



INITIATING COLORECTAL CANCER SCREENING

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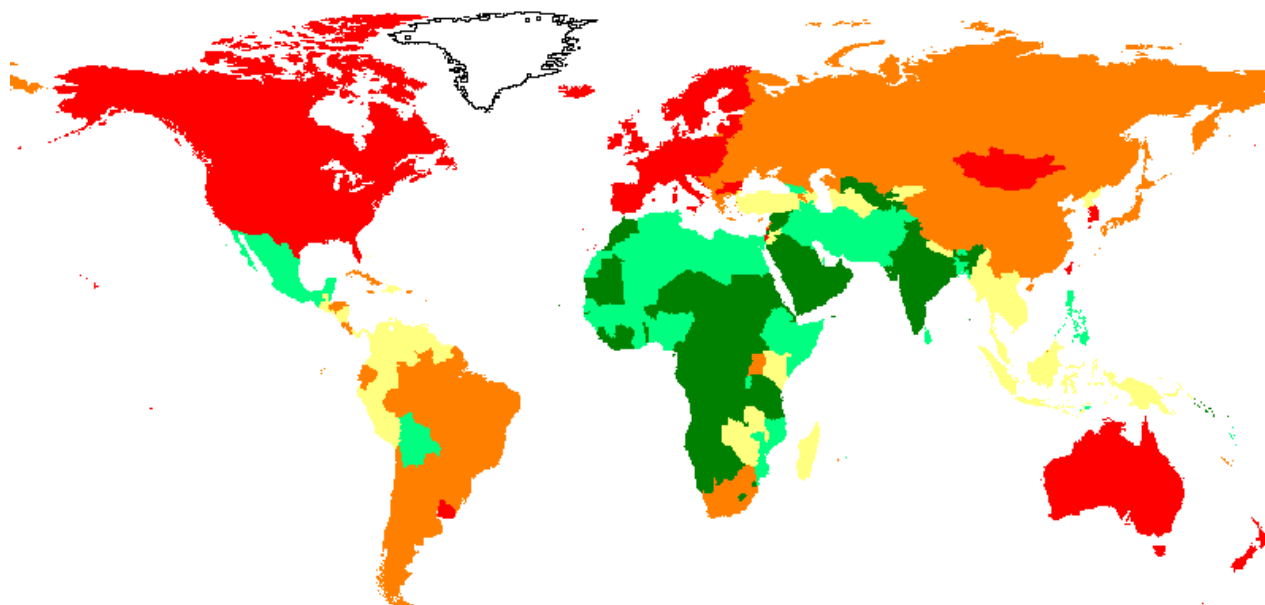
Ministry of Health Malaysia

26 November 2013



GLOBAL CANCER SCENARIO

Estimated age-standardised incidence rate per 100,000
All cancers excl. non-melanoma skin cancer: both sexes, all ages



