- Epidemiology of Selected
  Cancers in Saudi Arabia
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  Objectives
- To enumerate major common cancer in Saudi Arabia
- Identify the magnitude of the problem
- Discuss the distribution of cancer
- Describe causes of cancers
  - What is Cancer
- A group of diseases characterised by:
- Abnormal growth of the cells
- Ability to invade
- Lead to death
- The cancer may originate from
- Epithelial cells

- Mesodermal cells
- Bone marrow cells
- Cancer may be
- Primary
- Secondary
- Problem Statement
- It is a worldwide problem
- Every year there are 10 million new cases
- More than 6 million die every year

• Problem Statement

- The most common cancers worldwide are:
- Lung cancer (12.3% of all cancers)
- Breast cancer (10.4% of all cancers)
- Colorectal cancer (9.4% of all cancers)
- The most killing cancer are:
- Cancer of the lung (17.8% of all deaths)
- Cancer of the stomach (10.4% of all deaths)
- Cancer of the liver (8.8% of all deaths)

 (notice the relation between incidence and gender ie response to intervention)

## Cancer and Gender

- There is male predominance in some cancer like cancer lung, stomach, esophageal, bladder
- Sometimes it is due to exposure rather than difference in susceptibility
- Other cancers eg pancreatic and colorectal there is minimal difference in gender
- The relationship between incidence and mortality is not affected by gender
  - Cancer and Place

- There is unequal distribution of cancer between developed and developing countries
- Life style may influence the pattern of distribution of cancer
- Chronic infection also affect the distribution of cancer( hepatitis B and liver cancer, human papillomaviruses and cervical cancer, helicobacter pylori and cancer stomach

Time Trend

• At the beginning of this century cancer was the sixth cause of death now it is the second leading cause, Why?

• Patterns of cancer

- Different distribution for different cancer throughout the world, it is due to;
- Environmental factors
- Food habits
- Lifestyle
- Genetic factors
- Inadequate diagnosis and reporting
  - Causes of Cancer
- It is multifactorial aetiology
  - Environmental Factors
    - Responsible for 80 %to 90% of all cancers
  - Genetic Factors
    - More difficult to identify
      - Environmental Factors

- Tobacco
- Alcohol
- Dietary factors
- Occupational exposures
- Viruses
- Parasites
- Customs, Habits, and lifestyle
- Others
  - Saudi Oncology Society
- The Saudi Cancer Registry (SCR) in Saudi Arabia is a population-based registry
- Developed in 1992 (1412H).
- It was established under the jurisdiction of the Ministry of Health (MOH) by the Order of His Excellency the Minister of Health.

- The SCR commenced reporting cancer cases from 01 January 1994.
- The overall incidence of cancer in Saudi Arabia is 71.7 per 100,000
  - The Goal of SCR
- The primary goal of the SCR is to define the population-based incidence of cancer in Saudi Arabia.
- Supporting early detection and cancer screening programs and supporting cancer research projects.
  - Cancer Incidence Report 2004
- Between January 01 and December 31, 2004, the total

- number of cancer incident cases reported to the SCR was 9381.
- Overall, cancer was slightly more in men than in women.
- Cancers affected 4,778 (50.9%) males and 4,603 (49.1%) females, with a male to female ratio of 104:100.
- 7,138 cases were reported among Saudis, 1,987 among Non-Saudis.
- Diagnosis of malignancy was confirmed histologically