

PRIORITIES FOR CANCER PREVENTION AND CONTROL IN ZIMBABWE



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Zimbabwe is among the top 22 countries in the world in terms of the burden of HIV.¹ Many of the cancer cases in the country are related to HIV infection and therefore the country is facing a huge cancer challenge. Priority areas include prevention, early detection, care and support. The focus should be on high-impact, low-cost interventions such as vaccination against Human Papilloma virus (HPV) and cervical cancer screening using visual inspection of the cervix. These are the most appropriate measures for resource-constrained countries such as Zimbabwe. Furthermore, as most cancers present at an advanced stage, scaling up early detection is a priority. Equally important, is making treatment and care available and accessible to all patients, as opposed to the current situation whereby services are mainly centralized. This article highlights the priorities for national cancer prevention, control and care in Zimbabwe.

Cancer burden

According to World Health Organization (WHO) projections, the majority of people with cancer worldwide live in developing countries. These countries are facing a growing double burden of both infectious and non-communicable diseases such as cancer.² This is causing enormous pressure on already overstretched health systems. The African region, in particular, is facing a major public health challenge due to the rising burden of cancer.²

Zimbabwe, a low-income developing country in southern Africa, has a population of 12.75 million, with a life expectancy of 54 years.³ The gross domestic product was US\$ 10.8 billion in 2012.⁴ It is currently recovering from an economic crisis that peaked in 2008. However, the country has realized some encouraging successes, among which is the decline in HIV prevalence from 18% in 2004 to 15% in 2011.⁵ This was achieved through a coordinated, multidisciplinary approach. Success in HIV control in Zimbabwe brings hope for the fight against cancer. Yet another positive attribute is the high literacy rate of >90%: amongst the highest in Africa.⁶

In Zimbabwe, cancer is a major cause of morbidity and mortality with over 5,000 new diagnoses and over 1,500 cancer deaths per year.⁷ Most cancers are infection-related.

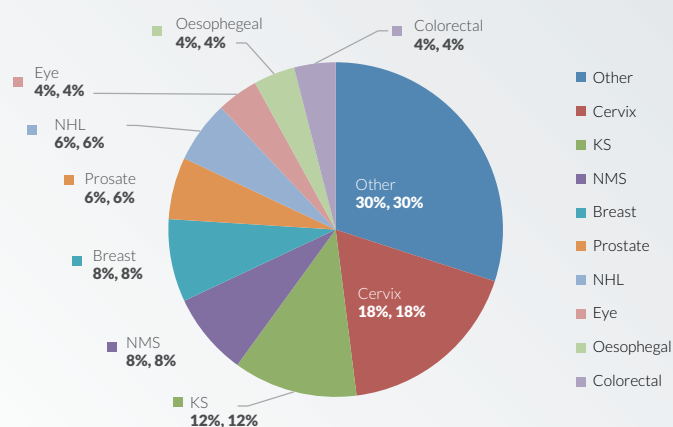
The other major risk factors include unhealthy lifestyles, nutritional and environmental factors. Figures 1 and 2 show cancer incidence and mortality data from the Zimbabwe National Cancer Registry.⁸

The most common cancers are cervical cancer and Kaposi sarcoma; these are also the leading causes of cancer mortality (Figures 1 and 2). In children, the most common cancers are Kaposi sarcoma, Wilm's tumour, retinoblastoma, soft and connective tissue tumours and tumours of the central nervous system.⁷ Analysis of data from the National Cancer Registry showed that 60% of cancers were HIV-associated.⁸ Unfortunately, in Zimbabwe, like other resource-limited countries, the majority of cancers present at an advanced stage. Low survival rates are therefore mainly a consequence of limited access to early detection and treatment.⁹

