CANCER PREVENTION AND CONTROL: A STRATEGY FOR THE WHO AFRICAN REGION

Report of the Regional Director

EXECUTIVE SUMMARY

1. Cancer is a problem in the African Region where 582,000 cases were recorded in 2002, a figure expected to double by 2020. While data on the burden and pattern of cancer in the Region are insufficient, the available studies and estimates show an increased incidence due to infectious agents and to growing tobacco and alcohol use, unhealthy diet, physical inactivity and pollution.

2. The most common cancers in the African Region are cancers of the cervix, breast, liver and prostate as well as Kaposi’s sarcoma and non-Hodgkin’s lymphoma. Enough knowledge and evidence exist for preventing one third of all cancers, providing effective treatment for a further one third and providing pain relief and palliative care for all cases. This strategy proposes interventions which, if promptly implemented, will contribute to reducing the burden of cancers.

3. Cancer control programmes should be established in a comprehensive and systematic framework and be integrated within national health plans. They should have adequate documentation, monitoring and evaluation systems. Country ownership, equity, partnership, accountability and integrated approach should guide the implementation of interventions.

4. Priority interventions should include development of policies, legislation and regulations; mobilization and allocation of adequate resources; partnerships and coordination; training of health personnel; acquisition of adequate infrastructure and equipment for primary, secondary and tertiary prevention; and strategic information, surveillance and research. These interventions, with primary and secondary prevention as top priorities, and availability, affordability and accessibility of drugs for cancer treatment should be implemented and scaled up in countries.

5. The Regional Committee is invited to review and adopt this proposed strategy.
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INTRODUCTION

1. Cancer refers to a group of diseases characterized by abnormal cell proliferation with a tendency to invade adjacent tissues and produce metastases. It poses a real global problem, accounting for 12.5% of all deaths worldwide in 2005; by 2020, new cases of cancer are projected to reach about 15 million every year, 70% of which will be in developing countries, including over one million in the African Region.1

2. The main factors contributing to the increasing incidence of cancer in the African Region are growing tobacco and alcohol use, unhealthy diet, physical inactivity, environmental pollution and action of infectious agents. Most cancer patients have no access to screening, early diagnosis, treatment or palliative care. Furthermore, the health systems of countries are not sufficiently equipped to provide cancer services.

3. Cancers impact negatively on the overall health status of the population in Member States and lead to loss of income and huge health expenditures. They mostly occur in the economically productive age group. Faced with a growing burden of noncommunicable diseases (NCDs) and a high burden of communicable diseases, countries in the Region are having difficulties in providing adequate cancer prevention and treatment services.

4. There is now sufficient understanding of the risk factors such that at least one third of all cancers worldwide are now preventable. Evidence is also available for early detection and effective treatment and cure of a further one third of cancer cases. In addition, treatment exists to help relieve pain and provide palliative care.

5. The declaration by Heads of State and Government of the African Union in Durban, in 2002, making a commitment to address cancer adequately in the development policies of countries; the WHO regional strategy for prevention and control of NCDs; the WHO regional strategy for health promotion; the Framework Convention on Tobacco Control; and the Global Strategy on Diet, Physical Activity and Health, are all part of the effort of the international community to address the problem of cancer.2

6. This document provides an overview of the cancer situation in the African Region and proposes a strategy for appropriate action by Member States and partners. The strategy builds on an existing World Health Assembly resolution (WHA58.22 on cancer prevention and control) and past achievements in the area of NCDs and proposes a set of public health interventions aimed at reducing the burden of cancer.

SITUATION ANALYSIS AND JUSTIFICATION

7. Information on the burden and pattern of cancer in the Region is scarce because of lack of accurate population-based data and the weakness of health information systems. In 2002, Globocan,

a worldwide database deriving estimates from available cancer registries, recorded 582 000 cases of cancer in Africa, a figure expected to double in the next two decades if interventions are not intensified.\(^3\)

8. Data from localized studies and derived estimates indicate that there is a high burden of cancer in the Region. The most common cancer recorded in the Region is cervical cancer which accounts for 12% of all new cases each year. Other major cancers recorded in the Region are cancers of the breast (10%), liver (8%) and prostate, as well as Kaposi’s sarcoma (5%) and non-Hodgkin’s lymphoma (5%).\(^4\) Cervical cancer and breast cancer are among the major public health problems in the Region although tools for their screening and early diagnosis are available.

