

## THE 25<sup>th</sup> ANNUAL ELLEN P. HERMANSON MEMORIAL SYMPOSIUM March 15, 2022

#### WHAT'S ALL THE \*BUZZ\* ABOUT ALCOHOL & BREAST CANCER?

#### Setting: Board of Health Public Hearing, City of Gotham, New York

In our fictional community of Gotham, New York, the Board of Health is holding a public hearing in connection with a proposed rule requiring stores/purveyors (liquor, grocery and drug stores) to post signage at the point of purchase where alcohol is sold ("Alcohol Signage Rule"). (Note that existing alcohol bottle labels contain requisite disclosures of two risks: don't drink while driving or pregnant.) A copy of the Alcohol Signage Rule is annexed as Exhibit "A".

#### Vocal Opposition to and Support for the Action Being Considered

The Board of Health has received hundreds of comments, including support from local breast cancer and other cancer-related non-profit organizations. In contrast, the Gotham Chamber of Commerce and various industry organizations have submitted vigorous oppositions.

As expected, the Gotham Chamber of Commerce and various food and beverage industry organizations adamantly oppose creating any law that would deter consumers from purchasing alcohol, and/or impose regulatory burdens on businesses. They also take issue with any measure that would dictate behavioral and lifestyle choices under the guise of protecting public health. They celebrate individual freedoms, and argue that people can decide for themselves whether they are susceptible to developing breast cancer and at what levels their individual consumption would be deemed harmful. In sum, the opponents argue these legal points:

- the Board exceeded its authority as an executive branch entity;
- the Alcohol Signage Rule is "arbitrary and capricious";
- the Alcohol Signage Rule infringes on the affected stores' First Amendment rights; and
- the Alcohol Signage Law is preempted by state and federal statutes.

Proponents of the contemplated government action focus on the "science" and epidemiology of this quiet but potent public health crisis. They argue that the ability of scientists to view alcohol's effects at a cellular level coupled with the results of

longitudinal population studies provide clear evidence that heavy drinkers place themselves at greater risk for developing breast cancer. They insist that given the historic appeal of alcohol and how it is engrained in our culture's social fabric, the general public is incapable of independently, without the assistance of government restrictions, best protecting itself by reducing consumption to "safe" levels. Proponents maintain that one function of local government is to promote public health and use its tools provided by the state legislature and constitution. They urge that Gotham resist succumbing to lobbyist pressures that prioritize economics over public health, and in any event, they contend that preventing the development of cancer has longer-term economic benefits that outweigh any short-term gains from alcohol sales-tax revenue.

#### **Expert Input**

At the Public Hearing, as for whether the Board of Health had any legal right to impose such mandates on alcohol purveyors, attorneys will speak to the legality of the rulemaking process and the Alcohol Signage Rule's content. Preliminarily, the attorneys will address whether the Alcohol Signage Rule underwent the appropriate administrative rulemaking process:

- -Board vote.
- -publication of proposed rule and notice of public hearing
- -comments period.

Attorneys will also discuss the "Regulatory Impact Statement" and what content is necessary. Substantively, attorneys will discuss whether the Board of Health exceeded its authority in enacting the Alcohol Signage Rule, or whether in doing so it acted arbitrarily and capriciously. Questions regarding constitutionality and preemption will also be discussed. The attorneys will also describe the procedure and process of a court challenge should the Board go forward in promulgating the rule.

Medical/public health witnesses will present viewpoints regarding the Alcohol Signage Rule and the science underlying the connection, if any, between alcohol use and developing cancer. Experts will speak about cancer risks of drinking alcohol, and discuss possible interpretations of what the WHO intends when citing a "harmful" consumption of alcohol. They will discuss the benefits of limiting or removing alcohol from the diet of cancer patients, survivors, and people with a propensity for cancer.