■ < 103.1 ■ < 128.4 ■ < 159.1 ■ < 218.9 ■ < 326.1

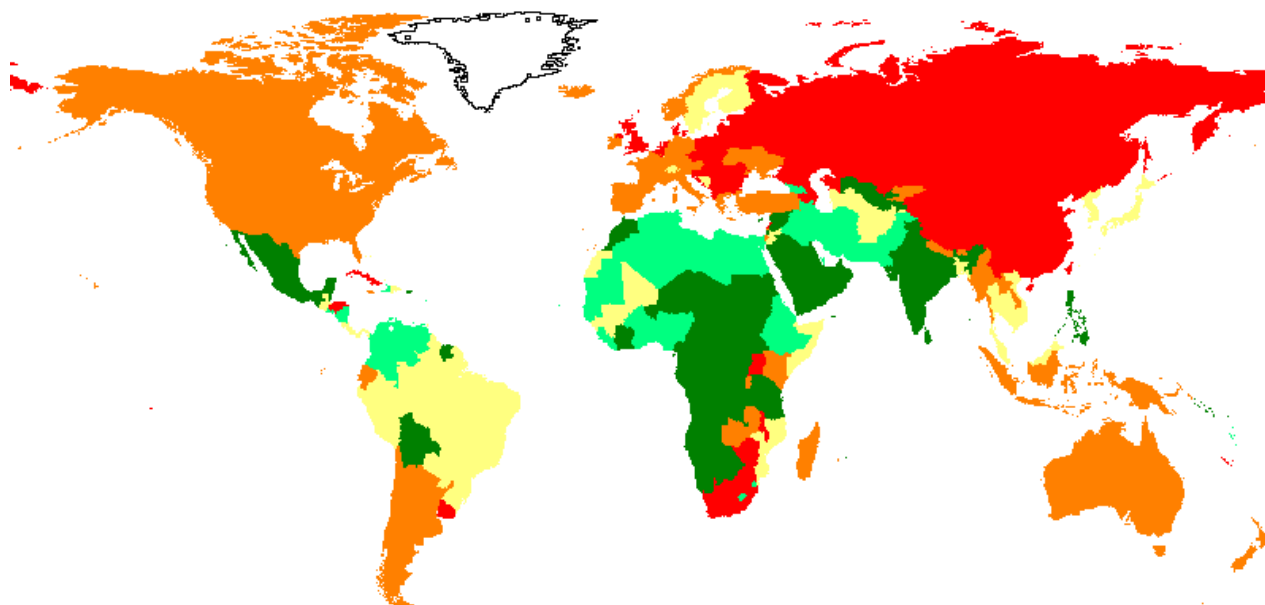
GLOBOCAN 2008 (IARC) - 30.9.2013





GLOBAL CANCER SCENARIO

Estimated age-standardised mortality rate per 100,000
All cancers excl. non-melanoma skin cancer: both sexes, all ages



■ < 79.3 ■ < 89.2 ■ < 101.4 ■ < 114.9 ■ < 185.2

GLOBOCAN 2008 (IARC) - 30.9.2013



COLORECTAL CANCER AT GLANCE

(GLOBOCAN 2008)

- Colorectal cancer is the third most common cancer in men (10.0% of the total) and the second in women (9.4% of the total) worldwide.
- Almost 60% of the cases occur in developed regions.
- Incidence rates vary 10-fold in both sexes worldwide, the highest rates being estimated in Australia/New Zealand and Western Europe, the lowest in Africa (except Southern Africa) and South-Central Asia, and are intermediate in Latin America.
- Incidence rates are substantially higher in men than in women (overall sex ratio of the ASRs 1.4:1).



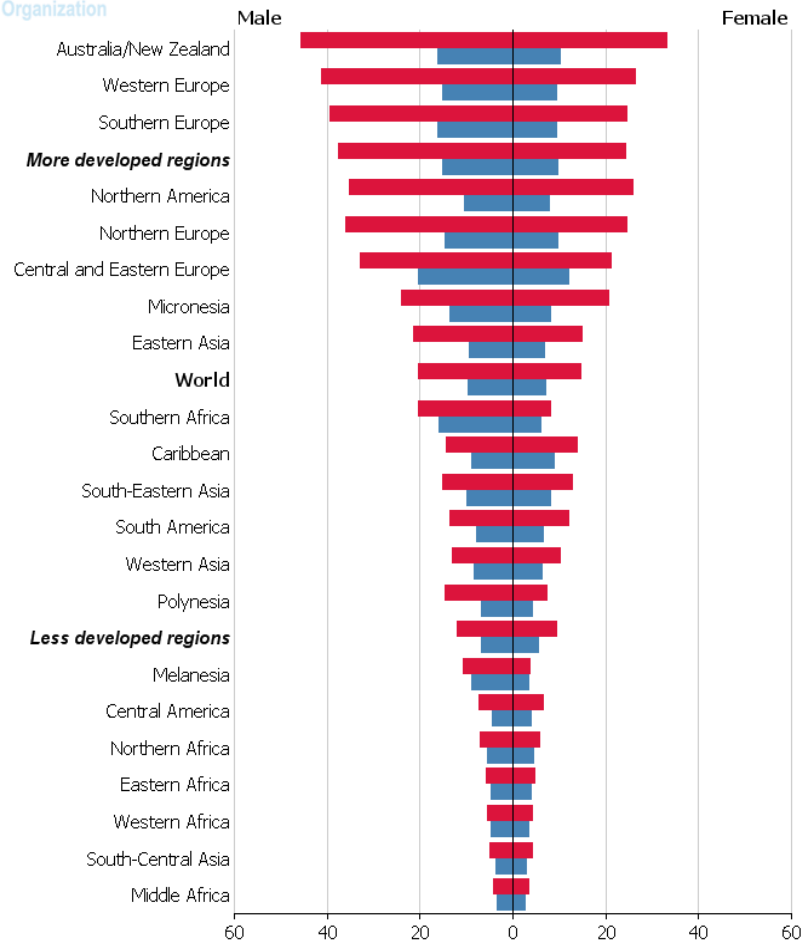
COLORECTAL CANCER AT GLANCE (GLOBOCAN 2008)

- Deaths from colorectal cancer worldwide are estimated around 8% of all cancer deaths, making it the fourth most common cause of death from cancer.
- As observed for incidence, mortality rates are lower in women than in men, except in the Caribbean.
- The highest mortality rates in both sexes estimated in Central and Eastern Europe (20.1 per 100,000 for male, 12.2 per 100,000 for female), and the lowest in Middle Africa (3.5 and 2.7 respectively)



