Revolutionizing the Management of Cancer: Prevention

Adjunct Professor, Univ. of Texas M. D. Anderson Cancer Center, Houston
Oncology Advisor - Ministry of Health, Trinidad & Tobago
Clinical Oncologist, Brian Lara Cancer Center, Trinidad
Associate Lecturer, Univ. of the West Indies, Medical Sciences
Believe

Trinidad & Tobago
1. Most Feasible Strategy
Most Feasible initiative: Education and Information Campaign

a. Public and Patients
b. Medical Staff
c. Politicians
d. Decision makers
2. Most desperately needed
2. Most Desperately Needed

Health Workers and Optimize them by adding Support systems
If this is your waiting room: Will you be attending to patient tobacco history and cessation?
3. Strategy based on important breakthrough
3. Strategy based on important breakthrough:

Vaccination to prevent cervical cancer
4. Most urgent humanitarian need: Pain Control
A Hurricane is coming!

Projected global deaths for selected causes of death, 2002–2030

- Cancers
- Ischaemic heart disease
- Stroke
- HIV/AIDS
- Tuberculosis
- Malaria
- Other infectious diseases
- Road traffic accidents

Year:
- 2000
- 2010
- 2020
- 2030
Bad news

- Cancer is a leading cause of death, pain and suffering

- 7.6 million died of Ca in 2005

- Cancer deaths > AIDS + TB + malaria

- > 70% of Ca deaths occur in low- and middle-income countries
Many cancers can be prevented:
All countries can, at some useful level implement the three basic components of cancer control
Most Feasible Strategy
Most Feasible initiative:
Education and Information Campaign

a. Public and Patients-

b. Medical Staff

c. Politicians

d. Decision makers
Most Feasible initiative: Education and Information Campaign

- Evidence-based, Continuous, sustained
- Prevention
- Early signs
- Pathways and navigation – by country for screening
- Treatment
- Caribbean FAQs and dispel common myths
Most Feasible initiative:

Education and Information Campaign

What do they need to know?
Training trainers on Avoiding Cancer

Estimated proportion of preventable cancer associated with 9 leading modifiable risk factors:

- Indoor smoke from household use of solid fuels, 0.5%
- Urban air pollution, 1%
- Overweight and obesity, 2%
- Contaminated injections in health-care settings, 2%
- Physical inactivity, 2%
- Unsafe sex, 3%
- Low fruit and vegetable intake, 5%
- Alcohol Use, 5%
- Smoking, 21%

Training trainers on Avoiding Cancer

Like other CNCDs - proven risk factors

- tobacco use
- alcohol use
- dietary factors incl. low fruit & veg.
- physical inactivity
- overweight and obesity
Example: World Cancer Nutrition Guidelines 2007

<table>
<thead>
<tr>
<th>FOODS AND DRINKS THAT PROMOTE WEIGHT GAIN</th>
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<tbody>
<tr>
<td>Limit consumption of energy-dense foods</td>
<td></td>
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<tr>
<td>Avoid sugary drinks</td>
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<table>
<thead>
<tr>
<th>PLANT FOODS</th>
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<tbody>
<tr>
<td>Eat mostly foods of plant origin</td>
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<tr>
<th>ANIMAL FOODS</th>
<th></th>
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<tbody>
<tr>
<td>Limit intake of red meat and avoid processed meat</td>
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<thead>
<tr>
<th>ALCOHOLIC DRINKS</th>
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<tbody>
<tr>
<td>Limit alcoholic drinks</td>
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<table>
<thead>
<tr>
<th>PRESERVATION, PROCESSING, PREPARATION</th>
<th></th>
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<tbody>
<tr>
<td>Limit consumption of salt</td>
<td></td>
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<tr>
<td>Avoid mouldy cereals (grains) or pulses (legumes)</td>
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<table>
<thead>
<tr>
<th>DIETARY SUPPLEMENTS</th>
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<tr>
<td>Aim to meet nutritional needs through diet alone</td>
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<table>
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<tr>
<th>BREASTFEEDING</th>
<th></th>
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<tbody>
<tr>
<td>Mothers to breastfeed; children to be breastfed</td>
<td></td>
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</table>
Unlike other CNCDs - proven risk factors:

physical carcinogens

• ultraviolet (UV)
• ionizing radiation
Training trainers on Avoiding Cancer

Unlike other CNCDs - proven risk factors:

chemical carcinogens

- *Group 1: Carcinogenic to humans (102 agents)
- *Group 2A: Probably carcinogenic to humans (69 agents)
- *Group 2B: Possibly carcinogenic to humans (246 agents)