#### Background Giving Rise to Board's Action

In 2017, the World Health Assembly passed Resolution WHA70.12, "Cancer prevention and control in the context of an integrated approach" (the "Resolution"). (See Exhibit "B".) The Resolution urges governments and the World Health Organization (WHO) to "accelerate action" to achieve the targets specified in the "Global Action Plan for the Prevention and Control of NCDs 2013-20"3 and the "2030 UN Agenda for

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NCDs means non-communicable diseases.

Sustainable Development" in order to "reduce premature mortality from noncommunicable diseases" like cancer.

In a March 2021 statement elaborating on cancer and efforts to prevent and control it, the WHO listed several <u>carcinogens</u>, each falling within the category "physical", "chemical" or "biological". (*See* Exhibit "C".) The WHO wrote that "alcohol use" is a <u>risk factor</u> for cancer, <sup>4</sup> regarding which it comments: "Between 30 and 50% of cancers can currently be prevented by avoiding risk factors and implementing existing evidence-based prevention strategies." It then states (in pertinent part):

Cancer risk can be reduced by:

- not using tobacco;
- maintaining a healthy body weight;
- eating a healthy diet, including fruit and vegetables;
- doing physical activity on a regular basis;
- avoiding harmful use of alcohol;

(Emphasis added.) The WHO does not define "harmful" or quantify what level of alcohol consumption should be considered harmful.

#### Gotham Board of Health's Action Steps

As guided by the WHO's recommendations to "accelerate action" in reducing cancer, the Gotham Board of Health published its proposed Alcohol Signage Rule, set the statutory notice period for comments, and scheduled the public hearing, where everyone's voices will be heard and questions will be answered.

The program will conclude with an audience poll of whether Gotham should continue to try to promote a public health policy even where there may be an economic impact on businesses and individual liberties.

Alcohol was not included within the examples of carcinogens. This begs for a medical explanation of how the use of alcohol, although not considered a "carcinogen", is a "risk factor" for cancer.

### **EXHIBIT "A"**

#### (Proposed) GOTHAM CITY "ALCOHOL SIGNAGE RULE"

Pursuant to the authority vested in the Gotham City Health and Health Planning Counsel and the Commissioner of Health by section 225 of the Public Health Law, Title 24 of the Rules of the City of Gotham is amended, to be effective upon Publication of a Notice of Adoption in the Gotham City Register, to read as follows:

- § 208.01 Required warning. A vendor that offers for sale any alcohol must provide the following warning:
  - (a) **Definitions.** Words and terms used in this section have the same meaning as in §17-173(a) of the Gotham City Administrative Code, except that terms not defined in such 17-173(a) have the same meaning as terms defined in the Alcoholic Beverage Control Law.
  - (b) Applicability. This section applies to vendors, owners, and other persons in control of any business establishment that, pursuant to the Alcoholic Beverage Control Law, is required to obtain a license for the retail sale of Alcohol Beverage Control Law, is required to obtain a license for the retail sale of alcoholic beverages for and (i) consumption on the premises, of (ii) for consumption off the premises.
  - (c) **Posting.** Owners, operators and other persons described in subdivision (b) of this section must post in each applicable business establishment a sign, provided by the Department, in a conspicuous place visible to patrons at the point of purchase, with the following text:
    - "Warning: Consumption of Alcohol can cause breast cancer."
  - (d) An icon must appear on a sign next to any alcohol item or on a sign next to any alcohol display: The icon must be as wide as it is tall and equal in height to the largest letter in the alcohol item's name, as displayed on the menu, menu board, or tag next to any alcohol on display; and



The icon must be two (2) inches wide and two (2) inches tall; and

- (e) The monetary penalty for a violation of this section is \$200 dollars. Violations may be adjudicated at any tribunal operated by the Office of Administrative Trials and Hearings.
- (f) **Effective date.** This section takes effect on December 1, 2023.
- (g) Severability. If any provision of this section, or its application to any person or circumstance, is held invalid by any court of competent jurisdiction, the remaining provisions or the application of the section to other persons or circumstances shall not be affected.

