Guest Editorial: The state of oncology in Malawi in 2015

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Introduction

Malawi, along with other countries in sub-Saharan Africa, has seen an increase in cancer incidence. An internal Ministry of Health (MOH) survey of all central and district hospitals documented over 10,300 cancer cases in 2010 in these facilities. The increased burden of noncommunicable diseases (NCD), including cancer, has left many countries ill-prepared to deal with this epidemic. This has resulted partly from a lack of long-term investment in infrastructure for managing NCDs, and the traditional focus on infectious diseases as the only important health agenda.

Cancer policy

The Malawi MOH has made some progress in this area. There is an NCD unit that has been set-up and a manager appointed for this unit. This section oversees all NCD activities and helps set and implement cancer policy. The unit has managed to come up with an NCD plan and task forces in different areas of NCDs.

There is still a gap, however, as Malawi does not have a National Cancer Control Programme (NCCP) or a cancer plan. This would put the country on course with the WHO's agenda. A thoroughly set NCCP decreases cancer incidence and improves the lives of cancer patients, regardless of the level of resources available in a country.³

The Malawi MOH has now included a cancer section, for the first time, in the Malawi Standard Treatment Guidelines (MSTG). The MSTG oncology chapter covers common cancers and their management.⁴

Cancer registration

The Malawi National Cancer Registry (NCR), located in Blantyre, is the country's only population-based cancer registry. It is still externally funded, as the MOH is yet to inherit responsibility of ownership and financing of this important national establishment. Cancer registration is one of the important targets for a good quality cancer programme. This is target number 2 of the Union for International Cancer Control's (UICC) World Cancer Declaration, aimed at reducing cancer burden and promoting equity.⁵

There are other registries, in Lilongwe and Mzuzu, but these are pathology- or hospital-based. Though these may highlight interesting institutional data, they fall short in terms of their applicability to the community at large and for programming.⁶

There is no mandatory reporting of a cancer diagnoses by physicians, and collecting this data is a demanding task for the NCR personnel. Lack of death registration (vital statistics on death), as a legal mandate in the country, is another operational challenge that compromises the accuracy of our cancer statistics.

Oncology human resources

Malawi still has limited human capacity in the field of cancer diagnosis and care. There are currently five Malawian oncologists and haematologists involved in full-time cancer care, and all of these started practicing within the past six years. There are four Malawian pathologists in the country and two radiologists. Surgical oncology has well-qualified surgeons in some specialty areas but still remains deficient in others fields. Pathology technicians are very few, and there are currently no cancer social workers practicing in the country.

The only three certified oncology nurses are yet to be registered with the Nurses and Midwives Council of Malawi. The College of Medicine holds a grant from the Medical Education Partnership Initiative (MEPI, a funding programme administered by the American National Institutes of Health [NIH]) that is helping build the human resources capacity in this area. When the trainees that are being supported by this grant all graduate, it will go a long way to helping improve the above situation.⁷

Research capacity

Currently, the country is seeing a gradual increase in cancer research capacity in Blantyre and Lilongwe. Part of the research infrastructure has been laid down by the government, MEPI, and other NIH research grants. Currently, there are several research projects going on in both cities, with local and international collaborations. Several local papers have come up addressing local questions, and the current issue of the *Malawi Medical Journal* bears testimony to this.

In women, cancer of the cervix still remains the commonest, with most women presenting with late-stage disease. The importance of palliative care in this form of cancer cannot be overemphasized, and Bates and Mijoya's paper addressing this, in the current issue, truly tackles a key area of care.8 In men, apart form Kaposi's Sarcoma (KS), cancer of the oesophagus is the commonest.1 Other than alcohol and smoking, there is lack of clarity on other causative factors of this cancer in the local setting. Work investigating the local aetiological factors is very crucial for developing preventative strategies. Mlombe et al.'s case-control study reported in the current issue is, to my knowledge, the first systematic attempt to answer this question locally. There are other big studies in this area within the sub-Saharan African region, supported by the International Agency for Research on Cancer (IARC) and NIH, for which results are awaited.

The country has seen the establishment of the head and neck surgery discipline at Queen Elizabeth Central Hospital (QECH). This discipline is working closely with the QECH ENT hospital. This is a very important specialty, not only in diagnosing and managing head and neck cancers surgically, but also to aid in planning for radiotherapy. The systematic review paper, done by Faggons et al. and published in this issue, sheds more light on this important form of cancer.¹⁰

Advocacy

Advocacy forms an important pillar in cancer care and programming, in terms of mobilizing resources for care and programming-related activities. It also agitates the voice of awareness that helps direct the population to cancer screening.