*The International Agency for Research on Cancer (IARC) is part of the World Health Organization. www.iarc.fr
Training trainers on Avoiding Cancer biological carcinogens

Immuniz’n / tmt of agents that cause cancers

HPV- Cervical Cancer (2nd commonest in Females on J’ca and T&T)

This is the only Cancer vaccine that will prevent more than 70% of cases!!
biological carcinogens

H. pylori: A bacteria that causes gastric cancer (2nd commonest in males in J’ca and B’dos)-

- Hepatitis B
Must educate and inform

a. Public and Patients-
b. Medical Staff
c. Politicians
d. Decision makers

About

Early detection & secondary prevention
Is Cancer as preventable as Stroke & Heart Disease?
Is Cancer as **preventable** as Stroke & Heart Disease?

**NO**
Worldwide:
If major risk factors eliminated we would prevent

- **80%** of heart disease, stroke and type 2 diabetes
- **30-40%** of cancer
Caribbean Region

If major risk factors eliminated

Would we even prevent 30-40% of cancer??
Barbados: Males

Barbados: Females

Preventable??
Barbados: Prevention?

Males
- Prostate

Females
- Breast

- Smoking, 21%
- Indoor smoke from household use of solid fuels, 0.5%
- Urban air pollution, 1%
- Contaminated injections in health-care settings, 2%
- Overweight and obesity, 2%
- Physical inactivity, 2%
- Unsafe sex, 3%
- Low fruit and vegetable intake, 5%
- Alcohol Use, 5%

~40% preventable cancer
Jamaica: Males

JAMAICA
10 Leading Causes of Cancer Deaths In Jamaica:

Prostate cancer
Stomach cancer
Trachea, bronchus, lung cancers
Colon and rectum cancers
Lymphomas, multiple myeloma
Cesophageus cancer
Mouth and oropharynx cancers
Bladder cancer
Liver cancer
Pancreas cancer

Age Standardized Death Rate per 100,000

Females

JAMAICA
10 Leading Causes of Cancer Deaths In Jamaica:

Breast cancer
Cervix uteri cancer
Stomach cancer
Colon and rectum cancers
Lymphomas, multiple myeloma
Cesophageus cancer
Mouth and oropharynx cancers
Trachea, bronchus, lung cancers
Liver cancer
Ovary cancer

Age Standardized Death Rate per 100,000

Preventable??
Jamaica: Prevention?

Males
- Prostate

Females
- Breast

- Smoking: 21%
- Indoor smoke from household use of solid fuels: 0.7%
- Urban air pollution: 1%
- Contaminated injections in health-care settings: 2%
- Overweight and obesity: 2%
- Physical inactivity: 2%
- Unsafe sex: 3%
- Low fruit and vegetable intake: 5%
- Alcohol use: 5%
Tr’dad & T’bgo: Males  Females

10 Leading Causes of Cancer Deaths In Trinidad and Tobago
Projected 2025

- Prostate cancer
- Trachea, bronchus, and lung cancers
- Stomach cancer
- Colon and rectum cancers
- Mouth and oro-pharynx cancers
- Lymphomas, multiple myeloma
- Oesophagus cancer
- Leukaemia
- Pancreas cancer
- Liver cancer

Age Standardized Death Rate per 100,000
[+] click to view larger graph

10 Leading Causes of Cancer Deaths In Trinidad and Tobago
Projected 2025

- Breast cancer
- Cervix uteri cancer
- Colon and rectum cancers
- Lymphomas, multiple myeloma
- Stomach cancer
- Corpus uteri cancer
- Trachea, bronchus, and lung cancers
- Leukaemia
- Pancreas cancer
- Ovary cancer

Age Standardized Death Rate per 100,000
[+] click to view larger graph
Trinidad: Prevention?

