CANCER CONTROL PLANNING

14 Making cancer control part of the national health agenda: The World Health Organization's Country Cooperation Strategy and comprehensive cancer control planning

Andreas Ullrich and Shambhu Prasad Acharya

22 The International Cancer Control Partnership: Building capacity in cancer control planning

Julie Torode, Kristina Collins, Brenda Kostelecky, Rebecca Morton-Doherty, Lisa Stevens and And Cynthia Vinson

28 Sponsored feature: AstraZeneca: Driving oncology collaboration in Asia
Susan Galbraith AstraZeneca

31 Cancer prevention and treatment in developing countries: Recommendations for action

Thomas J Bollyky and Caroline Andridge

MAKING CANCER CONTROL PART OF THE NATIONAL HEALTH AGENDA: THE WORLD HEALTH ORGANIZATION'S COUNTRY COOPERATION STRATEGY AND COMPREHENSIVE CANCER CONTROL PLANNING



ANDREAS ULLRICH (LEFT) AND SHAMBHU PRASAD ACHARYA (RIGHT),
WORLD HEALTH ORGANIZATION

This article provides an overview of the principles behind the World Health Organization's guidance for national cancer control planning. It also describes the WHO Country Cooperation Strategy (CCS) which enables national governments to integrate cancer programmes into the broader national health agenda and to collaborate with a wide variety of international partners.

or over two decades, the World Health Organization (WHO) has encouraged countries to set up comprehensive national cancer control programmes (NCCPs) as part of their national health policy, strategy or plan (NHPSP). According to WHO standards, these programmes require a well-defined planning process with involvement from a broad range of national stakeholders that cover the plan components from prevention to palliative care. The NCCP framework governs not only the collaboration between national health authorities and WHO, but also with other international partners such as the International Atomic Energy Agency with its PACT cancer programme who also provide support in cancer planning. According to a recent WHO survey about national capacity for the prevention and management of noncommunicable diseases including cancer (1), the majority of countries including LMICs have taken up this WHO principle and have developed a national cancer plan. However, on closer inspection, very few of these plans are operational and have an allocated budget. The reason for this may be linked to the fact that in the past cancer was not considered a health priority like communicable diseases such as HIV, TB, Malaria, etc. and made part of the Millennium Development Goals over the last decade. The UN High Level Meeting on NCDs in 2011 and its political declaration (2) has catalysed a paradigm change in health planning since there is a declared commitment by all governments to include NCDs in their national health priorities. WHO has a leading role in galvanising national health systems to adequately address cancer and other NCDs.

Historically, it is important to have an understanding about how WHO in accordance with its global health UN mandate provides technical support to its Member States, taking into account that assistance in health planning is one of the six WHO core functions. The WHO Country Cooperation Strategy defines medium-term priorities for the technical and financial support WHO provides through WHO HQ, regional and country offices to countries in support of their national health policy, strategy and plan. The CCS is WHO's key instrument to guide its technical cooperation in a particular country and the main instrument for harmonizing WHO cooperation in countries with other UN agencies and development partners.

The objective of this article is to provide an overview of

the principles behind WHO's guidance in national cancer control planning, and the ideas which govern its support for good planning in general, as formulated in the WHO Country Cooperation Strategy (CCS) (3). It will show how NCCP planning follows the principles of CCS. Once a decision is taken by national health authorities to include cancer as a national health priority, the collaboration in cancer planning between the national government and WHO, as well as with other partners, needs to follow the principles of the CCS so that cancer is part of the broader national health agenda and NCCP translates into implementation and impact on cancer for that country.

The content of NCCPs

According to the WHO definition, a national cancer control plan is a public health programme with the overall objective of reducing the number of new cancer cases by lessening population exposure to cancer risks as well as strengthening health-care systems to provide equitable access to services for the early detection and management of cancer. NCCPs encompass prevention, early detection, treatment and palliative care. There are in principal two major areas of interventions which govern cancer control planning: population-wide interventions to reduction cancer risks and interventions which reorient health-care systems to deliver individual services for cancer patients. Early detection and screening relates to interventions at both the population and individual levels, as it is aimed at reaching out to a asymptomatic target population in order to identify individuals who might have early cancer or pre-cancer. This process of "looking for the needle in a haystack" requires a health-care delivery system which provides equal access to early detection and follow-up for those who are detected as potential cancer cases. Two principles govern early detection: screening as the systematic application of a test to a target 'at risk' population or general awareness-raising about signs and symptoms of cancer.