Current status of cancer management in Zimbabwe

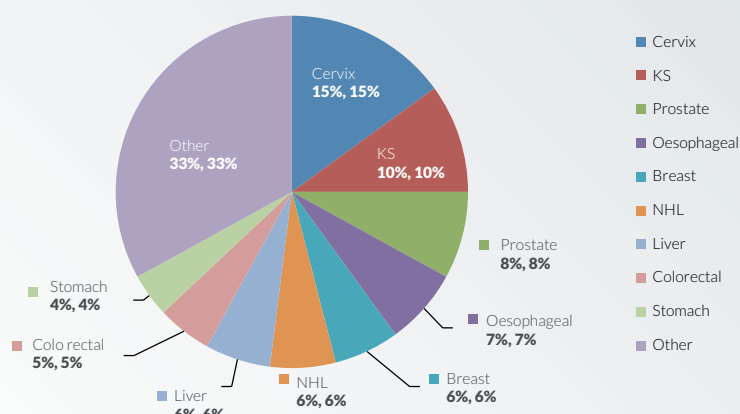
Access to screening, early detection, diagnostic and palliative care services is limited due to resource constraints. Another problem is that most diagnostic, treatment and palliative care services are centralized, so limiting access for many patients. Cancer treatment is currently only available at two

Figure 1: Cancer incidence by type in Zimbabwe, 2010



Source: ZNCR 2010

Figure 2: Cancer mortality in Zimbabwe, 2010



Source: ZNCR 2010

government hospitals in Harare and Bulawayo; private chemotherapy services are also available, mainly in the cities. There are no private radiotherapy services in the country. The centralized nature of the services also poses transport and accommodation problems, leading to treatment delays. Furthermore, the functional capacity of the existing centres is sub-optimal due to limitations on radiotherapy equipment, chemotherapy drugs, pain control medication and skilled staff. Inadequate supplies of chemotherapy drugs in state pharmacies force patients to source them from private pharmacies. Meanwhile, the more affluent patients seek services outside the country compromising national income. Non-governmental organizations, such as the Cancer Association of Zimbabwe (cancer awareness and support), the Hospice Association of Zimbabwe and Island Hospice (palliative care) and KIDZCAN (children's cancer care) do complement government cancer control activities but

unfortunately, they too are mainly centralized. Additional support is received from international organizations such as the United Nations.

Additional problems include a shortage of pathologists, radiologists and surgical oncologists in government service and again, most are available in the cities and in private practice, compromising access and early diagnosis. Moreover, planned operations are often postponed to make way for more acute cases, further delaying surgical management.

With regard to costs, many patients cannot afford the fees for services such as screening, biopsy, staging investigations and chemotherapy, and palliative care medication. Social welfare funds are inadequate and selective. Only a minority of patients have health insurance and in many situations, reimbursement for service provision is rationed.

Priorities for cancer control in Zimbabwe

The burden of disease, available resources, feasibility, impact and cost-effectiveness of interventions should determine priorities. According to WHO recommendations, a national cancer plan² should underpin the priorities for cancer control. Zimbabwe has a draft Cancer Prevention and Control Strategy, which outlines priorities for cancer prevention and control. Following an imPACT (Programme

of Action of Cancer Therapy assessment) mission, a cancer "prevention and control strategy" was recommended. A concerted effort by various stakeholders planned a feasible, cost-effective, appropriate, evidence-based and sustainable cancer prevention and control strategy. The aim of the strategy includes reducing cancer incidence, mortality and morbidity. Finalization and launch of the National Cancer Prevention and Control Strategy needs to be given priority.

Primary prevention

According to the WHO, 30–40% of cancers are preventable.² For resource-constrained environments such as Zimbabwe, prevention would be the most cost-effective intervention with the greatest public health potential. Zimbabwe has to formulate a national cancer prevention communication strategy. Policies on environmental pollution control, tobacco and alcohol control have been formulated but not

implemented. The Framework Convention on Tobacco Control¹⁰ needs ratification. HIV infection control efforts have led to a reduction in incidence of some HIV-associated tumours such as Kaposi sarcoma.¹¹ However, there is a need for more awareness about prevention of Hepatitis B. Vaccination against the liver cancer-causing virus is included in the pentavalent vaccine for children and coverage was more than 80% in 2010. As for prevention of cervical cancer, Zimbabwe now has funding from the Global Alliance for Vaccines and Immunisation (GAVI) to carry out HPV vaccine pilot projects on young girls in two selected, high immunization coverage districts, commencing in 2014. These demonstration projects will guide the national implementation of HPV vaccination. On-going bilharzia control to prevent bladder cancer, focusing on school children in endemic areas commenced in 2013. It is also critical that any anti-cancer programmes and interventions integrate control of chronic infections and non-communicable diseases within primary care. This would optimize cost-effective usage of the available limited resources.

