Global Cancer Disparities and the Need for New Initiatives

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The field of oncology is evolving at breakneck speed. Keeping up with the latest research findings, clinical best practices, and new chemotherapy agents is challenging, even with the help of the Internet. These oncolgic advances, however, are far from uniformly available, and disturbing global disparities persist. In much of the world, a diagnosis of cancer remains a death sentence, and too many patients struggle to obtain access to screening, treatment, and basic symptom management (Knaul et al., 2012). The harsh reality is that patients’ chances of dying from cancer depend largely on where they live. For example, about 90% of cervical cancer deaths—a highly preventable cancer—occur in developing regions of the world (International Agency for Research on Cancer & World Health Organization, 2012). About 27% of cervical cancer deaths occur in India alone (Jemal et al., 2011).

Millions of patients with cancer in low- and middle-income countries (LMICs) are unable to access basic pain relief, such as morphine. This unnecessary suffering is a public health crisis that is increasingly viewed as a violation of human rights and a call to action for social justice (Brennan, Carr, & Cousins, 2007; Cherny, Cleary, Scholten, Radbruch, & Torode, 2013; Human Rights Watch, 2011).

Another harsh reality is that nurses who are expected to provide cancer care in the majority of the world rarely receive the necessary training or have access to the resources available to their Western counterparts. Nurses who practice in many settings within LMICs cope with a staggering volume of desperately ill patients, minimal staffing, lack of supplies and personal protective equipment, cultural stigma and misunderstandings about their work as nurses, and power and gender inequities that further complicate their roles (LeBaron, Beck, Black, & Palat, 2014; Livingston et al., 2013).

Global View of Cancer

A traditional global health paradigm views noncommunicable diseases (NCDs), such as cancer and heart disease, as the burden of the Western world, and infectious diseases, such as malaria and tuberculosis, as the focus of clinical initiatives and research in LMICs. This outdated paradigm no longer fits, given the world’s rapidly aging population (United Nations Department of Economic and Social Affairs, 2002) and people around the world adopting a developed-country lifestyle, characterized by unhealthy diets, tobacco use, and lack of exercise. In the coming decades, LMICs will not only continue to battle infectious diseases that have yet to be eradicated, but also will face a looming NCD epidemic of their own (Beaglehole et al., 2011; Remais, Zeng, Li, Tian, & Engelgau,...
Cancer incidence is predicted to rise 75% globally by 2030, disproportionately affecting lower-income countries, where about 70% of the world’s cancer deaths occur and where an equally large percentage of patients present with late-stage, incurable disease (Bray, Jemal, Grey, Ferlay, & Forman, 2012; International Atomic Energy Agency & Programme of Action for Cancer Therapy, 2014). In other words, the most devastating effects of the global cancer crisis will be felt most acutely in countries least resourced to cope with its impact. To make matters worse, funding priorities are not aligned with these epidemiologic realities, and inadequate resources are allocated toward cancer control in LMICs (Silberner & Narang, 2012) (see Figure 1). Many may be familiar with the well-financed and important Global Fund to Fight AIDS, Tuberculosis and Malaria (Global Fund, 2015), but no equivalent global fund for cancer exists to address the critical needs of the second leading cause of death globally.

**Implications for Nursing**

Nurses, as frontline care providers and the largest healthcare workforce (International Council of Nurses, 2014), will be affected by this perfect storm of misaligned resources, exploding cancer incidence, and shifting world demographics, but not nearly enough attention has been given to how these impending realities will affect oncology nursing practice and research. For example, under-resourced and overburdened hospitals and clinics with critical staffing shortages will see a sharp rise in patients diagnosed with cancer who present for treatment. Increasing numbers of patients with cancer will require comprehensive symptom management, and they will need nurses who are prepared to deliver care in highly resource-constrained environments. Evidence-based oncology practice, developed almost exclusively in and for a Western context, will need to be critically reexamined for effective implementation in vastly different cultural and resourced settings. Oncology nurse scientists must explore and cultivate creative research partnerships with colleagues in disciplines such as atmospheric science, medical anthropology, and data science to find global oncology solutions.

**Global Exchange**

The broad goal of this new column, Global Exchange, is to shift the lens from a primarily Western-oriented perspective and frame cancer as a global public health crisis that requires oncology nurses from around the world to play a vital, forward-thinking role in developing solutions. To do this, the column will use the Social Ecological Model (National Cancer Institute, 2005) to discuss relevant global oncology topics that affect nurses on individual, interpersonal, institutional, community, and public policy levels. This column will work to raise awareness with oncology nurse scientists and clinicians regarding global oncology issues and provide a productive forum to share ideas, highlight culturally and contextually effective solutions to existing challenges, and inspire novel approaches to future concerns. It will also strive to give a stronger voice to oncology nurses who practice and conduct research in lower-income

**FIGURE 1. Cancer Deaths Versus Funding in Low- and Middle-Income Countries**

<table>
<thead>
<tr>
<th></th>
<th>Deaths</th>
<th>Funding ($)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cancer</td>
<td>4.8 million</td>
<td>Malaria 1.3 billion</td>
</tr>
<tr>
<td>Tuberculosis</td>
<td>1.1 million</td>
<td>HIV and AIDS 6.2 billion</td>
</tr>
<tr>
<td>Malaria</td>
<td>711,000</td>
<td>HIV and AIDS 2.1 million</td>
</tr>
<tr>
<td>Tuberculosis</td>
<td>903 million</td>
<td></td>
</tr>
<tr>
<td>Cancer</td>
<td>168 million</td>
<td></td>
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</tbody>
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The vast bulk of donor health funding to low- and middle-income countries goes to HIV and AIDS, tuberculosis, and malaria, despite the larger death toll from cancer. Figures include funding for prevention and treatment donated by private organizations and governements (primarily the United States and European countries). Health spending by recipient countries is not included. Ninety-two percent of cancer funding is spent on antitobacco campaigns.
countries and provide an opportunity for them to share the realities and obstacles they encounter in their daily practice and research.

By virtue of epidemiologic reality, in conjunction with technology that continues to negate geographic distance at a blazing pace, oncology has irreversibly gone global. No longer will a Western-oriented mindset suffice, and the questions asked, the projects developed, and the funding sought must account for the larger, diverse context in which cancer care occurs. Nurses are poised to lead the development of sustainable, scalable, and culturally sensitive solutions to the challenges inherent to the world’s growing cancer burden; Global Exchange is here to be a catalyst in this crucial endeavor.

References


Authorship Opportunity

Global Exchange provides readers with perspectives that highlight cancer as a global concern. The column discusses global oncology topics that affect nurses. Materials or inquiries should be directed to Associate Editor Virginia T. LeBaron, PhD, ACNP-BC, AOCN®, ACNP-BC, FAANP, at vlebaron@virginia.edu.