

National cancer control planning and implementation

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National Cancer Control

- What is cancer control?
- What are the essential elements of national cancer control plans?
- Who are the partners in cancer control planning and implementation?
- Challenges encountered and lessons learned from various countries

What is cancer control?

- Effective cancer education & prevention
- Effective screening and early diagnosis for certain types of cancer
- Accurate pathologic diagnosis and staging
- Appropriate treatment
- Appropriate symptom management & survivorship care
- Effective end-of-life care

Essential elements

- Reliable information on cancer risk factors, cancer incidence, staging, treatment, & prognosis
- Development of a national cancer control plan
 - Education, prevention, screening, diagnosis, treatment, treatment of symptoms, survivorship, and end-of-life care
- Planning then implementation
- Metrics and corrections in plan as needed
- Involvement of all segments of society

Mary Lasker, cancer advocate



- Rebuilt American Cancer Society
- Helped start “War on Cancer”, 1971
- Started US NCI cancer clinical trials network
- Started Lasker Foundation and Lasker Awards

All parts of society

- General public, cancer advocates, cancer patients, their families and friends
- Government: national and state ministries/ departments of health & public health, health insurance providers, ministries of finance, science, environment, sport/ exercise, health statistics offices, etc
- Public and private employers
- Public and private hospitals and clinics; medical professional societies
- Schools and universities
- Pharmaceutical, biotechnology, and imaging industries

Reliable baseline information

- Tobacco control
 - Cigarettes and oral tobacco use
 - Implementation of recommendations from WHO Framework Convention on Tobacco Control
- Implementation of preventive cancer vaccines:
 - Hepatitis B, human papillomavirus (HPV)
- Obesity rates and activity levels
- Environmental risk factors (sun exposure, etc)

Reliable baseline information

- Incidence of cancers and pre-cancers, especially cancers which can be prevented and/or screened for
- Current screening practices
 - Breast cancer
 - Cervical cancer
 - Colon cancer
 - (Prostate cancer)

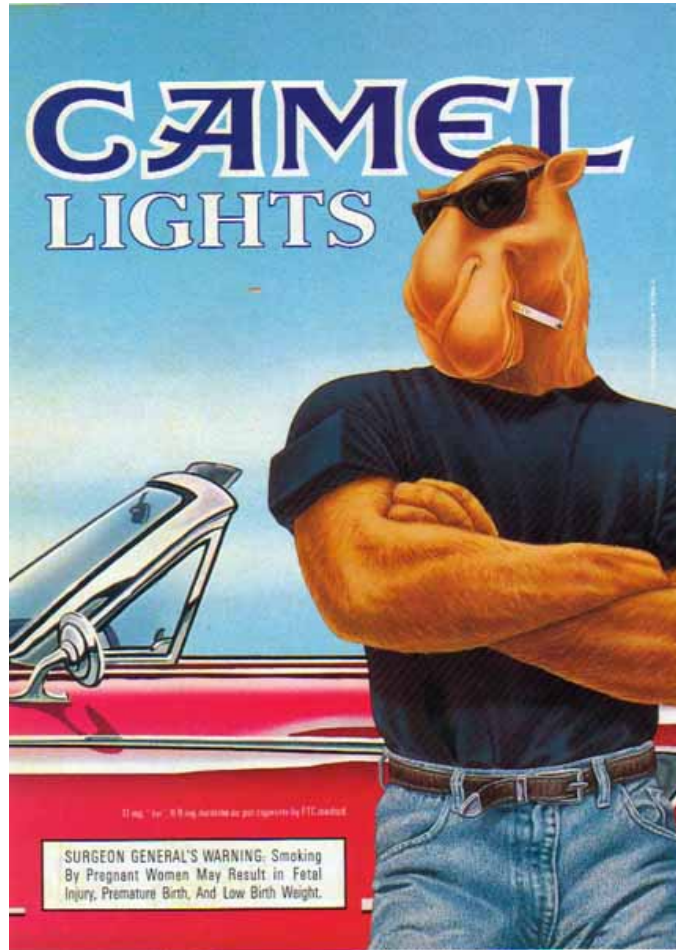
Reliable baseline data

- Cancer incidence
 - Pathology, staging, imaging
- Cancer treatment
 - Use and quality of surgery, chemotherapy, radiation, etc
- Cancer prognosis/ outcome
- Patient-reported outcome/ quality of life