# **EXHIBIT "B"**

Agenda item 15.6 31 May 2017

## Cancer prevention and control in the context of an integrated approach

The Seventieth World Health Assembly,

Having considered the report on cancer prevention and control in the context of an integrated approach;<sup>1</sup>

Acknowledging that, in 2012, cancer was the second leading cause of death in the world with 8.2 million cancer-related deaths, the majority of which occurred in low- and middle-income countries;

Recognizing that cancer is a leading cause of morbidity globally and a growing public health concern, with the annual number of new cancer cases projected to increase from 14.1 million in 2012 to 21.6 million by 2030;

Aware that certain population groups experience inequalities in risk factor exposure and in access to screening, early diagnosis and timely and appropriate treatment, and that they also experience poorer outcomes for cancer; and recognizing that different cancer control strategies are required for specific groups of cancer patients, such as children and adolescents;

Noting that risk reduction has the potential to prevent around half of all cancers;

Aware that early diagnosis and prompt and appropriate treatment, including pain relief and palliative care, can reduce mortality and improve the outcomes and quality of life of cancer patients;

Recognizing with appreciation the introduction of new pharmaceutical products based on investment in innovation for cancer treatment in recent years, and noting with great concern the increasing cost to health systems and patients;

Emphasizing the importance of addressing barriers in access to safe, quality, effective and affordable medicines, medical products and appropriate technology for cancer prevention, detection, screening diagnosis and treatment, including surgery, by strengthening national health systems and international cooperation, including human resources, with the ultimate aim of enhancing access for patients, including through increasing the capacity of the health systems to provide such access;

Recalling resolution WHA58.22 (2005) on cancer prevention and control;

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<sup>&</sup>lt;sup>1</sup> Document A70/32.

Recalling also United Nations General Assembly resolution 66/2 (2011) on the Political Declaration of the High-level Meeting of the General Assembly on the Prevention and Control of Non-communicable Diseases, which includes a road map of national commitments from Heads of State and Government to address cancer and other noncommunicable diseases:

Recalling further resolution WHA66.10 (2013) endorsing the global action plan for the prevention and control of noncommunicable diseases 2013–2020, which provides guidance on how Member States can realize the commitments they made in the Political Declaration of the High-level Meeting of the General Assembly on the Prevention and Control of Non-communicable Diseases, including those related to addressing cancer;

Recalling in addition United Nations General Assembly resolution 68/300 (2014) on the Outcome document of the high-level meeting of the General Assembly on the comprehensive review and assessment of the progress achieved in the prevention and control of non-communicable diseases, which sets out the continued and increased commitments that are essential in order to realize the road map of commitments to address cancer and other noncommunicable diseases included in the Political Declaration of the High-level Meeting of the General Assembly on the Prevention and Control of Non-communicable Diseases, including four time-bound national commitments for 2015 and 2016;

Mindful of the existing monitoring tool that WHO is using to track the extent to which its 194 Member States are implementing these four time-bound commitments to address cancer and other noncommunicable diseases, in accordance with the technical note<sup>1</sup> published by WHO on 1 May 2015 pursuant to decision EB136(13) (2015);

Mindful also of the WHO Framework Convention on Tobacco Control;

Also mindful of the Sustainable Development Goals of the 2030 Agenda for Sustainable Development, specifically Goal 3 (Ensure healthy lives and promote well-being for all at all ages) with its target 3.4 to reduce, by 2030, premature mortality from noncommunicable diseases by one third, and target 3.8 on achieving universal health coverage;

Appreciating the efforts made by Member States<sup>2</sup> and international partners in recent years to prevent and control cancer, but mindful of the need for further action;

Reaffirming the global strategy and plan of action on public health, innovation and intellectual property;

Reaffirming also the rights of Member States to the full use of the flexibilities in the WTO Agreement on Trade-related Aspects of the Intellectual Property Rights (TRIPS) to increase access to affordable, safe, effective and quality medicines, noting that, inter alia, intellectual property rights are an important incentive in the development of new health products,

<sup>&</sup>lt;sup>1</sup> Available at http://www.who.int/nmh/events/2015/technical-note-en.pdf?ua=1 (accessed 19 May 2017).

