

*Colo-Rectal Cancer:
Magnitude of the Problem*

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Ain Sukhna - Egypt

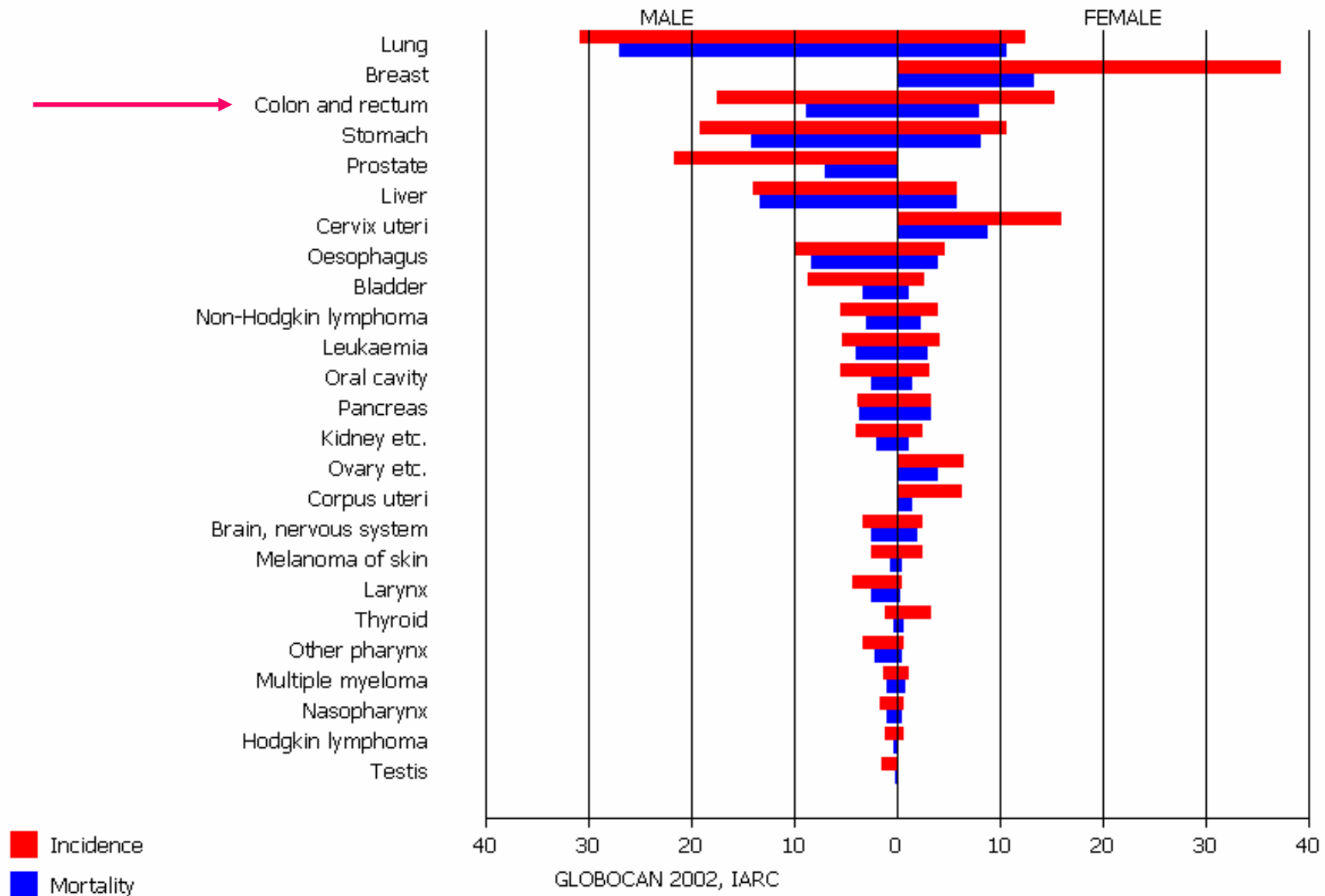
Outline

- World Incidence of Colorectal Cancer
- Frequency of Colorectal Cancer in Arab World
- Frequency of Colorectal Cancer in Egypt
- Risk Factors of Colorectal Cancer