Malawi has seen several advocacy groups come up over the past five years: the umbrella body, Cancer Association of Malawi (CAM), was re-established during this period; the Cancer Care Foundation and Cancer Quest (a cancer survivor group), and others have also been established.

Cancer treatment facilities

The country has now developed substantial paediatric oncology capacity that started as a Burkitt lymphoma study under leadership of Prof. Liz Molyneux.¹¹ This will eventually be reinforced by Malawian oncologists. It will definitely change the landscape of practice in this field and integrate it with radiation oncology as time goes. Malawi will eventually see the multidisciplinary care required in childhood cancers beyond the surgery and paediatrics interface. There are facilities for paediatric oncology in Mzuzu, Lilongwe (Kamuzu Central Hospital), and Blantyre (QECH), with the last two facilities having more capacity.

Six private and public medical oncology units have been established, spanning all three regions of the country. These can administer cytotoxic chemotherapy under the supervision of either an oncologist or a haematologist and other experienced doctors. This has enabled management of most chemotherapy-sensitive tumours and, indeed, has seen cures in breast cancers, lymphomas, germ cell tumours and other conditions. It has also created a good opportunity for successful and durable palliation in KS and other forms of cancer.

The much-awaited radiotherapy facilities would help increase our capacity to cure cancers (cervix, nasopharynx, oesophagus, breast, lymphomas, and others). Malawi would ideally require three radiotherapy facilities to address current demands. Approximately 55% to 60% of cancer patients require radiotherapy. This is very cost-effective, life-saving treatment and has been projected to have a positive economic benefit if access to it is increased.¹²

These treatment facilities bring with them treatment, teaching, and research capacity.

Conclusions

Some progress has been made over the past few years. However, oncology practice in Malawi still remains in its infancy and requires much investment from state, academic, and research institutions, and from the private sector to fast-track progress in this area.

References

- 1. Msyamboza KP, Dzamalala C, Mdokwe C, Kamiza S, Lemerani M, Dzowela T, et al. Burden of Cancer in Malawi; common types, incidence and trends: national population-based cancer registry. BMC Res Notes. 2012 Mar 16;5:149. doi: 10.1186/1756-0500-5-149.
- 2. Masamba L. [Audit of cancer cases in all Malawi Ministry of Health central and district hospitals, 2010]. Unpublished raw data. Ministry of Health, Government of Malawi, Lilongwe, Malawi.
- 3. World Health Organization. National cancer control programmes: policies and managerial guidelines [Internet]. Geneva: World Health Organization; 2002. 180 p. Available from: http://www.who.int/cancer/media/en/408.pdf.
- 4. Minstry of Health, Malawi. Malawi standard treatment guidelines—incorporating Malawi essential medicines list. 5th ed. Lilongwe: Ministry of Health, Malawi; 2015. 638 p.
- 5. Union for International Cancer Control (UICC) [Internet]. World cancer declaration 2013. Available from: http://www.uicc.org/world-cancer-declaration.
- 6. Union for International Cancer Control (UICC) [Internet]. Cancer registries: why, what and how? Geneva: International Agency for Research on Cancer, World Health Organization. 8 p. Available from: http://www.uicc.org/sites/main/files/private/UICC%20Cancer%20 Registries-%20why%20what%20how.pdf
- 7. Tomoka T. Cancer service delivery in Malawi: impact of a MEPI pilot award. Acad Med. 2014 Aug;89(8 Suppl):S113-4. doi: 10.1097/ACM.000000000000338.
- 8. Bates MJ, Mijoya A. A review of patients with advanced cervical cancer presenting to palliative care services at Queen Elizabeth Central Hospital, Blantyre, Malawi. Malawi Med J. 2015 Sep;27(3):93-5.
- 9. Mlombe YB, Rosenberg NE, Wolf LL, Dzamalala CP, Chalulu K, Chisi J, et al. Environmental risk factors for oesophageal cancer in Malawi: a case-control study. Malawi Med J. 2015 Sep;27(3):88-92.
- 10. Faggons CE, Mabedi C, Shores CG, Gopal S. Review: Head and neck squamous cell carcinoma in sub-Saharan Africa. Malawi Med J. 2015 Sep;27(3):79-87.
- 11. Hesseling PB. Burkitt lymphoma treatment: the Malawian experience. Afr J Cancer. 2009 May;1(2):72-9.
- 12. Atun R, Jaffray DA, Barton MB, Bray F, Baumann M, Vikram B, et al. Expanding global access to radiotherapy. Lancet Oncol. 2015 Sep;16(10):1153-86. doi: 10.1016/S1470-2045(15)00222-3.