Role of Nurses in the Creation of National Cancer Care Plans in Low- and Middle-Income Countries

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A national cancer control plan (NCCP) is a strategic plan that aims to reduce cancer incidence and mortality and improve quality of life by using evidence-based interventions to maximize a country's healthcare resources. NCCPs are essential tools in the global effort to manage the growing burden of noncommunicable diseases. Oncology nurses must understand and participate in the process of NCCP development and implementation to ensure that proposed interventions are acceptable to the target population and that training needs of the healthcare workforce are appropriately addressed, and to effectively deliver interventions from teaching cancer prevention behaviors to administering end-of-life care.

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Cancer incidence and mortality are rising in low- and middle-income countries (LMICs) around the world. The number of cancer cases in less-developed regions of the world is predicted to increase from 8 million cases in 2012 to 13.1 million cases by 2030, and the number of deaths is predicted to increase from 5.3 million in 2012 to 9.1 million in 2030 (Ferlay et al., 2013). These projections represent a 61% increase in new cancer cases and a 58% increase in cancer deaths in low-resource settings. The trend of rising cancer burden, along with severely constrained resources, presents a significant challenge for health systems in LMICs. Despite this challenge, strategic and evidence-based investments in cancer prevention, early detection, and treatment have substantial potential to reduce the burden of cancer and yield cost savings in the long term (Knaul et al., 2012). Investments in cancer control must also support the broader health capacity in countries to not undermine progress in infectious disease control, maternal and child mortality, and other health gains that have been made.

A national cancer control plan (NCCP) is a strategic country-level plan for cancer prevention and control that aims to reduce cancer incidence and mortality and improve quality of life for patients with cancer. An NCCP is a key tool for countries to design and implement evidence-based strategies for cancer control that account for a country's specific cancer burden, the resources and capacity available, and the culture and health system in that country (Union for International Cancer Control [UICC], 2012). Because no one-size-fits-all approach to cancer control exists, a deliberate and tailored approach to plan development is essential. Quality plan development involves all stakeholders in a country, along with the use of available data, tools, and resources, to ensure that the plan reflects the country's priorities and that the objectives and strategies are relevant, feasible, and affordable in the country's specific context.

The lead organization in the development of a country's NCCP is typically the ministry or department of health. The involvement of a diverse range of multi-sectoral partners in the planning process through a formal national cancer control partnership is a key component of ensuring the development of a quality plan and successful implementation (UICC, 2012; World Health Organization [WHO], 2006). This multi-sectoral coalition can include stakeholders from all areas of the community, such as academic and medical institutions, business and industry, community-based organizations, nonprofit organizations, government agencies, professional associations, and political leaders. Involving the full spectrum of stakeholders helps bring different strengths, expertise, points of view, and resources to the table.

NCCPs historically have been developed and implemented mainly in high-income countries, such as France, Ireland, and Spain (Ministerio De Sanidad Y Politica Social, 2010; National Cancer Forum, 2006; Republique Francaise, 2014). In some countries, like the United States, Canada, and Australia, the health system is structured such that, rather than developing a national plan, each state, province, or territory has its own plan. In recent years, many more countries, including many LMICs, have recognized the potential value in cancer control planning and have begun to develop and implement their own plans.

The growing global noncommunicable disease (NCD) epidemic and high-level political attention surrounding the issue has spurred much of the momentum in creating NCCPs. For example, in 2005, the World Health Assembly—the decision-making body of the WHO (2005)—adopted resolution WHA58.22, whereby member states committed to developing and improving cancer control programs. In September 2011, the United Nations General Assembly (2012) issued a Political Declaration on the Prevention and Control of NCDs that led to the WHO (2013) Global NCD Action Plan (GAP) 2013–2020, further building momentum for addressing cancer globally. The opportunity afforded by a global focus on NCDs inspired the creation of the International Cancer Control Partnership (ICCP) in 2012 by the National Cancer Institute and the UICC.

ICCP is a coalition of international organizations with expertise in different areas of cancer control planning. ICCP's goal is to support planners and decision makers in the process of cancer control planning, implementation, monitoring, and evaluation to assist countries in reaching the goals of GAP (Torode et al., 2015). ICCP facilitates access to a number of useful tools to develop and implement evidence-based cancer control plans. The ICCP has developed an online portal at www.iccp-portal.org to collate cancer planning tools and resources from multiple sources to aid in cancer control planning efforts. In addition, the ICCP online portal provides links to a large collection of published cancer control and NCD plans.