World

- Colorectal cancer is the 4th most common cancer site for males after lung, prostate and stomach cancer
- For females, it is the 2nd after breast cancer

World Crude rate per 100,000 (all ages)



World Estimated New Cancer Cases, Crude and Age-adjusted Incidence Rates by Gender, Globocan 2002

Gender	Number of new cases	Crude incidence rate	Age-adjusted incidence rate	Male to female ratio
Males	550,465	17.6	20.1	1.1
Females	472,687	15.4	14.6	1

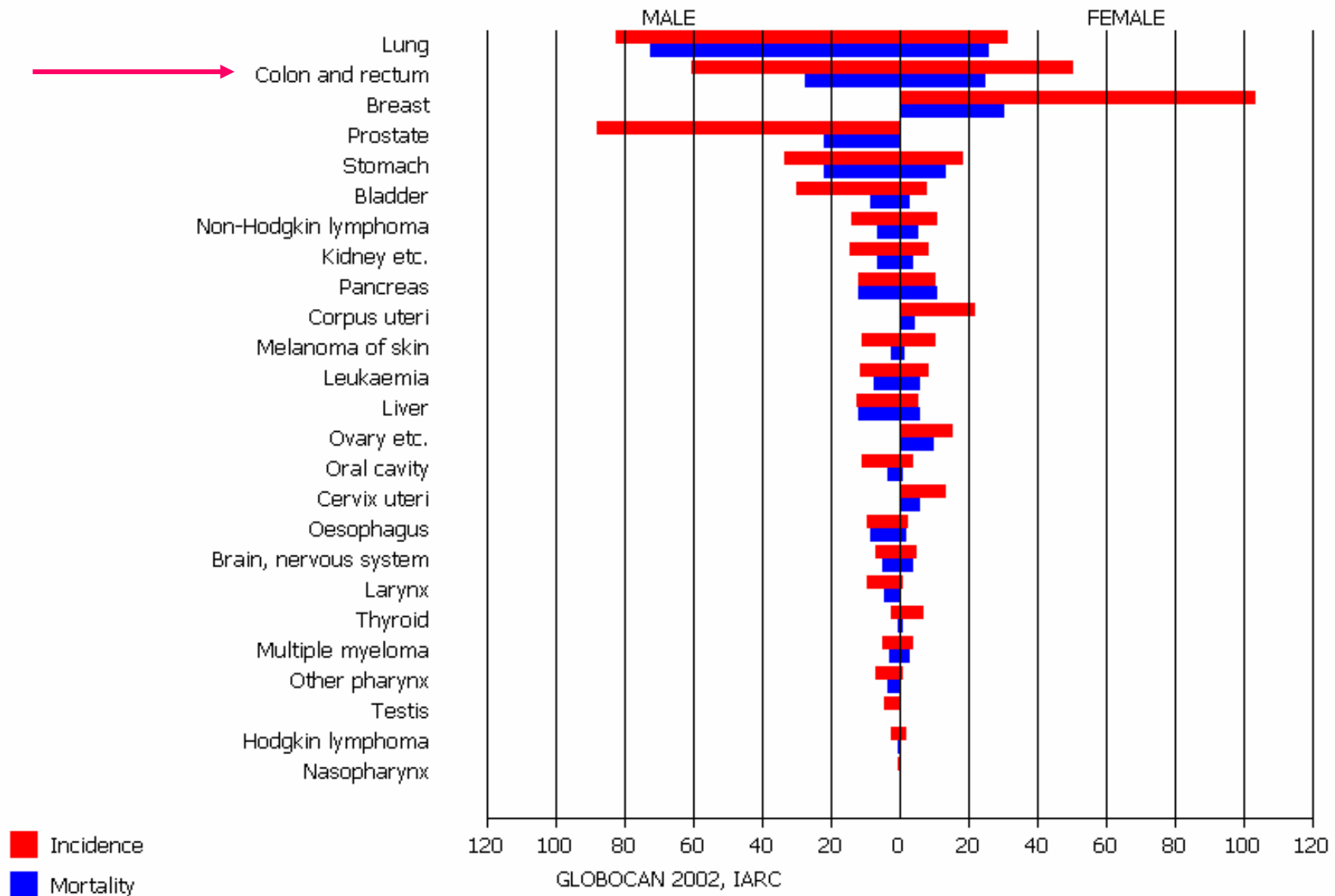
Incidence rates/100,000

World Estimated Cancer Deaths, Crude and Age-adjusted Death Rates by Gender, Globocan 2002