Reducing cancer risks as part of NCCPs

With regard to reducing population exposure to behavioural cancer risks such as tobacco use, obesity, alcohol use and lack of physical activity, programme planning requires multisectoral approaches mainly outside the health-care system. The WHO NCD action plan 2013–2020 (4) addresses these cancer risks and gives strategic direction using a set of voluntary targets (5) for the reduction of, for example, tobacco consumption, as part of the NCD monitoring framework. WHO has developed global strategies and guidelines for policies and strategies which

target tobacco use (6), unhealthy diet and physical inactivity (Global Strategy on Diet, Physical Activity and Health 2004 (7) and alcohol (Global Strategy to Reduce Harmful Use of Alcohol 2010 (8). To make effective use of these strategies, there is a need for collaboration between national health authorities and WHO and other partners to support national planning and implementation. It has been forecast that by achieving the voluntary targets of the NCD Action Plan by 2025, 7% of all cancer deaths would be avoided which is equivalent to 2.4 million deaths in the 30 – 69 year age group and 2.1 million cancer in the over 70 year age group (10).

Another key area of cancer prevention which requires careful planning is lessening the exposure to infectious causes of cancer such as HBV and HPV infections through mass immunization. WHO has develop detailed guidance on how to plan and implement immunization programmes for HPV by targeting adolescent girls to avoid HPV chronic infections and for infant immunization against HBV infection to reduce HBV-caused liver cancer (hepatocellular cancer HCC). Both cancer types are of major relevance in LMICs. The roll-out of immunization programmes which may be school-based or health facility-based requires governmental planning with support from WHO and other partners such as the Global Alliance for Vaccines and Immunization.

Legislative and regulatory interventions are key methods of reducing environmental and occupational exposure to pollutants such as asbestos and other carcinogens. With its monograph programme, IARC, the WHO cancer research centre, is continuously increasing knowledge about environmental and other causes of cancer which has initiated changes in national regulations and legislation, for example, regulations to reduce exposure to asbestos.

Plans for strengthening health-care systems to deliver the early detection and management of cancer

Cancer treatment is at its most effective in reducing case fatality rates and in increasing long-term survival rates when diagnosed at early stages and managed in accordance with best practice and international standards. Planning will therefore require a combined strategy of early detection and screening with a strategy for cancer treatment capacity-building at all levels of care. The assessment of the current situation of existing services, including their effectiveness and safety, and the setting of priorities and objectives for cancer management, is the starting point of the planning process. Once agreed upon priorities, cancer management service infrastructure at all levels of care will need to be developed which includes cancer specialized surgery, chemotherapy and radiotherapy in specialized radiotherapy

centres. In accordance with WHO's framework for health system development and its building blocks (11), planning care delivery for cancer management requires scaling up the availability of trained health-care providers, access to medicines and technologies for cancer treatment, the development of national treatment standards and the establishment of a governance structure for cancer care delivery systems and their monitoring and financing. Figure 1 provides examples of the distribution of essential cancer diagnosis and treatment technologies that are needed at all three levels of care.

Planning a NCCP

The 12th General Programme of Work and Programme Budget (12) is setting WHO's priorities in health planning. Cancer control is included as part of the NCD-related strategies and actions. Among the four major NCDs (cancer, CVD, diabetes, COPD), it was cancer control which was thought-out first with the overarching principle of integrating prevention and control into one national plan. This principle of comprehensiveness has been extrapolated to the other major NCD conditions which are part of the global NCD Action Plan (4). A national cancer control planning process starts (defined as step 1 (14)) with an indepth situation analysis of the cancer burden and underlying risks and the availability of services for early detection,

diagnosis, treatment and palliative care. Population-based cancer registries are the source of solid data about the incidence and pattern of cancer from which evidence-based decisions can be taken on priorities to address cancer prevention, early detection/screening and management.

Step 2 requires an open discussion among stakeholders so that they have ownership of the decisions taken for the cancer plan. Government, civil society professional organizations and leading experts and patient groups are needed for their input and commitment. This planning phase ends up with the formulation and political endorsement of a NCCP document which includes all four pillars of the comprehensive cancer control framework. Implementing the plan depends on the availability of resources, political will and a governance and reporting mechanism. Implementation needs to be accompanied by a monitoring system so that deficiencies in progress can be identified and managed.