COLORECTAL CANCER AT GLANCE (GLOBOCAN 2008)

International Agency for Research on Cancer

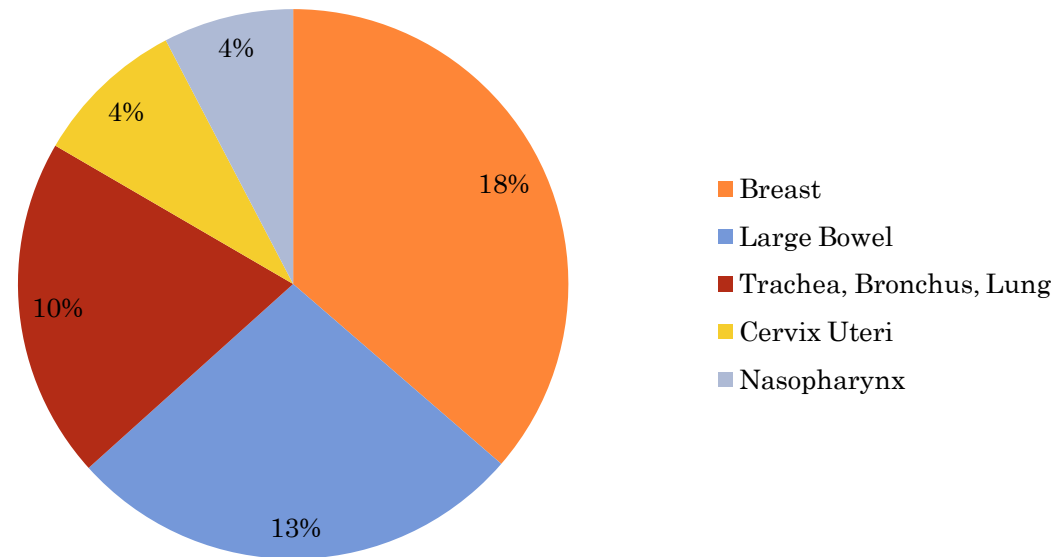


GLOBOCAN 2008 (IARC)

■ Incidence
■ Mortality

MALAYSIA SCENARIO

Preliminary finding NCR 2007-2011



No. of cases notified :

MALE : 44.5%

FEMALE : 55.5%

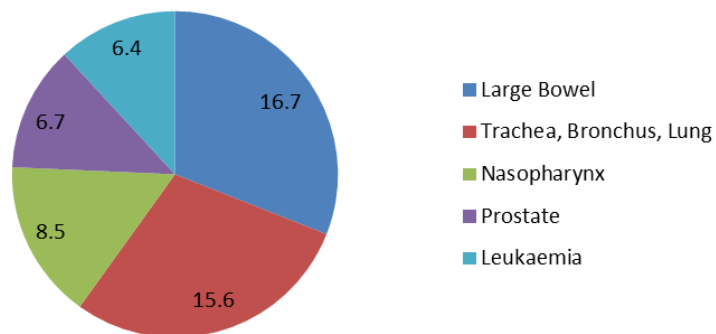


MALAYSIA SCENARIO

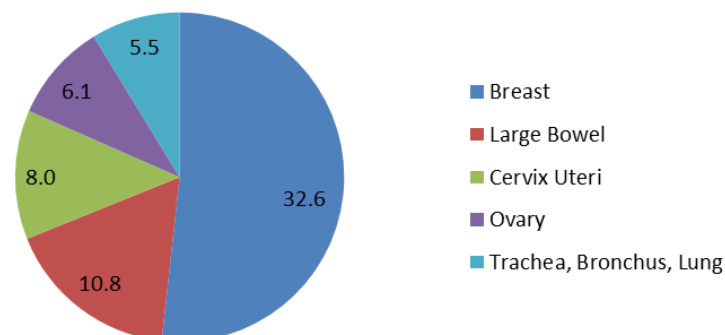


Preliminary finding NCR 2007-2011

5 most common cancer male (%)



5 most frequent cancer female (%)



RATIONALE FOR INITIATING COLORECTAL CANCER SCREENING PROGRAMME

- The National Cancer Control Blueprint, endorsed by the Cabinet in 2008, included colorectal cancer as one of the cancers of concern and suggested that screening programme should be initiated.
- Colorectal cancer is highly preventable and able to be treated effectively if diagnosed early.
- NCR 2008 : 64% of colorectal cancer diagnosed at stage III and IV.
- WHO - Screening using Faecal Occult Blood Test estimated to reduce mortality rate by 20% if done every 2 years.
- Reduction increased to 33% if done yearly



RECOMMENDED TEST USED FOR SCREENING

- Immunological Faecal Occult Blood Test (iFOBT)
 - Qualitative test
 - Is a non-invasive
 - Fairly simple method of screening, with reasonable levels of acceptability to the population (IHM study)
 - No dietary restriction required before sample is taken.