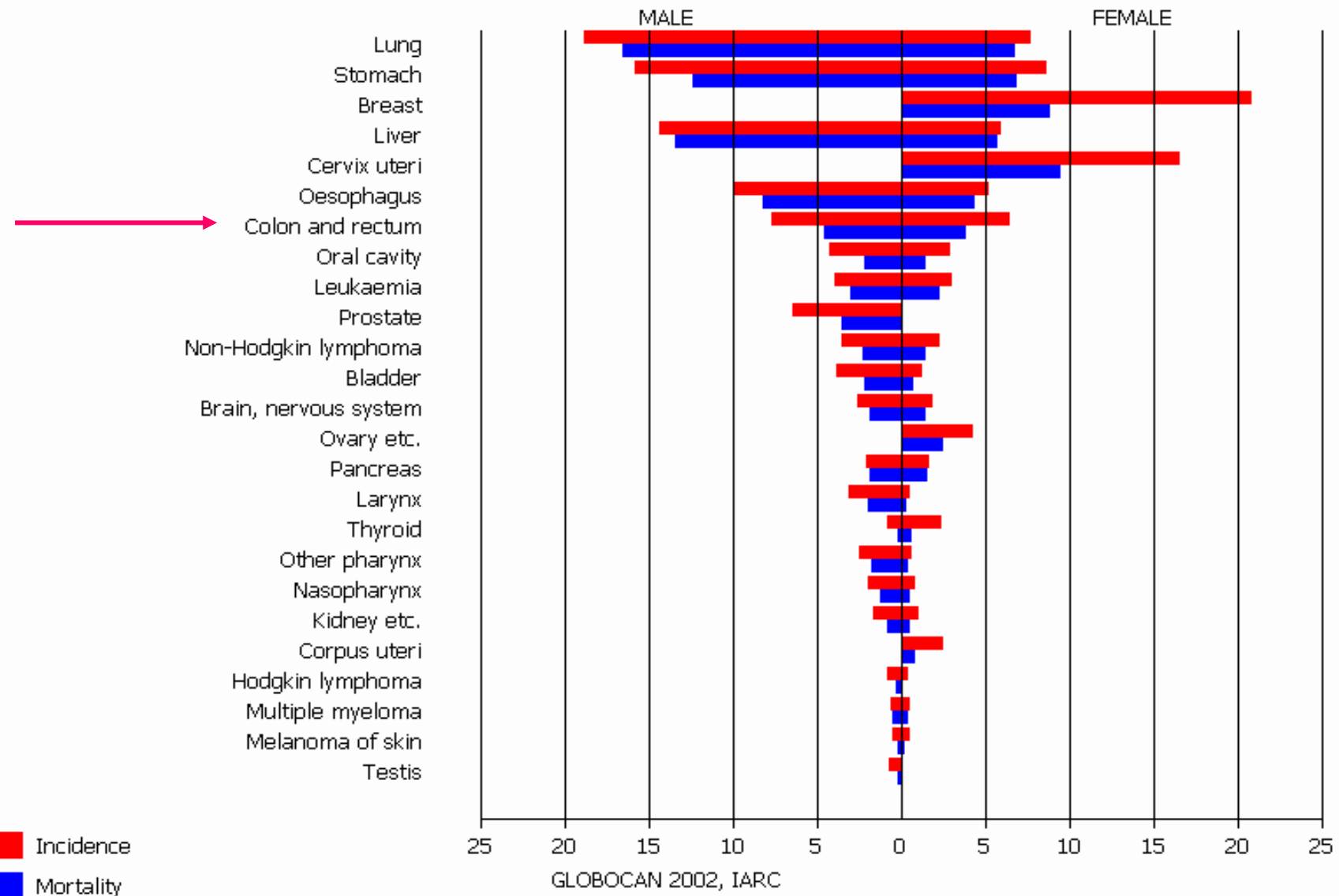
Gender	Number of deaths	Crude death rate	Age-adjusted death rate	Male to female ratio
Males	254,816	8.4	9.8	1.1
Females	237,595	7.9	7.6	1.0