Males: Prostate

Females: Breast

- Indoor smoke from household use of solid fuels: 0.5%
- ~40% preventable cancer
- Smoking: 21%
- Alcohol use: 5%
- Low fruit and vegetable intake: 5%
- Unsafe sex: 3%
- Physical inactivity: 2%
- Contaminated injections in health-care settings: 2%
- Overweight and obesity: 2%
- Urban air pollution: 1%
Training trainers on Avoiding Cancer

Early detection & secondary prevention

1. **Cervical cancer screening**: detect pre cancer (# 2 in females in J’ca and T&T)

2. Early Detection of **Breast Cancer / Pre-Cancer**
   
   #1 in Females) (#1 in B’dos, T&T, J’ca)
   
   Breast self awareness (BSA)
   
   Clinical Breast Examination (CBE)
   
   Mammography
Early detection & secondary prevention

3. Screening for Colorectal Ca. (#2 in males in T&T and in females in B’dos)

4. Screening for Prostate Ca (#1 in males in J’ca, B’dos and T&T)
Most Feasible Strategy
Most Feasible initiative:

**Train the trainers Campaign**

Cancer prevalence
About Cancer
Early signs
Pathways and navigation – by country
Prevention
Treatment
Caribbean FAQs
Dispelling common myths

Evidence-based, Continuous, sustained,
Most Feasible initiative:
Education and Information Campaign

Strategy for initiation

A. Support a network with Caribbean professionals who are functioning in US, UK and Canada and locals

I have a long list of cancer specialists who are eager to come in to help fuel evidence based education and practice.
Most Feasible initiative:

Education and Information Campaign

B. Advocate for Healthcare agencies to mandate and pay for education for staff.

C. Use available resources:
Available Resources

Download [pdf 1.95Mb]

http://www.who.int/topics/cancer/en/
WHO GUIDE FOR EFFECTIVE PROGRAMMES

In 2005, 7.6 million people died of cancer. More than 70% of those deaths occurred in low and middle income countries. WHO has developed a series of six modules that provides practical advice for programme managers and policy-makers on how to advocate, plan and implement effective cancer control programmes, particularly in low and middle income countries.

The WHO guide is a response to the World Health Assembly resolution on cancer prevention and control (WHA58.22), adopted in May 2005, which calls on Member States to intensify action against cancer by developing and reinforcing cancer control programmes.

Short summary [pdf 1.93Mb]

http://www.who.int/topics/cancer/en/
Available Resources

TOOLS AND FEATURES

Useful tools
These tools are part of the Planning module which was published in 2006.

1. Team Building [pdf 244kb]
2. Team building - Spanish [pdf 316kb]
3. Assessing partnerships [pdf 74kb]
4. Assessing partnerships - Spanish [pdf 80kb]
5. Web resources [pdf 321kb]
Available Resources

Planning
How to plan overall cancer control effectively, according to available resources and integrating cancer control with programmes for other chronic diseases and related problems.

Download [pdf 1.28Mb]

http://www.who.int/topics/cancer/en/
Early detection
How to implement effective early detection of major types of cancer that are amenable to early diagnosis and screening.

Download [pdf 4.78Mb]

http://www.who.int/topics/cancer/en/
Available Resources

Diagnosis and treatment
How to implement effective cancer diagnosis and treatment, particularly linked to early detection programmes or curable cancers.
Download [pdf 5.77Mb]

http://www.who.int/topics/cancer/en/
Available Resources

Palliative care
How to implement effective palliative care for cancer, with a particular focus on community-based care.
Download [pdf 4.21Mb]

- http://www.who.int/topics/cancer/en/
Available Resources

Policy and advocacy

How to advocate for policy development and effective programme implementation of cancer control.