Some countries are working on their national cancer planning processes with the International Atomic Energy Agency (IAEA) and its PACT programme. Entry point for the IAEA to become involved are requests for technical support on developing national capacity in radiotherapy services. In responding to this request, IAEA makes the existence of a NCCP mandatory for any support and follow up. IAEA PACT has developed a global cancer assistance programme which

Figure 1: Distribution of cancer diagnostic and treatment services across the levels of care in a typical middle-income country

Tertiary care level

(national or regional hospital) <u>Diagnosis</u>

Imaging: X-ray, ultrasonography, mammography, computerized tomography (CT) scan, endoscopy Laboratory: cytology, haematology, histopathology, prognostic markers, immunochemistry

Treatment

Radiotherapy, complex surgery and chemotherapy, rehabilitation, psychosocial support, self-help groups, patient education programmes

Secondary care level

(district hospital)

Diagnosis

Imaging:X-ray, ultrasonography, mammography, endoscopy
Laboratory: cytology including fine-needle aspiration, haematology, biopsy, routine histopathology

Treatment

Moderately complex surgery and chemotherapy (mainly outpatient clinics), rehabilitation, psychosocial support, self-help groups, patient education programmes

Primary care level

Early referral of suspicious cases, simple surgical procedures (e.g. cryotherapy of pre-cancerous lesions of the cervix), retrieval of patients who abandon treatment, patient support groups, patient education and rehabilitation, education and training of community caregivers including traditional healers

Source: Global Analysis of CCS, CCO/WHO, 2012

is aimed at supporting the national cancer control planning process by at least one country mission during which a delegation of experts meets with national key stakeholders and provides advice in priority setting and planning (12). The US National Cancer Institute also provides support for cancer control planning (13).

The WHO Country Cooperation Strategy (CCS)

The CCS provides a framework for translating WHO's normative work into national health planning, fully aligning the priorities identified with national health priorities by means of a well-defined process which follows a set of key guiding principles and values. Among those, the principle of country ownership of the planning process and its outcome is of paramount importance. CCS therefore requires an alignment of the planning with national priorities and builds upon national health systems and supports existing plans and strategies. The CCS not only relates to national priority setting and budget allocation but also to WHO's general programme of work which sets WHO's global leadership priorities and deliverables of which NCDs are part.

At the country level, WHO, under the leadership of country office team, formulates the CCS which is WHO's key instrument to guide its work in and with a country, in support of the country's national health policy, strategy or plan. A set of planning steps include situation analysis, stakeholder involvement and the formulation and national endorsement of a CCS document. It is the main process for harmonizing WHO's collaboration in countries, with that of other UN bodies and with development partners. The CCS process is a powerful tool for fostering strategic policy dialogue among key stakeholders in countries, territories and regions and for positioning health at the centre of the development agenda. The CCS priorities, which are aligned with national health priorities, as well as WHO's Program Budget outputs and deliverables, are the basis for developing a biennial work plan at country level. Where NCDs, especially the prevention and control of cancer, are identified as a CCS priority or country level priority in the biennial Programme Budget, WHO engages in technical collaboration with the country and provides the necessary technical support. The existing CCS is published on the WHO website (15). Table 1 gives an overview of the health topics included in the existing 143 CCS documents according to a WHO internal analysis. Cancer control plans are not specifically listed however, but found in NCD and cancer prevention relevant programmes such as FCTC and health promotion and lifestyle. Among the 143 CCS, more than half have FCTC implementation included and 94% health lifestyle-related programmes.

While the NCDs, including cancer, are becoming major public health issues especially in middle-income countries, WHO technical cooperation with these countries is yet to adequately address the challenges of NCDs, including cancer. The formulation of CCS can provide an opportunity to make NCDs a priority for WHO through sound health situation analysis that would reflect the burden of disease related to cancer. The commitment of the UN system, including the joint letter from the WHO Director-General and UNDP Administrator to UN Resident Coordinators and WHO Representatives encouraging them to advocate for NCDs and to incorporate NCDs into United Nations Development Assistance Framework (UNDAF) would enable the integration of national cancer control plan into the work of the UN system with dedicated financial and technical resources.