Death rates/100,000

More developed regions Crude rate per 100,000 (all ages)



Less developed regions Crude rate per 100,000 (all ages)

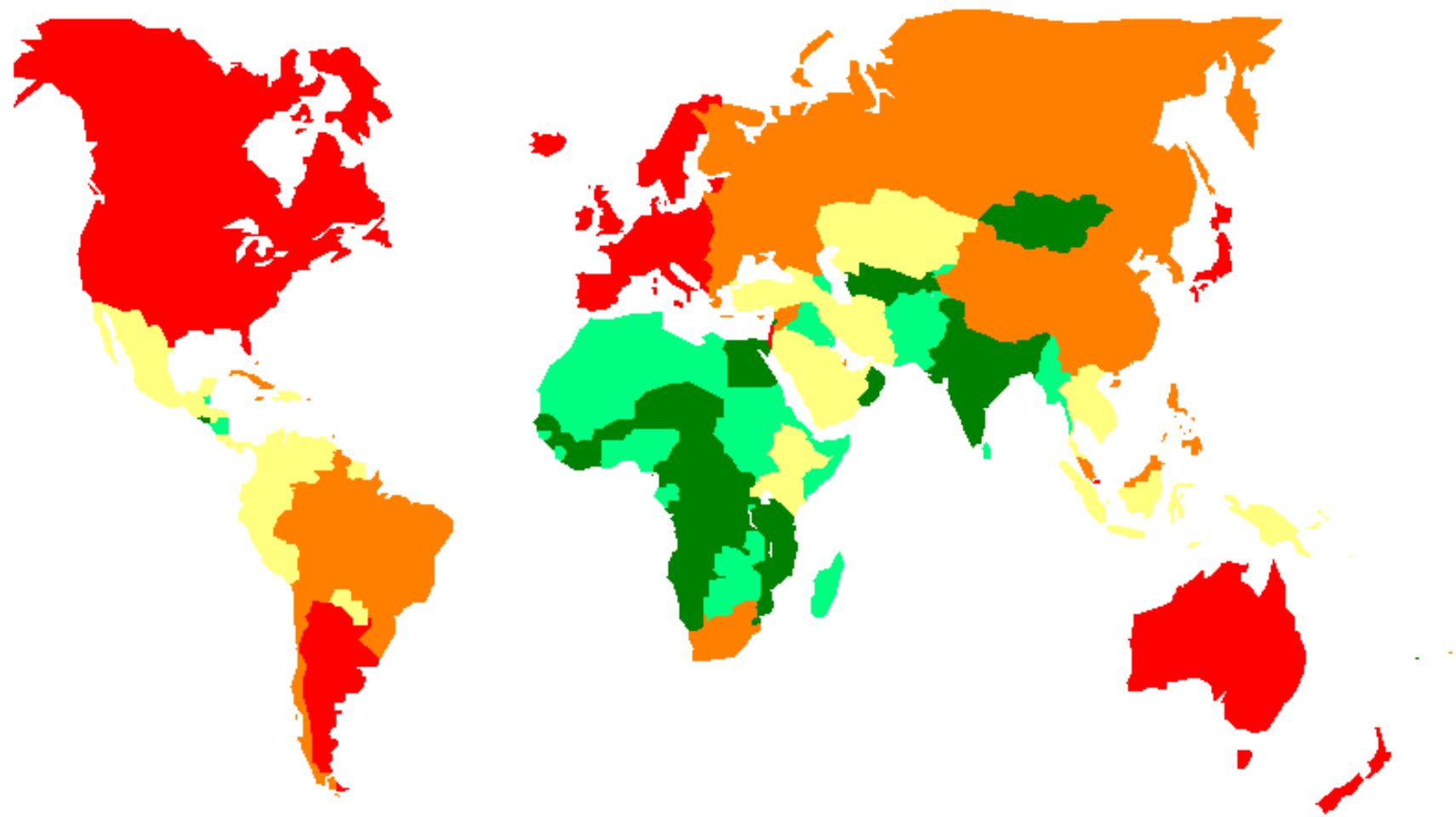


World Age-adjusted Incidence Rates by Gender, Globocan 2002

	Males	Females	M/F ratio
World	20.1	14.6	1.2
More developed countries	40.0	26.6	1.2
Less developed countries	10.2	7.7	1.2