Early detection

Early detection comprises both screening in asymptomatic but at-risk populations and early diagnosis in symptomatic populations. The problem is that in Zimbabwe the majority of patients, even with potentially curable cancers, present at an advanced stage.⁹ Early clinical diagnosis can only be implemented through increased public and health workers' awareness of cancer symptoms and signs and of available cancer programmes. The work force needs to be adequate, empowered, well trained in primary care and able to promptly recognize and refer people with suspected signs and symptoms for early diagnosis and treatment. Equally, health services need to be equipped with the necessary infrastructure to support diagnosis and treatment. Lack of

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access to early detection services and general lack of awareness currently leads to late presentation which is costly to manage and leads to poorer outcomes.

Priorities to improve early detection of cancers in Zimbabwe include formal assessment of the reasons for delays in early detection, scaling up of provision of early detection services at all levels accompanied by a sound referral system, i.e. referral centres need to have the capacity to take up the referred cases. Additionally, access to cancer screening services should be improved through increased availability of cost-effective screening services. Screening by Visual Inspection with Acetic Acid and Cervicography (VIAC) has been introduced at tertiary and some secondary centres. This has been selected as the screening method for Zimbabwe because it places less demand on the limited numbers of available pathologists, provides immediate results, the simplicity of the procedure and the potential for immediate treatment of lesions and its cost-effectiveness for both the woman and the health system. Plans are on-going to make VIAC available for primary care and all other levels.

Diagnosis and treatment

Diagnosis is the first step in cancer management. Once the diagnosis is confirmed, staging to evaluate the extent of disease is essential. Treatment will obviously depend on the type of cancer, the tissue of origin and stage of the disease. The aims of treatment will also vary according to the circumstances, from cure, to prolonging useful life and improving the quality of life.²

The diagnostic infrastructure in Zimbabwe is limited. Early diagnostic facilities are available mainly in the two largest cities: Harare and Bulawayo. However, a critical shortage of diagnostic facilities in public institutions leads to diagnostic delays of up to three or more weeks.

The three major modalities of cancer treatment namely surgery, radiotherapy and chemotherapy are both costly and inadequate in the country, in terms of personnel, medicines and equipment. Tumours which are detected early can be managed surgically but shortage of oncology-trained surgeons compromises care. Multidisciplinary teams are essential but currently a lack of trained specialists such as paediatric oncologists, haematologists and oncology nurses compromises this. Priority should be given to coordinate the fragmentary existing paediatric surgical and oncology services to improve care given to children with cancer.

Facilities at the existing radiotherapy centres have recently been upgraded but are still inadequate for the population. Affordable and accessible chemotherapy and palliative care medicines should be available in public institutions.

Priorities for cancer diagnosis and treatment in Zimbabwe include the establishment of cancer multidisciplinary teams, updating cancer treatment guidelines, the decentralization of diagnostic and treatment services and making accommodation available for patients being treated. Services should focus on early detectable tumours. Training of primary care staff to support decentralization should be implemented.