Guidance for cancer control planning

- US: American Cancer Society, Centers for Disease Control and Prevention (CDC), and National Cancer Institute
 - 50 US states, Native American tribes, Pacific Islands
- World Health Organization (WHO), International Agency for Atomic Energy (IAEA), International Union for Cancer Control (UICC)
 - IAEA PACT countries: Albania, Guatemala, Tanzania, Vietnam, Yemen, etc

Making Joe Camel an outlaw



Tobacco control

- WHO Framework Convention on Tobacco Control
 - Adopted by World Health Association in 2003
- Bloomberg Initiative to Reduce Tobacco Use
 - Campaign for Tobacco-free Kids, US CDC, WHO, World Lung Foundation, Johns Hopkins Bloomberg School of Public Health
- Challenges:
 - Persistent and creative advertising and legal suits by tobacco companies
 - Many countries earn major portions of budget from ownership of tobacco companies and/or tobacco taxes

Preventive vaccines

- Hepatitis B vaccine
 - Integrated with standard pediatric vaccines; low cost critical; widespread uptake
- Human papillomavirus vaccine
 - Need for 2-3 doses; need to vaccinate adolescents before onset of sexual activity; cost too high
 - Need to make clear to parents that vaccination is to prevent cancer
 - School-based vaccination effective

Ferdinand Botero: The Tango



Other risk factors

- Obesity and activity levels
 - NIH-funded trials showed that use of metformin and lifestyle intervention in patients with prediabetes would prevent onset of type 2 diabetes (2002)
 - US: no routine insurance coverage for lifestyle intervention; FDA has not approved metformin for this indication
- Environmental exposure
 - Effective reduction to sun exposure in Australia

Australia sun exposure campaign



Screening

- Need effective quality control for Pap smears
 - UK and Brazil have had time periods with low quality control
- Need low-cost HPV point-of-care diagnostic test
- Need effective quality control for mammography
 - High-quality images and review of images
- Need to be able to track patients who have been screened and recall patients with abnormal findings
 - National health identifier numbers useful

Diagnosis

- Timely evaluation of patients with abnormal findings
- Insurance coverage for patients with abnormal findings
- Quality control for imaging studies
- Quality control for pathology
 - Fine-needle aspirate (FNA), tumor margins, ER/PR, her-2-neu status, sentinel lymph nodes, etc

Treatment

- Timely treatment after diagnosis
- Access to appropriate treatment
 - Breast Health Global Initiative guidelines
 - US: National Comprehensive Cancer Network guidelines
- Access for rural and poor patients?
- Appropriate training for doctors and nurses
- Quality control for surgery, chemotherapy, radiation
- Access to drugs for treatment & symptom management

Symptom management/ survivorship

- Need to ask patients about symptoms and effects of living with cancer (patient-reported outcomes)
- Need to treat symptoms appropriately
 - Pain, depression, fatigue
- Need to overcome stigma of cancer and help patients reintegrate with family and work life

End-of-life care

- Need to maintain contact with cancer patients
- Need for morphine availability (legality, cost)
- Need for education of patient, family, doctors, and nurses about pain control and opiates
- Availability of in-patient and out-patient hospice services

Ongoing evaluation

- Are prevention campaigns working?
- Are more people undergoing screening?
- Are cancers being diagnosed earlier?
- Is the incidence of cancer falling?
- Are cancer patients living longer and living better after diagnosis?
- Are the symptoms of cancer patients adequately addressed?

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