WHO's leadership at country level is particularly important to ensure that health is reflected in the development agenda. This covers the policy, management, staff development and administrative services that increase the effectiveness of WHO offices in countries, areas and territories, and, more broadly, that shape WHO's cooperation with countries in which WHO has no physical presence. In practice, this means regularly updating the processes and tools needed for developing CCS and, in particular, introducing a much sharper focus on the areas of collaboration so that they play a greater role in future priority setting. In all countries, the CCS is closely aligned with national health policies, strategies and plans; and, where appropriate, its key components are reflected in the United Nations Development Assistance Framework to which all UN agencies contribute. This is complemented by the UN Interagency Taskforce on NCDs (16) which brings together all UN agencies in order to contribute to the implementation of the NCD action plan with its priority actions in order to achieve the set of voluntary targets.

The WHO country office takes the lead (within the Secretariat there are three levels of the organization: HQ, regional and country offices) in developing and negotiating a CCS; managing technical cooperation; implementing and monitoring international commitments, conventions and legal instruments; and in emergency and crisis response.

Conclusion

The NCCP planning process used by WHO is fully in line with the WHO generic CCS strategy and planning templates. Situation analysis, stakeholder involvement, governmental endorsement of a strategy document and a well-defined

Categories and areas of collaboration	No. of CCSs that prioritized the area	% of all CCSs
1. Communicable Diseases		
HIV/AID, TB, Malaria, Sexually Transmissible Infections (STIs)	118	83%
Neglected Tropical Diseases (NTDs)	76	53%
Vaccine preventable diseases and polio	95	66%
Emerging and re-emerging diseases	63	44%
2. Non communicable Diseases (NCDs)		
Health promotion, risk factors and healthy settings		
(incl. nutri-tion/physical activity for NCD prevention)	135	94%
FTCT/tobacco control	93	65%
Mental health and substance abuse	99	69%
Violence/traffic accident and injury prevention	98	69%
Physical disability	29	20%
Care Model	41	29%
Ocular health (visual impairment and blindness)	17	12%
3. Health through the Life Course		
Reproductive health services	76	53%
Maternal and new born care	108	76%
Child and adolescent health	103	72%
Life-course, ageing and continuum of care	40	28%
Nutrition (malnutrition etc.)	78	55%
4. Health Systems and Services Strengthening MoH Governance, leadership and health policy	133	93%
Health in all policies	100	7070
(& multisectoral collaboration for health)	84	59%
Planning, monitoring and evaluation	96	67%
Human Resource for Health development	127	89%
Health information systems	128	90%
Hospital management	28	20%
Universal health coverage/ health financing	122	85%
Quality service delivery based on Primary Health Care	129	90%
Organization of health services including decentralization	112	78%
Medicines	400	7.00
(production, procurement, Good Manufacturing Practices)	108	76%
Vaccines and biologicals (production, logistics, cold chain etc.)	41	29%
Laboratories, technologies and safe blood	100	70%
Traditional medicines	25	17%
Operational research	86	60%
5. Preparedness, surveillance and response	440	000/
Emergency preparedness and response	118	83%
Disease surveillance and early warning systems	10	4007
(in context of emergencies)	62	43%
Occupational health and safety, climate change	54	38%
Air quality	11	8%
Food and water cafety: waste management canitation	96	67%
Food and water safety; waste management, sanitation International Health Regulations 2005	92	64%

implementation process are common to both. Compared to other health topics, a comprehensive NCCP is based on a very complex set of interventions along the continuum of cancer prevention and care where each area will require specific stakeholder involvement, budget allocation and implementation processes. Planning and implementing cancer prevention strategies goes beyond the health sector and requires involvement multisectoral ownership. There is also overlap between some components of cancer prevention with the planning in infection control by immunization programmes (HPV, HBV). The same applies to cervical cancer screening and reproductive health programme planning. HIV programmes may include cancer control components in their planning since cancer risk among HIV positive populations is higher than in the general population. Planning to strengthen health-care delivery for cancer management will also need to be imbedded into the planning of WHO's priority areas such as universal health coverage increasing access to essential medical products. Most countries have cancer plans and policies which reflect an understanding about what is needed to control cancer, however implementation is remaining a major challenge. On the other side, cancer control planning is not yet adequately reflected in most CCS documents (Table 1). More progress could be achieved by closely linking cancer control planning with the national CCS planning process and involving the partners of WHO such as IAEA in synchronizing CCS and NCCP planning. The dynamic of the implementation of the NCD action plan 2013-2020 is an opportunity to

enhance the implementation of cancer control since having an effective national cancer plan will help achieve the overarching NCD target of 25 % reduction of NCD mortality by 2025. •

Dr Andreas Ullrich MD, MPH is Medical Officer cancer control, which is focal point for Cancer Control with the World Health Organization (WHO) at WHO Headquarters in Geneva and liaison officer WHO with the International Agency for Research on Cancer.