9. Infectious agents are at the origin of almost 25% of cancer deaths in the developing countries. They include hepatitis B and hepatitis C viruses, human papillomavirus (HPV), schistosomiasis, *Helicobacter pylori*, Epstein-Barr virus and human immunodeficiency virus (HIV), among others. Vaccines exist for some of these infectious agents, including hepatitis B and HPV. However, the vaccine for HPV is expensive and not yet widely available in the Region.

10. Kaposi’s sarcoma has increased dramatically in parts of central, southern and east Africa where HIV prevalence is high. Liver cancer, caused by high levels of exposure to aflatoxins and chronic hepatitis B virus infection, remains very common across sub-Saharan Africa.\(^5\)

11. Tobacco use is the most avoidable cause of cancer. It causes cancer of the lungs, larynx, pancreas, kidney, bladder, oral cavity and oesophagus. The prevalence of tobacco use in Africa is rising, with attendant increase in passive exposure to tobacco smoke. It is estimated that in 2006 more than 50% of children in Algeria and Namibia\(^6\) were exposed to passive smoke.

12. Access to prevention, diagnosis and treatment services and psychosocial care for patients and families in the Region are severely hampered by insufficient funding and general weakness of health systems. Infrastructure and equipment are inadequate, outdated and poorly maintained. Qualified personnel for cancer control are inadequately trained, and most health-care workers, especially at peripheral levels, have too little knowledge and skills in regard to cancer.

13. In almost all Member States, national cancer prevention and control programmes are either lacking or very weak; policies, legislation and regulations are found wanting; and actions of partners are fragmented and poorly coordinated. The few existing cancer diagnosis and treatment facilities are centralized in urban areas.

14. Most patients report to health services when the disease is already at an advanced stage, with the result that patients with five-year survival rates in the Region are among the lowest ever reported.\(^7\) Chemotherapy and other tools of treatment remain beyond affordability. Pain relief and palliative care services are limited because of insufficient awareness among health-care providers, patients and the general public, as well as excessive regulation of the use of opioids.


\(^6\) [http://www.who.int/tobacco/surveillance/gyts/en/](http://www.who.int/tobacco/surveillance/gyts/en/).

**Justification**

15. The burden and risk of cancer in the Region are increasing. Most resources are used for treating cancers already at advanced stage and for costly referral of patients abroad. In contrast, too little is invested in cancer prevention while health systems are not well prepared to combat the threat of cancers.

16. Implementing this strategy will contribute to reducing cancer risks and lead to a decrease in cancer incidence and mortality, thus resulting in improved health and quality of life.

**THE REGIONAL STRATEGY**

**Aim, objectives and targets**

17. The aim of this strategy is to help reduce cancer morbidity and mortality in the African Region.

18. The specific objectives are:

   (a) To provide Member States with an orientation for the development and implementation of national strategies and programmes for cancer prevention and control;

   (b) To scale up cancer prevention, cure and care services;

   (c) To provide a platform for advocacy for increased resource allocation, increased action, multisectoral collaboration and cancer control partnerships;

   (d) To promote cancer research and cancer data collection and use.

19. Targets:

   (a) By 2013, 20% of Member States will have achieved 10% reduction of passive exposure to tobacco smoke among youths aged from 13 to 15 years;

   (b) By 2013, 40% of countries in the Region will have developed and be implementing cancer control programmes, including primary, secondary and tertiary prevention;

   (c) By 2013, at least 35% of Member States will be equipped with cancer registries and adequately trained staff.

**Guiding principles**

20. The guiding principles of this strategy are:

   (a) **Country ownership, leadership and fairness** in the implementation of this regional strategy;

   (b) **Equity and accessibility** of services, especially for the poor and rural communities;

   (c) **Partnership, team building and coordination**, with the involvement of all partners at various levels (government, private sector, civil society) in the development, planning and implementation of interventions; such coordination should be based on a clear definition and understanding of roles, responsibilities and mandates;
(d) **Innovation, creativity and accountability**, with the involvement of individuals, cancer patients, civil society and communities, and at all stages of decision-making, planning, implementation and evaluation;

(e) **Systematic and integrated approach** to step-by-step implementation of priority interventions as part of a national cancer action plan.