<sup>&</sup>lt;sup>2</sup> And, where applicable, regional economic integration organizations.

- 1. URGES Member States, <sup>1</sup> taking into account their context and institutional and legal frameworks, as well as national priorities:
  - (1) to continue to implement the road map of national commitments for the prevention and control of cancer and other noncommunicable diseases included in United Nations General Assembly resolutions 66/2 (2011) on the Political Declaration of the High-level Meeting of the General Assembly on the Prevention and Control of Non-communicable Diseases and 68/300 (2014) on the Outcome document of the high-level meeting of the General Assembly on the comprehensive review and assessment of the progress achieved in the prevention and control of non-communicable diseases:
  - (2) to also implement the four time-bound national commitments for 2015 and 2016 set out in the Outcome document, in preparation for a third High-level Meeting of the General Assembly on the Prevention and Control of Non-communicable Diseases, to be held in 2018, taking into account the technical note published by WHO on 1 May 2015, which sets out the progress indicators that the Director-General will use to report to the United Nations General Assembly in 2017 on the progress achieved in the implementation of national commitments, including those related to addressing cancer, taking into account cancer-specific risk factors;
  - (3) to integrate and scale up national cancer prevention and control as part of national responses to noncommunicable diseases, in line with the 2030 Agenda for Sustainable Development;
  - (4) to develop, as appropriate, and implement national cancer control plans that are inclusive of all age groups; that have adequate resources, monitoring and accountability; and that seek synergies and cost-efficiencies with other health interventions;
  - (5) to collect high-quality population-based incidence and mortality data on cancer, for all age groups by cancer type, including measurements of inequalities, through population-based cancer registries, household surveys and other health information systems in order to guide policies and plans;
  - (6) to accelerate the implementation by States Parties of the WHO Framework Convention on Tobacco Control; and, for those Member States that have not yet done so, to consider acceding to the Convention at the earliest opportunity, given that the substantial reduction of tobacco use is an important contribution to the prevention and control of cancer; and to act to prevent the tobacco industry's interference in public health policy for the success of reducing the risk factors of noncommunicable diseases;
  - (7) to promote the primary prevention of cancers;
  - (8) to promote increased access to cost-effective vaccinations to prevent infections associated with cancers, as part of national immunization schedules, based on country epidemiological profiles and health systems' capacities, and in line with the immunization targets of the global vaccine action plan;

<sup>&</sup>lt;sup>1</sup> And, where applicable, regional economic integration organizations.

- (9) to develop, implement and monitor programmes, based on national epidemiological profiles, for the early diagnosis of common cancers, and for screening of cancers, according to assessed feasibility and cost-effectiveness of screening, and with adequate capacity to avoid delays in diagnosis and treatment;
- (10) to develop and implement evidence-based protocols for cancer management, in children and adults, including palliative care;
- (11) to collaborate by strengthening, where appropriate, regional and subregional partnerships and networks in order to create centres of excellence for the management of certain cancers;
- (12) to promote recommendations that support clinical decision-making and referral based on the effective, safe and cost-effective use of cancer diagnostic and therapeutic services, such as cancer surgery, radiation and chemotherapy; and to facilitate cross-sectoral cooperation between health professionals, as well as the training of personnel at all levels of health systems;
- (13) to mobilize sustainable domestic human and financial resources and consider voluntary and innovative financing approaches to support cancer control in order to promote equitable and affordable access to cancer care;
- (14) to promote cancer research to improve the evidence base for cancer prevention and control, including research on health outcomes, quality of life and cost-effectiveness;
- (15) to provide pain relief and palliative care in line with resolution WHA67.19 (2014) on the strengthening of palliative care as a component of comprehensive care throughout the life course;
- (16) to anticipate and promote cancer survivor follow-up, late effect management and tertiary prevention, with the active involvement of survivors and their relatives;
- (17) to promote early detection of patients' needs and access to rehabilitation, including in relation to work, psychosocial and palliative care services;
- (18) to promote and facilitate psychosocial counselling and aftercare for cancer patients and their families, taking into account the increasingly chronic nature of cancer;
- (19) to continue fostering partnerships between government and civil society, building on the contribution of health-related nongovernmental organizations and patient organizations, to support, as appropriate, the provision of services for the prevention and control, treatment and care of cancer, including palliative care;
- (20) to work towards the attainment of Sustainable Development Goal 3, target 3.4, reiterating the commitment to reduce, by 2030, premature mortality from cancer and other noncommunicable diseases by one third;
- (21) to promote the availability and affordability of quality, safe and effective medicines (in particular, but not limited to, those on the WHO Model List of Essential Medicines), vaccines and diagnostics for cancer;

