obvious that developing countries have their challenges and will take a long time to create something like a specialized, trained oncology nurse. To fill the gap, experienced registered nurses who have developed their skills in cancer care through practice, exposure, and learning by doing will be a better substitute. Owing to their expertise and ongoing nursing education programs, they are providing exceptional care services and are making great progress in this regard. It has always been challenging to start with and develop a new field of specialization from its inception. Challenges are global and region-specific too. Some of those are as follows:



## **Challenges to developing a robust oncology**

**nursing workforce: Nurse shortages:** There are lots of national and international agencies that usually talk about the nurse-patient ratio, and it is a very common occurrence that we always fall behind those norms. This is alarming too; despite having the largest population in the world, there is a lack of skilled healthcare practitioners to meet the demands of the country. This is not only the problem that we are not creating enough skilled staff, but we are also failing to retain them, motivating them to go for higher education. Recruitment barriers While talking about oncology nursing, there is always suspicion regarding staff safety. There are perceptions that oncology is a demanding specialty with complex care and hazardous work environments while rendering services. It is an obvious fact that cancer treatment means handling lots of cytotoxic drugs, ionizing radiation, and all that. **Burnout:** An oncology nurse has not only physical burnout but emotional or psychological burnout too. They are not only physically overburdened but also emotionally and psychologically. In an area like oncology, where patients usually have chronic morbidity and limited outcomes, it becomes obvious that they have burnout. These burnouts are not only physically exhaustive but also cause a loss of interest, decreased enthusiasm, limited outcomes, etc. The frequent addition of newer innovations in cancer care becomes challenging in the absence of a specialized oncology nursing workforce. These additions are so frequent that until one is accustomed to presenting innovation, another comes. **Lack of research mentors:** This is an obvious challenge in developing countries where there are

almost negligible nurse researchers or Ph.D. nurses for mentorship and guidance.<sup>[5]</sup> Furthermore, motivation for such courses and that higher level of study is also lower as there are no special benefits or acknowledgments provided by policymakers or people sitting in higher strata. For years now, authorities have not developed a single position that matches their talents and abilities, even though nurses are going for post-doctoral fellowships in education as well. Underfunded and under-resourced healthcare systems are contributing to clinical safety issues too, be it in the context of staff safety or patient safety. There is less motivation and enthusiasm shown by leaders, policymakers, and all others. Handling cytotoxic medication, risky diagnostic tools, ionizing radiation, and all are always a risky affair and a threat to staff and patient safety. Underrepresentation in decision-making is always a big challenge for nursing personnel. Even after being highly skilled, educated, and experienced, nurses have hardly a voice in decision-making. Having a say in policymaking is important for inculcating self-respect and the empowerment of specialized clinical nurses.

## **Frequently changing workforces**

This is a bigger challenge in developing countries as many of the experienced nurses from here are migrating for better opportunities, better remuneration, and better working conditions, all to developed countries. This is a great burden for developing countries because, despite limited resources, skilled nurses are being fostered, and they are just moving out. This is a vicious cycle that keeps going on.

## **Economic and linguistic disparities**

In large-scale developing countries, the presence of disparities is a common occurrence. Making services available everywhere is a tougher job in such a diverse population. It is required that the standards of nursing services be equity-based, i.e., the maximum distribution of resources should be in the underserved area. It is not just physical diversity or the external one, but we do encounter a failure to recognize diversity within the nursing workforce.

### **Challenges in specific contexts:**

There is inconsistent implementation of educational standards. Even though standardization of education in the curriculum is already there, there is an underdeveloped mechanism to monitor how strictly these standards are adhered to. Still, we are lingering on “creating jacks of all trades rather than going for specialization.”<sup>[8]</sup> There are gaps in evidence demonstrating the clinical and educational effectiveness of cancer nursing education, and there are also limited efforts to integrate research into clinical research modules.

### **Research**

Research in nursing is still in its budding phase. Many studies have shown that, even though research is taught in the nursing curriculum, specialty nurses only devote 0% to 5% of their time to research, and as little as 2% in the setting of oncology.<sup>[8]</sup> There is a lack of doctorate-holding academic nurses too, which is making things more difficult to handle. Even though we have a little specialization at the education level, there are differences in the availability of

specialized nursing education and the employment of specialists.

**Profession and practice** There is no position or post as a specialized oncology nurse, or precisely, for the last many decades, not even a single post for a specialized nurse has been created in the public sector. We have the older nomenclature too, which disguises the qualifications, education, and aptitude of nurses working in various capacities. Until nurses are recognized as highly skilled and qualified people, things will not start changing. It is disheartening that even after attaining a doctoral degree, no special recognition is given to them.

**Policy making** Numerous studies have demonstrated the limited participation or influence of nurses in policymaking at local, national, and international levels. Even though an increasingly knowledgeable and skilled nursing workforce is thereafter adding degree- or university-level education.<sup>[8]</sup> Despite acknowledgment and reporting of that, nurses have underrepresentation.