**Priority interventions**

21. **Cancer prevention and control policies, legislation and regulations.** Cancer policies, legislation and regulations are necessary to ensure that all individuals in countries have access to cancer services. They must aim to prevent infectious agents from causing cancers and to reduce exposure to tobacco smoke, chemicals such as pesticides, toxins such as aflatoxins, pollution and radiation. A cancer prevention and control policy document should be adopted and implemented within an integrated national health policy and plan.

22. **Establishment of comprehensive national cancer control programmes.** Cancer control programmes should comprise primary, secondary and tertiary prevention and include screening, early diagnosis, curative therapy and palliative care, as an integral part of NCD programmes. The interventions should be adapted to local settings and implemented in a cost-effective manner. The experience and lessons learnt should be documented for sharing. National, regional and subregional centres of excellence for cancer control should be designated and supported as part of a programme to build capacity and maintain quality care across the health system.

23. **Advocacy, resource mobilization and appropriate allocation.** Advocacy and resources are crucial to the implementation of cancer prevention and control programmes, and to their legislation and regulation within national health policies. These resources, to be mobilized from governments, individuals, the private sector and international partners, should be sustainable and equitably distributed among different levels of the health system. Member States should establish mechanisms for results-oriented resource allocation. There is a need for countries to advocate for the reduction of the cost of cancer medicines and the production of generic drugs for cancer treatment.

24. **Mobilization of partners and coordination of interventions.** It is necessary to clearly define partners’ areas of contributions, as well as the relevance of their support in line with national priorities. Partners should work collaboratively in international and national alliances and networks in order to support countries in building effective national programmes and strengthening health systems.

25. **Capacity development.** It is also necessary to improve the skills of decision-makers, health personnel and care providers at primary, secondary and tertiary levels of health systems. More specifically, cancer information for policy-makers and decision-makers should be reinforced for better understanding of technical and institutional aspects as well as international agreements and regulatory frameworks for cancer prevention and control. This information will prepare them to initiate, promote and better communicate national policies, legislation and regulations. At the same time, there is need to strengthen and develop community capacity for cancer prevention and control.

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26. Given that many cancer risk factors, such as pollution and exposure to chemicals, are beyond the control of the health sector, it is necessary to implement interventions to strengthen cross-sector collaboration. Such collaboration should involve relevant government sectors and stakeholders such as professional associations, civil society, community representatives, nongovernmental organizations, and the private sector.

27. Development of human capacity at all levels of the health system should be strengthened for cancer prevention and control. This should include laboratory skills for diagnosis as well as telemedicine, a useful tool for medical education and diagnosis. At the same time, health systems should be strengthened to address the problem of cancer at various levels. This should include the provision of adequate infrastructure as well as equipment and their maintenance for screening, diagnosis and treatment at all levels.

28. **Primary prevention.** Primary interventions are cost-effective approaches to reduce exposure to the major risk factors at individual and community levels. They reach out to school children, adults, the elderly and people at risk.

29. Primary prevention ensures that preventable cancers are targeted by health promotion strategies through improved communication for behaviour change. Implementation should be done in a cross-cutting manner, linking communicable and noncommunicable diseases, and starting at the community level. Specific interventions should be strengthened to reduce the incidence of AIDS-related cancers and HIV transmission and to improve the diet and physical activity of HIV patients.

30. Additional primary prevention interventions include using existing immunization programmes to make available suitable vaccine and to immunize populations at risk against the biological agents at the origin of carcinogenesis (hepatitis B viruses, HPV); reinforcing tobacco control; and involving traditional health practitioners in ensuring early referral of patients to health-care facilities.

