

Cancer care is increasingly complicated worldwide by its management with concurrent acute and chronic illness states. In low- and middle-income countries, including those in sub-Saharan Africa, this results in lower overall survival rates and a higher burden of cancer deaths. A case study is presented to highlight the challenges patients with cancer in Zambia—many of whom are also positive for HIV or AIDS—face in relationship to access to care and comanagement of disease states.

#### AT A GLANCE

- Oncology nurses in sub-Saharan Africa face unique challenges, particularly because of the number of potentially life-threatening diseases common in this region.
- The high prevalence of HIV, high burden of cervical cancer, psychosocial challenges, and financial constraints of patients affect their management.
- The small number of oncology and palliative care specialized nurses poses an additional challenge to meeting the complex needs of patients with cancer in Zambia.

#### KEYWORDS

cancer care; HIV; AIDS; disease comanagement; access to care

#### DIGITAL OBJECT IDENTIFIER

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# Disease Comanagement

## A case study of HIV/AIDS and cancer care in sub-Saharan Africa

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The World Health Organization (WHO) defines the occurrence of infectious diseases, such as tuberculosis (TB) and HIV/AIDS; noncommunicable diseases, like heart disease and cancer; and violence and injuries as a “triple threat” to global health (WHO, 2018b). HIV/AIDS is among the leading causes of death globally, with low- and middle-income countries disproportionately affected (WHO, 2017).

Cancer is reported as the second leading cause of death worldwide, accounting for nearly 14 million new cases in 2012 and 8.8 million deaths in 2015 (WHO, 2018a). About 70% of deaths occur in low- and middle-income countries (WHO, 2018a). In addition, infectious diseases, including human papillomavirus (HPV), are associated with 25% of cancer cases in such countries (WHO, 2018a). Africa, Asia, and Central and South America account for 60% of the world’s cancer cases and 70% of cancer-related deaths (McGuire, 2016). Cancer in sub-Saharan Africa (SSA), which occurs concurrently with infectious disease, accounts for some of the lowest survival outcomes in the world (Olaleye & Ekrikpo, 2017; Sankaranarayanan et al., 2010). Although public health initiatives focus on TB, HIV/AIDS, malaria, and maternal mortality, the burden of cancer is increasing in SSA (De Vuyst et al., 2013). Oncology nurses face challenges of adequate staffing, training, workforce stability, and the prioritization of care in the context

of potentially numerous life-threatening disease states (Munjanja, Kibuka, & Dovlo, 2005).

The most common cancers occurring in Zambia are listed in Table 1. HPV-associated diseases, particularly cervical cancer, are major causes of morbidity and mortality in SSA. Cervical cancer incidence rates in SSA are the highest in the world, and the disease is the most common cause of cancer death among women in the region (De Vuyst et al., 2013). Rates of cervical cancer vary considerably in different subregions; however, cervical cancer ranks first or second in all individual SSA countries and subregions. Guinea, Zambia, Tanzania, Malawi, and Mozambique have some of the highest invasive cervical cancer incidence rates in the world, at more than 50 per 100,000 women (De Vuyst et al., 2013).

### The Challenge of HIV and Cervical Cancer

Because of aging, population growth, lack of access to appropriate prevention services, and the concomitant HIV/AIDS epidemic, cervical cancer incidence and mortality rates in SSA are anticipated to rise during the next 20 years (De Vuyst et al., 2013). The prevalence of cervical precancer and cancer is reported to be high among women who are HIV positive in SSA, who typically present with cancer at an earlier age (Bateman et al., 2015). In SSA countries with high burdens of HIV, AIDS-associated malignancies, such as cervical cancer, increase as more