Incidence rates/100,000

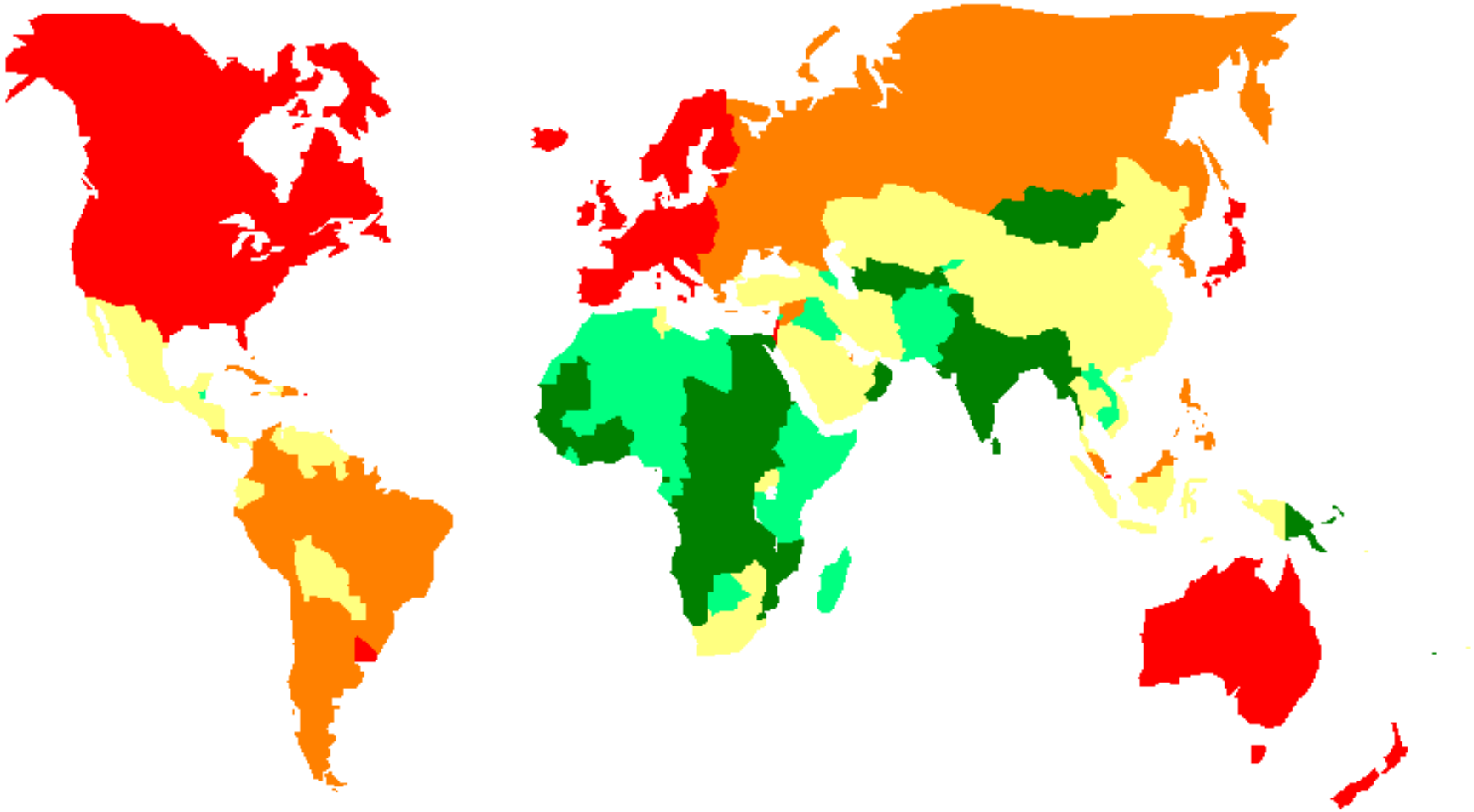
Colon and rectum, Males
Age-Standardized incidence rate per 100,000