Dr Ullrich graduated in Medicine from the University of Munich, Germany, specialising in internal medicine, and then graduated in Public Health at the Bielefeld School of Public Health, Germany where he then worked as assistant professor in cancer epidemiology.

He joined WHO in 2001, working on its cancer control programme which is providing global guidance to WHO Member States in cancer control planning and capacity building. He has since developed a WHO organization-wide cancer prevention and control network which is engaging all relevant technical programmes at headquarters and regional Offices in responding to the needs of cancer control in low- and middle-income countries. The translation of the results of cancer research into public health practice is Dr Ullrich's focus as liaison officer WHO IARC, WHO's cancer research institute in Lyon, France. Dr Ullrich's current major focus is supporting WHO member states in developing and monitoring cancer

programmes under the NCD framework and in implementing the 2014–2020 WHO NCD Action Plan in close collaboration with the Union for International Cancer Control (UICC), ACS, the International Atomic Energy Agency (IAEA) and professional organizations in cancer treatment (ESMO and ASCO).

Shambhu Acharya, PhD (Public Health) is currently Director ad interim of the Department of Country Cooperation and Collaboration within the United Nations System which is primarily responsible for developing tools, monitoring and supporting the formulation of country cooperation strategies. Dr Acharya graduated with PhD in Health Policy and Management from the University of North Carolina at Chapel Hill, USA. He worked for a year with the World Bank in Washington DC, and subsequently in Bangladesh.

He joined WHO in 1992 as Programme Manager at WHO Country Office in Bangladesh where he was responsible for managing large World Bank funded projects, including one on the prevention and control of cancer. He was later reassigned to WHO Regional Office for South-East Asia as Regional Advisor, National Health Systems and Policies. Subsequently he was reassigned to WHO/HQ as Technical Officer in partnership for health sector development initiative in 1999. Since then, Dr Acharya has been in HQ working in different capacity in the areas of health system, country cooperation and collaboration with UN and other partners.

References

- $1. \ Ullrich A Riley L "Current national cancer control capacity" in \ World Cancer Report chapter 6.2 p 538-546; 2014 IARC Lyon France$
- $2.\,UN\,General\,Assembly\,High\,level\,Meeting\,on\,NCDs\\http://www.who.int/nmh/events/un_ncd_summit2011/en/\,and\,its\,declaration\\http://www.who.int/nmh/events/un_ncd_summit2011/political_declaration_en.pdf?ua=1$
- 3. WHO country cooperation strategy http://www.who.int/country-cooperation/what-who-does/ccs/en/
- 4. WHO NCD action plan http://www.who.int/nmh/publications/ncd-action-plan/en/
- 5. WHO NCD Global Monitoring framework http://www.who.int/nmh/global_monitoring_framework/en/
- 6. WHO Framework Convention on Tobacco Control http://www.who.int/fctc/en/
- 7. WHO Global Strategy on Diet and Physical activity http://www.who.int/dietphysicalactivity/en/
- 8. WHO Global strategy on alcohol http://www.who.int/substance_abuse/activities/gsrhua/en/

- Contis et al (2014) .: Contribution of six risk factors to achieving the 25x25 NCD morality reduction target: a modelling study. Lancet
- 10. WHO Everybody's business: strengthening health systems to improve health outcomes.
- http://www.who.int/healthsystems/strategy/everybodys_business.pdf?ua=1
- 11. WHO 12th general program of work http://www.who.int/about/resources_planning/twelfth-gpw/en/
- 12. IAEA PACT program http://cancer.iaea.org/
- $13. \, NCI \, Global \, Health \, program \, http://www.cancer.gov/aboutnci/organization/global-health/research-programs-initiatives/ICCP$
- 14. WHO Cancer control: knowledge into action http://www.who.int/cancer/modules/en/
- 15. WHO Country Cooperation Strategies and Briefs http://www.who.int/country-cooperation/what-who-does/strategies-and-briefs/en/
- 16. UN Interagency taskforce http://www.who.int/nmh/ncd-task-force/en/