(22) to promote access to comprehensive and cost-effective prevention, treatment and care for the integrated management of cancers including, inter alia, increased access to affordable, safe, effective and quality medicines and diagnostics and other technologies;

#### 2. REQUESTS the Director-General:

- (1) to develop or adapt stepwise and resource-stratified guidance and tool kits in order to establish and implement comprehensive cancer prevention and control programmes, including for the management of cancers in children and adolescents, leveraging the work of other organizations;
- (2) to collect, synthesize and disseminate evidence on the most cost-effective interventions for all age groups, and support Member States<sup>1</sup> in the implementation of these interventions; and to make an investment case for cancer prevention and control;
- (3) to strengthen the capacity of the Secretariat both to support the implementation of cost-effective interventions and country-adapted models of care and to work with international partners, including IAEA, to harmonize the technical assistance provided to countries for cancer prevention and control;
- (4) to work with Member States, and collaborate with nongovernmental organizations, private sector entities, philanthropic foundations and academic institutions as defined in the Framework of Engagement with Non-State Actors in order to develop partnerships to scale up cancer prevention and control, and to improve the quality of life of cancer patients, in line with Sustainable Development Goals 3 (Ensure healthy lives and promote well-being for all at all ages) and 17 (Strengthen the means of implementation and revitalize the global partnership for sustainable development);
- (5) to strengthen the collaboration with nongovernmental organizations, private sector entities, academic institutions and philanthropic foundations, as defined in WHO's Framework for Engagement with Non-State Actors, with a view to fostering the development of effective and affordable new cancer medicines:
- (6) to provide technical assistance, upon request, to regional and subregional partnerships and networks, including, where appropriate, support for the establishment of centres of excellence to strengthen cancer management;
- (7) to develop, before the end of 2019, the first periodic public health- and policy-oriented world report on cancer, in the context of an integrated approach, based on the latest available evidence and international experience, and covering the elements of this resolution, with the participation of all relevant parts of WHO, including IARC, and in collaboration with all other relevant stakeholders, including cancer survivors;
- (8) to enhance the coordination between IARC and other parts of WHO on assessments of hazards and risks, and on the communication of those assessments;

<sup>&</sup>lt;sup>1</sup> And, where applicable, regional economic integration organizations.

- (9) to prepare a comprehensive technical report to the Executive Board at its 144th session that examines pricing approaches, including transparency, and their impact on availability and affordability of medicines for the prevention and treatment of cancer, including any evidence of the benefits or unintended negative consequences, as well as incentives for investment in research and development on cancer and innovation of these measures, as well as the relationship between inputs throughout the value chain and price setting, financing gaps for research and development on cancer, and options that might enhance the affordability and accessibility of these medicines;
- (10) to synchronize the periodic report on progress made in implementing this resolution with, and integrate it into, the monitoring and report timeline of the prevention and control of noncommunicable diseases, set out in resolution WHA66.10.

Tenth plenary meeting, 31 May 2017 A70/VR/10

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## **EXHIBIT "C"**

## Cancer

3 March 2021

Cancer is a generic term for a large group of diseases that can affect any part of the body. Other terms used are malignant tumours and neoplasms. One defining feature of cancer is the rapid creation of abnormal cells that grow beyond their usual boundaries, and which can then invade adjoining parts of the body and spread to other organs; the latter process is referred to as metastasis. Metastases are the primary cause of death from cancer.