Download [pdf 3.80Mb]

http://www.who.int/topics/cancer/en/
Available Resources

UICC develops its work in four strategic directions:

- Cancer prevention and control
- Tobacco control
- Knowledge transfer
- Capacity building and supportive care

Knowledge transfer includes both the international cancer fellowships programme and the TNM prognostic factors project.

http://www.uicc.org/
Available Resources

The World Cancer Declaration 2008 was developed by the International Union Against Cancer (UICC)

endorsed by the World Cancer Congress 2008

http://www.uicc.org/
Place cancer on the development agenda.

- Increase political priority

A country's investment in its growing cancer problem is an investment in the economic and social well-being of the country.
11 Targets: by 2020

1. **Sustainable delivery systems** will be in place to ensure that effective cancer control programmes are available in all countries.

2. The **measurement of the global cancer burden** and the impact of cancer control interventions will have improved significantly.

3. Global **tobacco consumption, obesity and alcohol intake levels** will have fallen significantly.
11 Targets: by 2020

4. Populations in the areas affected by HPV and HBV will be covered by universal vaccination programmes.

5. Public attitudes towards cancer will improve and damaging myths and misconceptions about the disease will be dispelled.

6. Many more cancers will be diagnosed when still localized through the provision of screening and early detection programmes and high levels of public and professional awareness about important cancer warning signs.
11 Targets: by 2020

7. Access to accurate cancer diagnosis, appropriate cancer treatments, supportive care, rehabilitation services and palliative care will have improved for all patients worldwide.

8. Effective pain control measures will be available universally to all cancer patients in pain.

9. The number of training opportunities available for health professionals in different aspects of cancer control will have improved significantly.
11 Targets: by 2020

10. Emigration of health workers with specialist training in cancer control will have reduced dramatically

11. There will be major improvements in cancer survival rates in all countries
10. Emigration of health workers with specialist training in cancer control will have reduced dramatically.
I asked the question to world leaders in Geneva in August:

What is the plan for No. 10?

(“Emigration of health workers with specialist training in cancer control will have reduced dramatically”)

They took my email and promised to get back to me!
2. Most Desperately Needed

Health Workers and Optimize them by adding Support systems
Most needed initiative:

Staff Staff Staff

Cancer Nurses
Cancer Doctors
Physicists, Pharmacists, Radiation therapists, Radiographers, Cytologists
Healthcare Information Systems Management
Professional Education/Research/Ethics
Most needed initiative:

- Staff
- Staff
- Staff
- Staff
- Train
- Retain
- Repatriate
- Import
Most needed initiative:

Staff Staff Staff

Advocate for adequate staffing
Most needed initiative: Staff

Optimize use of medical staff:

Arm you doctors

✓ Prevention educators at all points of contact.

✓ Material: Internet access, booklets, DVDs, videos, audio
58th World Health Assembly approved resolution on cancer prevention and control

For the first time in the history of WHO, an opportunity to reinforce comprehensive cancer policies and strategies among its member states has presented itself.

Adopted cancer prevention and control resolution, May 2005

In May 2005 the 58th WHA has approved a resolution on cancer prevention and control. The document is available in the six WHO official languages:
Good News

• Significant proportion can be cured
  ✓ Surgery
  ✓ Radiotherapy
  ✓ Chemotherapy
4. Most urgent Humanitarian need Strategy
Pain control

- >70% of Ca deaths occur in low- and middle-income countries

- 89% of world morphine used in USA and Europe
SUMMARY
TOAST CANCER

Train the trainers & decision makers

Optimize Staff: Educators in clinic

Avoid Cervical Cancer - Vaccinate

Stop Pain
Handout

Information sources on the Web

- www.uicc.org
- www.who.int/topics/cancer/en/
- www.cancer.org
- www.cancer.ca
- www.cancer.gov
- www.nccn.org
- www.dietandcancerreport.org/
Be Patient

We’re only getting started!
Thanks

- All attendees
- Prof. Trevor A. Hassell, Director HSFB, Conference Coordinator
- Adrian J L Randall, CEO, Heart & Stroke Foundation of Barbados and Organisers of this meeting
- Prof. Henry Fraser