Cancer Control Planning in Low- and Middle-Income Countries

The process of developing an NCCP typically begins with an assessment of the country's cancer burden; the prevalence of risk factors; prevention and control policies and activities; the availability of screening and early detection programs; health system and workforce capacity; and the accessibility of diagnostic, treatment, and palliative care services. In LMICs, such assessments are often constrained by a lack of research and evaluation infrastructure (e.g., lack of sufficient data, quality of data, and data analysis capacity). For example, a population-based cancer registry is critical to understand a country's cancer burden. However, in LMICs, cancer registries tend to provide an incomplete and potentially inaccurate picture because many registries are only hospital-based or cover a subpopulation, such as a major urban center. Despite the challenges in obtaining high-quality and complete data for a thorough assessment, it is important that the plan starts with what is known and builds from this information. In fact, many NCCPs include a specific section on strengthening capacity for improved research and evaluation.

The assessment of a country's cancer situation in LMICs very often reveals that high proportions of cancers are diagnosed at advanced stages. This is because of factors like inadequate awareness of cancer signs and symptoms among the general population and health professionals, limited health literacy, cultural beliefs and barriers related to stigma, and few, if any, community health promotion or cancer education programs. In addition, assessment of cancer control activities in LMICs often reveals inadequate or ineffective screening and early detection programs; few treatment facilities; and scant medication, supplies, and equipment necessary for optimal cancer care. Substantial human resource needs are apparent, with low numbers of healthcare personnel and experts in cancer management, including nurses, and often few or no education or training programs in oncology.

The assessment often reveals additional health system issues that require attention from cancer planners. For example, patients frequently find it difficult to access basic cancer services because those services are generally available only at tertiary care facilities in urban centers. In addition, referral systems are often poorly functioning, and an overall lack of program coordination exists, which results in fragmentation, duplication, and inequality of care. A lack of standard cancer management guidelines also contributes to the inability of healthcare providers to take appropriate and prompt action when confronted with a suspected cancer. These challenges are compounded by serious underfunding of cancer control in almost all LMICs.

Once the country assessment is completed, the cancer control plan is formulated to address the identified gaps, taking into account the country context, including the health system, culture, and social determinants of health. A quality plan addresses the full range of cancer control activities (i.e., prevention, early detection, diagnosis, treatment, palliative care,

survivorship, and end-of-life care), in addition to general health system strengthening, such as building workforce capacity, developing data systems for further planning, financing of the plan, and establishing a monitoring and evaluation framework. An expansive NCCP includes broad goals, objectives, and strategies with specific targets and indicators of success. Although NCCPs are comprehensive in scope, not everything in the plan can be accomplished at once. Therefore, priorities must be established with a clear plan for phased implementation.

Significance of Nurses in Cancer Control Planning

Nurses are an important group of stakeholders in NCCPs, but they are typically underrepresented in national cancer control partnerships. Globally, nurses deliver the majority of cancer care, and their close connection with patients and the community provides them with a unique and important perspective on patient care and public health. When nurses serve as integral and active members of national partnerships that develop NCCPs, they can highlight the importance of community outreach and public awareness related to cancer prevention and control measures. Nurses can advocate for and directly support educating community health workers, a vital group of healthcare providers in LMICs, about the signs and symptoms of cancer. Nurses can also lobby for policy changes to expand nursing's role in cancer care in LMICs, such as in the areas of early detection and palliative care (Merriman & Harding, 2010; Mwanahamuntu et al., 2011; Shariff, 2014). Nurses have insight into the social determinants of health that affect the successful implementation of interventions and can help address factors, such as stigma, distrust of care provid-

ers and/or government institutions, and ethnic or gender inequities. Nurses can also ensure that the NCCP addresses the need to reduce health risks related to environmental and occupational exposures. For example, nurses can ensure that strategies are included to reduce exposure to hazardous chemotherapy drugs because chemotherapy is often prepared and administered by nurses in LMICs without the use of personal protective equipment. Without nurses as part of the coalition, these critical areas of NCCPs may be overlooked.

Nurses can get involved in their country's NCCP efforts in a number of ways. Nurses need to determine whether an NCCP in their country exists; if one does, nurses must become familiar with the plan, so they understand how they can help reduce cancer incidence and mortality and improve quality of life for patients with cancer. Nurses from other countries who work in an LMIC need to be familiar with the country's NCCP and ensure their efforts are aligned with its goals. If a national partnership already exists that is implementing the NCCP, becoming a part of the partnership, either as an individual or as part of a larger organization (e.g., a professional nursing society), will allow for better integration of efforts.

If no plan exists in a country, nurses can help in a number of ways. For example, they can advocate to the ministry of health for development of an NCCP. Nurses can also build support within the community and begin building a broad-based coalition for cancer prevention and control that includes advocates, healthcare providers, public health professionals, public servants, and international nongovernmental organizations. As plan development begins, nurses have an opportunity to help shape the broad vision of the plan, as well as the specific objectives and strategies.

Conclusion

An NCCP is an important health policy tool that provides a road map for a country's cancer control activities from prevention through survivorship. Nursing must be part of the coalition that develops and implements NCCPs to give voice to issues of concern for their community and their profession. Nurses need to be knowledgeable about their country's NCCP to participate fully in activities to reduce cancer incidence and mortality and work to lessen the burden of cancer in their country.

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