## The problem

Cancer is a leading cause of death worldwide, accounting for nearly 10 million deaths in 2020 (1). The most common in 2020 (in terms of new cases of cancer) were:

- breast (2.26 million cases);
- lung (2.21 million cases);
- colon and rectum (1.93 million cases);
- prostate (1.41 million cases);
- skin (non-melanoma) (1.20 million cases); and
- stomach (1.09 million cases).

The most common causes of cancer death in 2020 were:

- lung (1.80 million deaths);
- colon and rectum (935 000 deaths);
- liver (830 000 deaths);
- stomach (769 000 deaths); and
- breast (685 000 deaths).

### What causes cancer?

Cancer arises from the transformation of normal cells into tumour cells in a multi-stage process that generally progresses from a pre-cancerous lesion to a malignant tumour. These changes are the result of the interaction between a person's genetic factors and three categories of external agents, including:

physical carcinogens, such as ultraviolet and ionizing radiation;

- chemical carcinogens, such as asbestos, components of tobacco smoke, aflatoxin (a food contaminant), and arsenic (a drinking water contaminant); and
- biological carcinogens, such as infections from certain viruses, bacteria, or parasites.

WHO, through its cancer research agency, the International Agency for Research on Cancer (IARC), maintains a classification of cancer-causing agents.

The incidence of cancer rises dramatically with age, most likely due to a build-up of risks for specific cancers that increase with age. The overall risk accumulation is combined with the tendency for cellular repair mechanisms to be less effective as a person grows older.

## **Risk factors for cancers**

Tobacco use, alcohol use, unhealthy diet, physical inactivity and air pollution are risk factors for cancer (and other noncommunicable diseases).

Some chronic infections are risk factors for cancer; this is a particular issue in in lowand middle-income countries. Approximately 13% of cancers diagnosed in 2018 globally were attributed to carcinogenic infections, including Helicobacter pylori, human papillomavirus (HPV), hepatitis B virus, hepatitis C virus, and Epstein-Barr virus (3).

Hepatitis B and C viruses and some types of HPV increase the risk for liver and cervical cancer, respectively. Infection with HIV substantially increases the risk of cancers such as cervical cancer.

## Reducing the cancer burden

Between 30 and 50% of cancers can currently be prevented by avoiding risk factors and implementing existing evidence-based prevention strategies. The cancer burden can also be reduced through early detection of cancer and appropriate treatment and care of patients who develop cancer. Many cancers have a high chance of cure if diagnosed early and treated appropriately.

## **Preventing cancer**

Cancer risk can be reduced by:

- not using tobacco;
- maintaining a healthy body weight;
- eating a healthy diet, including fruit and vegetables;
- doing physical activity on a regular basis;
- avoiding harmful use of alcohol;
- getting vaccinated against HPV and hepatitis B if you belong to a group for which vaccination is recommended;
- avoiding ultraviolet radiation (which primarily results from exposure to the sun);
- reducing exposure (as far as is possible) to ionizing radiation (through occupational or medical diagnostic imaging); and
- reducing exposure to outdoor air pollution and indoor air pollution, including radon (a radioactive gas produced from the natural decay of uranium. Exposure to radon can occur in homes and buildings).

## **Early detection**

Cancer mortality can be reduced if cases are detected and treated early. There are two components of early detection:

#### **Early diagnosis**

When identified early, cancer is more likely to respond to treatment and can result in a greater probability of survival and less morbidity, as well as less expensive treatment. Significant improvements can be made in the lives of cancer patients by detecting cancer early and avoiding delays in care.

Early diagnosis consists of three components:

- being aware of the symptoms of different forms of cancer and of the importance of seeking medical advice if you are concerned;
- · access to clinical evaluation and diagnostic services; and
- timely referral to treatment services.