31. **Secondary prevention.** Screening, early detection and diagnosis at the stages where cancers are curable should be given high priority in community interventions. Interventions in reproductive health and childhood cancers should be promoted and implemented at different levels of the health system. Techniques of visual examination for cervical cancer screening followed by immediate treatment by cryotherapy will reduce cervical cancer morbidity and mortality. A step-wise approach is recommended when starting or reorienting implementation so that each step will have a measurable outcome and progress can be monitored.

32. **Tertiary prevention.** Diagnosis and treatment strategies through tertiary prevention will ensure that the majority of patients have access to efficient diagnostic and sufficient treatment facilities. Cancer diagnosis and treatment should be carried out at the secondary and, eventually, primary level of health systems. Countries should ensure sustained availability of a minimum set of affordable and cost-effective medications for cancer management. The use of different mechanisms, including subregional economic communities, will ensure sustainable availability of these medicines. An enabling environment should be created, with palliative care integrated into the existing health delivery system. In addition, psychosocial support mechanisms based on collaboration between health services and communities should be developed at local level.
33. **Strategic information, surveillance and research.** Surveillance, research and knowledge management play pivotal roles in cancer control. Countries should establish cancer registries to monitor the trends of cancer incidence, prevalence and mortality as well as the risk factors. There is a need for increased investment in research; operational research should be promoted as an integral part of cancer prevention and control in order to identify knowledge gaps and evaluate strategies. Research on traditional medicines must produce evidence of their safety, efficacy, quality and appropriateness for use in cancer chemotherapy and palliative care. Findings of research on new cancer therapies, including gene therapy, should be recommended for wider use in the Region.

**Roles and responsibilities**

34. Countries should:

   (a) Adopt regulations and legislation aimed at reducing avoidable exposure to cancer risk factors and strengthen clinical practices;

   (b) Develop and strengthen comprehensive cancer control programmes tailored to the socioeconomic context and integrated into national health systems;

   (c) Mobilize and allocate resources for cancer control programmes;

   (d) Create public awareness of cancer prevention methods;

   (e) Establish surveillance systems, particularly cancer registries, as part of the existing health information systems;

   (f) Establish a system for procurement and maintenance of cancer diagnosis and treatment equipment in relevant services;

   (g) Increase the knowledge and skills of health workers and non-health care providers in cancer prevention and control.

35. WHO and partners should support countries by:

   (a) Mobilizing communities in the fight against cancer and by facilitating effective linkages, cooperation, collaboration and coordination among partners and stakeholders;

   (b) Carrying out advocacy for increased resource allocation especially for cancer prevention, infrastructure, equipment, medicines and research;

   (c) Providing technical and material support for establishing or strengthening national cancer control programmes;

   (d) Providing technical and material support for monitoring and evaluating cancer prevention and control programmes;

   (e) Establishing and generating evidence-based information and analysis to be used by governments to develop cancer prevention and control legislation.

**Resource implications**

36. The existing level of financial allocation to cancer control is generally insufficient. The situation is worsened by referral abroad of many cancer patients. Additional resources are required to
support the implementation of this strategy, particularly primary prevention, early detection, care and management components. This will reduce costs in the long term. Furthermore, there is a need to ensure the availability not only of trained human resources at different levels of the health-care system but also of the equipment and medicines needed for screening and treatment.

**MONITORING AND EVALUATION**

37. Progress monitoring indicators include the availability and effective implementation of cancer control policy, legislation, regulations and programmes. Outcome and impact indicators include the reduction of cancer incidence and mortality, trends of morbidity and reduction of risk factors.

38. Continuous monitoring and evaluation are crucial to the success of cancer control programmes and should be based on progress, outcome and impact measurements. The progress indicators should be well managed to meet the requirements of national health management systems and of reporting mechanisms relevant to international bodies, including the African Union.

**CONCLUSION**

39. The cancer prevention and control challenges facing the African Region include inadequate policies, legislation and regulations and limited access to prevention, diagnosis and treatment services. Comprehensive cancer control programmes require a multisectoral approach.

40. Strong advocacy and commitment at the highest political level are needed for cancer prevention and control in order that interventions can be successfully implemented. The interventions, with high priority to primary and secondary prevention, should be implemented promptly in Member States to reduce cancer morbidity and mortality.

41. The Regional Committee is invited to review and adopt this proposed strategy.