### **Way out**

There is always a way out of every problem, and the same is true for these too. Some suggested ways out are the following: Innovative recruitment strategies, retaining a skilled workforce, and conducting continuous training are very essential to developing a robust workforce.<sup>[14]</sup> Innovative recruitment strategies could be an icebreaker in selecting the right person at the right place at the right time. Things, as per the changing demands of the profession, can be accommodated at the recruitment level. It should not only check the educational qualifications or

efficiency of nursing skills but also how good one is at handling day-to-day stress, being technologically sound, comfortable working as a team, accommodating or adaptive to frequent changes, etc. For that, in the screening test, one can go for giving teamwork assignments, prompting things to be sorted out, etc. Better working conditions, safe infrastructure, better opportunities, and recognition are essential requirements for retaining their skilled workforce, or, as they say, preventing brain and skill drain. As mentioned, many times cancer treatment is still evolving, and for that, lots of innovations and new knowledge are added every day. Keeping oncology nurses abreast of all these new add-ons through continuous education programs is very essential for imparting effective and efficient specialized nursing care.

### **Onboarding specialized education and continuing education programs**

Adding specialized courses at the university level, designing curriculum according to global standards, arranging well-qualified faculties until there is a pool of qualified people in that area, and ensuring the availability of standard books for the same. At the same time, for new updates, continuing education is the gold standard. This is one of the most critical parts of the upgrading of knowledge and skills. State certificate boards put a lot of work into requiring a particular number of hours spent in class each year to renew the certificate. But this is not carried out at institute levels to make the arrangements for facilitating them to get these hours mentioned. Things

ought to move more quickly at ground level to get the most benefit out of them.

**Occupational safety measures** These are very necessary to provide enough confidence among the new entrants to select this field. There are lots of practices that make people skeptical about choosing this field, like the use of cytotoxic drugs, ionizing radiation, etc. In such a scenario, it becomes important to alleviate the fear of healthcare practitioners about choosing this specialized field of practice.

**Burnout prevention interventions** Such interventions are very important to keep people motivated, energetic, emotionally fit, and ready to face any challenge. When one is working in such a physically exhausting and emotionally stressful situation, it becomes compulsory to adopt burnout prevention interventions such as prioritizing boundaries, developing a work-life balance, prioritizing self-care, exercising the body and mind, regularly taking breaks, maintaining a support network, etc. At the institute level too, these things need to be accommodated for better outcomes.

### **Retention of experienced oncology nurses**

All the reports indicate the incidence of cancer disease is increasing, and survival is minimal in this part of the world. Furthermore, trained nurses are migrating to the developed world from this part of the world. When the load of disease is so high, there is always an increase annually in the incidence of disease. In such conditions, it becomes necessary to retain their trained nurses by any means. There is a need to develop a meaningful system and policy response to the challenges through meaningful



engagement and involvement of nurses. Equal, consistent recognition and value of the role: for the empowerment of nurses and their recognition, equal and consistent value must be given to the nurses, making them a part of their broader healthcare system in a meaningful way. Create new posts to accommodate the specialized oncology nurses and rename the posts so that they depict their qualifications.

**Digital micro-credentials and continuing professional development programs :** These kinds of programs become important where specialist cancer nursing courses at the university level are unavailable for capacity building. This should be equity-based, and more resources should be diverted to develop those areas where availability of such facilities is unavailable or scarce to provide standardized care to cancer patients globally. Use of co-design methodology within the field of cancer nursing and consulting with professionals who know specialized areas of cancer nursing. Mentorship or special academic programs can be inducted to expedite the solution. Conducting research towards addressing the education-practice gap. Being a scientific profession, nursing is constantly criticized for lacking theoretical proof to justify its practices. Even though there is a lack of standard books in nursing education, in such conditions, it becomes important to implement evidence-based practice programs to broaden the theoretical base of the nursing profession. The evidence in the fields is being created through multi-level research.

## **Address under-funded and under-researched topics in cancer care**

It becomes essential to identify the areas that are underfunded and under researched, though they are important parts of cancer care, such as cancer prevention, quality of life, and cancer survivorship. This is required for the overall development of the field.

## **Participation of nurses in policy making**

It is urgent to ensure the participation of nurses at the national and international levels in shaping policy. These policies are important for the overall growth of the field of specialized nursing care. Good policies lead to the exponential growth of the field, while bad ones take things in reverse.

## **Conclusion**

In the face of the exponential growth of cancer as a public health burden, the future of the oncology nursing workforce is reflected in the call from international bodies such as WHO for nurses to move to higher levels of leadership, advocacy, and policymaking (i.e., national cancer control planning).<sup>[11]</sup> Effective oncology services can only be provided by a robust oncology nursing workforce that has acquired through specialized education and clinical training. Advanced surgeries, radiation therapy, and immunotherapies are examples of complex cancer therapies and technologies that require nursing assistance from qualified and experienced specialists. This also requires substantial effort to overcome nursing shortages and barriers to nurse recruitment to oncology and that could be achieved through

innovative recruitment strategies, onboarding, continuing education programs, occupational safety measures, burnout prevention interventions, etc. At the policy level too, it is high time to move away from a “one-size-fits-all” strategy to country- or region-specific policies depending on cancer burden and availability of resources.

Oncology nurses have the potential to coordinate care across the cancer care continuum, from diagnosis to survivorship and end-of-life care. As cancer care continues to evolve, nurses will play a key role in the field of oncology, whether as specialized oncology nurses providing clinical care or as nurse researchers spearheading groundbreaking oncology research. There is also an urgent need to strengthen cancer registry programs for gathering accurate and real-time data by leveraging information technology networks. Governments and policymakers should invest in initiatives for mapping cancer care resources and the oncology workforce before it is too late.

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