Palliative care and rehabilitation

WHO defines palliative care as “an approach that improves the quality of life of patients and their families facing the problems associated with life-threatening illnesses, through the prevention and relief of suffering by means of early identification and impeccable assessment and treatment of pain and other problems, physical, psychosocial and spiritual”.¹²

The provision of palliative care was pioneered in Zimbabwe by Island Hospice in 1979 and initially mainly served patients with cancer. Thereafter, service provision widened to include patients with other chronic conditions such as AIDS in response to the demand of the heightened epidemic. To optimize coverage, more emphasis was put on community-based services throughout the country. The Hospice and Palliative Care Association of Zimbabwe (HOSPAZ) was established to support and promote palliative care services in collaboration with the Ministry of Health and Child Welfare. In 2004, through a pilot project which included five African countries, WHO estimated the proportion of people needing palliative care to be 1 in 60. Also noted was the low level of integration of palliative care into the health care system. Subsequent review by the African Palliative Care Association (APCA) in 2010 showed Zimbabwean palliative care services to have progressed. The following had been achieved:

- ▶ There was a critical mass of activists and a range of providers and service types.
- ▶ Palliative Care was integrated into mainstream service provision, research was being undertaken and a national association had been formed.
- ▶ Palliative care provision is now part of the National Health Strategy and standard palliative care guidelines are already in use.

Palliative care priorities for the future include funding of local programmes, ensuring availability of morphine at all times and training primary health care workers and community-based carers in palliative care. Underpinning all of the above is finalization and approval of the guidelines by the Ministry of Health and Child Welfare. The existing draft

palliative care policy which seeks to address pain management, psychosocial and cultural needs of all people living with cancer needs to be implemented. Rehabilitation for cancer patients should also be prioritized.

Cancer surveillance and research

A cancer surveillance programme is an essential part of any national cancer control programme. Evaluation of the current situation, setting objectives for cancer control and defining priorities, and later, monitoring the implementation of the many individual cancer control activities is mandatory. Zimbabwe has a population-based cancer registry mainly for Harare. Funds permitting, a priority should be extension of this to the provinces. To achieve this goal, skilled personnel will need to be trained to implement expanded surveillance services. Legislation to make cancer a notifiable disease will go a long way to improving cancer registration. Ongoing integration with other surveillance systems for non-communicable diseases and HIV will improve efficiency and avoid duplication of processes. Statistical data to be prioritized includes data on incidence, mortality, stage distribution, HIV status, treatment patterns and survival. These will provide a basis for studies into the important causes of cancer in the local situation and for providing information about the prevalence of exposure to these factors in the population.²

Additionally, prioritizing investment into research and increased collaboration between relevant stakeholders will optimize research efforts.

Programme priorities for cancer control in Zimbabwe

Sourcing and allocation of funds to finance these various activities is the cornerstone of a successful programme and there should be a dedicated national cancer control budget. A comprehensive cancer prevention and control policy needs to be developed. It is recommended that there be a separate cancer-governing body with representation at provincial, district and community level, to facilitate communication and coordination and to streamline efforts towards the fight against cancer. Similar structures led to success of HIV care. Such a cancer control strategy should be implemented in 2014. The strategy should comprise comprehensive cancer referral and management guidelines, together with guidelines for decentralization and comprehensive cancer control. The latter also need to be integrated with primary health care for adults and children, school and work programmes, care for patients with other non-communicable diseases and HIV and AIDS programmes. Aligning the existing

health infrastructure to cancer management is also a priority. Already some aspects of the cancer strategy draft are being implemented. Availability of funding is critical to improve access of cancer services particularly to the under-privileged members of society.

Conclusion

Priorities for the control and care of patients with cancer in Zimbabwe include finalization and launching of the existing draft cancer prevention and control strategy.

HPV vaccination, cervical cancer screening and treatment are a priority to reduce the disease burden of this most common cancer which can be used as a performance indicator for the Zimbabwe Cancer Prevention and Control Programme. Control of other preventable cancers and early detection of selected curable cancers should also be prioritized. Cancer advocacy, dissemination of information and communication are also essential for success. Cancer treatment and palliative care need to be ongoing and coordinated. Pillars for success include sustainable, nationally funded, coordinated and collaborated cancer

control efforts with adequate infrastructure, equipment, medicines and skilled health practitioners to optimize access.

All of the above can only be fulfilled with increased financial commitment to the fight against cancer in Zimbabwe. Although there is much political commitment, the current financial limitations faced by the country are a major setback. The financial gap needs to be filled to make cancer treatment “free” for the ordinary Zimbabwean patient. ●

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