Early diagnosis of symptomatic cancers is relevant in all settings and the majority of cancers. Cancer programs should be designed to reduce delays in, and barriers to, diagnosis, treatment and care.

#### **Screening**

Screening aims to identify individuals with findings suggestive of a specific cancer or pre-cancer before they have developed symptoms. When abnormalities are identified

during screening, further tests to establish (or not) a diagnosis should follow, as should referral for treatment if needed.

Screening programmes are effective for some but not all cancer types and in general are far more complex and resource-intensive than early diagnosis as they require special equipment and dedicated personnel.

Patient selection for screening programmes is based on age and risk factors to avoid excessive false positive studies. Examples of screening methods are:

- HPV testing for cervical cancer;
- the PAP cytology test for cervical cancer;
- visual inspection with acetic acid (VIA) for cervical cancer; and
- mammography screening for breast cancer in settings with strong or relatively strong health systems.

Quality assurance is required for both screening and early diagnosis programmes.

#### **Treatment**

A correct cancer diagnosis is essential for appropriate and effective treatment because every cancer type requires a specific treatment regimen. Treatment usually includes radiotherapy, chemotherapy and/or surgery. Determining the goals of treatment is an important first step. The primary goal is generally to cure cancer or to considerably prolong life. Improving the patient's quality of life is also an important goal. This can be achieved by support for the patient's physical, psychosocial and spiritual well-being and palliative care in terminal stages of cancer.

Some of the most common cancer types, such as breast cancer, cervical cancer, oral cancer, and colorectal cancer, have high cure rates when detected early and treated according to best practices.

Some cancer types, such as testicular seminoma and different types of leukaemia and lymphoma in children, also have high cure rates if appropriate treatment is provided, even when cancerous cells are present in other areas of the body.

### **Palliative care**

Palliative care is treatment to relieve, rather than cure, symptoms caused by cancer and to improve the quality of life of patients and their families. Palliative care can help people live more comfortably. It is particularly needed in places with a high proportion of patients in advanced stages of cancer where there is little chance of cure.

Relief from physical, psychosocial, and spiritual problems through palliative care is possible for more than 90% of patients with advanced stages of cancer.

Effective public health strategies, comprising community- and home-based care, are essential to provide pain relief and palliative care for patients and their families.

Improved access to oral morphine is strongly recommended for the treatment of moderate to severe cancer pain, suffered by over 80% of people with cancer in the terminal phase.

## **WHO** response

In 2017, the World Health Assembly passed the Resolution Cancer prevention and control in the context of an integrated approach (WHA70.12) that urges governments and WHO to accelerate action to achieve the targets specified in the Global Action Plan for the prevention and control of NCDs 2013-2020 and the 2030 UN Agenda for Sustainable Development to reduce premature mortality from cancer.

WHO and IARC collaborate with other UN organizations and partners to:

- increase political commitment for cancer prevention and control;
- coordinate and conduct research on the causes of human cancer and the mechanisms of carcinogenesis;
- monitor the cancer burden (as part of the work of the Global Initiative on Cancer Registries);
- identify "best buys" and other cost-effective, priority strategies for cancer prevention and control;
- develop standards and tools to guide the planning and implementation of interventions for prevention, early diagnosis, screening, treatment and palliative and survivorship care for both adult and child cancers;
- strengthen health systems at national and local levels to help them improve access to cancer treatments;
- set the agenda for cancer prevention and control in the 2020 WHO Report on Cancer;
- provide global leadership as well as technical assistance to support governments and their partners build and sustain high-quality cervical cancer control

- programmes as part of the Global Strategy to Accelerate the Elimination of Cervical Cancer:
- improve breast cancer control and reduce avoidable deaths from breast cancer, focusing on health promotion, timely diagnosis and access to care in order to accelerate coordinated implementation through the WHO Global Breast Cancer Initiative;
- support governments to improve survival for childhood cancer through directed country support, regional networks and global action as part of the WHO Global Initiative for Childhood Cancer using the Cure All approach; and
- provide technical assistance for rapid, effective transfer of best practice interventions to countries.

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