PREPARATION..

- 1) “Feasibility Study on Population Based Colorectal Cancer Screening in Malaysia” using iFOBT done by IHM in 2008-2009 in Seremban.
 - 90% acceptance rate (sent their screening kit for examination)
 - Awareness campaign and opportunistic screening are the best approach
 - 66.7% acceptance to the confirmatory test
 - Suggested the screening should be introduced in the Ministry of Health facilities.



- **2) Health Technology Assessment (HTA) 2011**
- A screening programme for CRC using iFOBT for mass population has been conducted in Japan, China, Taiwan, Italy, Germany, Netherlands, Canada and Uruguay. In Japan and Italy, for a mass screening programmes on CRC, a health education campaign was initiated before mailing the invitation to enrolled subjects. Leaflet, brochure and poster illustrating the risk of CRC and the usefulness of screening were distributed in general practitioners' offices, pharmacies and public health facilities.
- Asymptomatic subjects aged between 50 and 74 years were identified and received iFOBT kits to be used at home on a single determination without dietary restriction before sending to hospital laboratories.
- As the incidence of CRC has increased in Malaysia, the screening programme may be considered to be introduced
- iFOBT can be recommended to be used as a screening test for CRC screening in Malaysia.



- 3) **Pilot project in 6 states**
- Pilot project for colorectal cancer screening conducted in Perak, Pulau Pinang, Terengganu, Pahang, Negeri Sembilan dan Wilayah Persekutuan Kuala Lumpur in (March 2011-March 2012)
- Opportunistic approach
- Target group - **screening** : asymptomatic client, aged 50-70 years.
- 3559 people were screened using iFOBT
- Positive rate for iFOBT : 4.2%.
 - 65.6% underwent *colonoscopy*
 - 6.1% colonic polyp
 - 5.1% cancer.



CURRENT SCENARIO

Gastroenterologist

(source : BPP)

- As of July 2013
- Total 33 in the field:
- 18 GE
- 15 in training
(master)

Scopes (31/12/2011) :

- 111 machines
 - Functioning : 66
 - Non-functioning : 45
- (source : CRC)

Surgeon

(Source : BPP)

- General Surgeon : 247
- Colorectal Surgeon
(MOH) : 16
- 7 in training

>84% scopes done
by surgeon

>10% done by GE
(source CRC)



WHO APPROACH IN PROGRAMME PLANNING

- Adoption of stepwise approach
 - To plan and implement intervention based on local considerations and needs
- WHO stepwise framework (in programme planning) consist of 3 steps :
 - Step 1 : where are we now? Investigate current state of the cancer problem, and cancer control services/programme



WHO APPROACH IN PROGRAMME PLANNING

- Step 2 : define public population, setting goal and objectives, decides on priority interventions
- Step 3 : implementation → 3 steps
 - **Implementation step 1 : implement intervention that are feasible, with existing resources**
 - Implementation step 2 : implement intervention that are feasible in medium term, with realistically projected increase in, or reallocation, of resources
 - Implementation step 3 : implement intervention that are beyond the reach of current resources, and when such resources become available



WHO KEY MESSAGE

- The aim of early detection is to detect cancer when it is localised to the organ of origin and before it invades the surrounding tissues and distant organs, or for some sites, to detect precancerous lesion.
- There are 2 main components of early detection programmes for cancer :
 - i. Screening
 - ii. Early diagnosis



WHO KEY DEFINITION

- **Screening** : is systematic application of screening test in a presumably asymptomatic population. It aims to identify individuals with an abnormality suggestive of specific cancer. These individuals require further investigation
- **Early Diagnosis** : the awareness of public or health professionals of early signs and symptoms to facilitate diagnosis before the disease becomes advanced, and, thus, enable more effective and simpler therapy. Sometimes called as 'down-staging'
- **Opportunistic screening** : is the unsystematic application of screening test in routine health service.



- Not forgetting other important components i.e :
 - Diagnosis
 - treatment
 - Follow-up



CONCLUSION

- In view of the increasing cases of colorectal cancer in Malaysia and majority of the cases still diagnosed at later stage with existing test in the market/country, colorectal screening should be initiate,
- Following WHO stepwise approach, Malaysia should initiate the **step 1** i.e implement intervention that are feasible, with existing resources and plan to increase the capacity in resources.



THANK YOU