■ < 4.8 ■ < 7.2 ■ < 12.3 ■ < 27.6 ■ < 58.5

GLOBOCAN 2002, IARC

Colon and rectum, Females
Age-Standardized incidence rate per 100,000



■ < 3.5 ■ < 5.8 ■ < 11.6 ■ < 19.6 ■ < 42.2

GLOBALCAN 2002, IARC

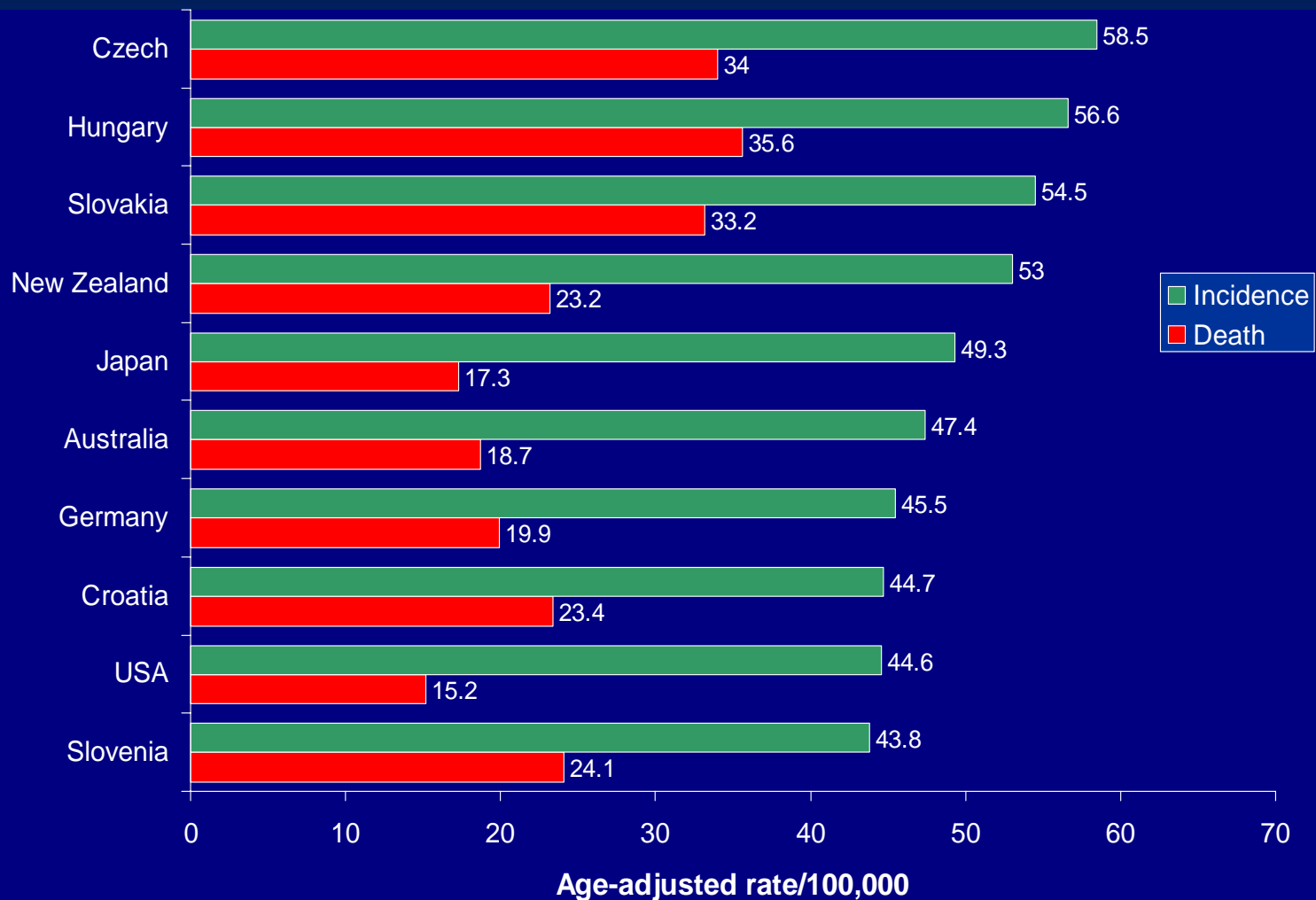
Worldwide Age-Adjusted Incidence Rates by Region*



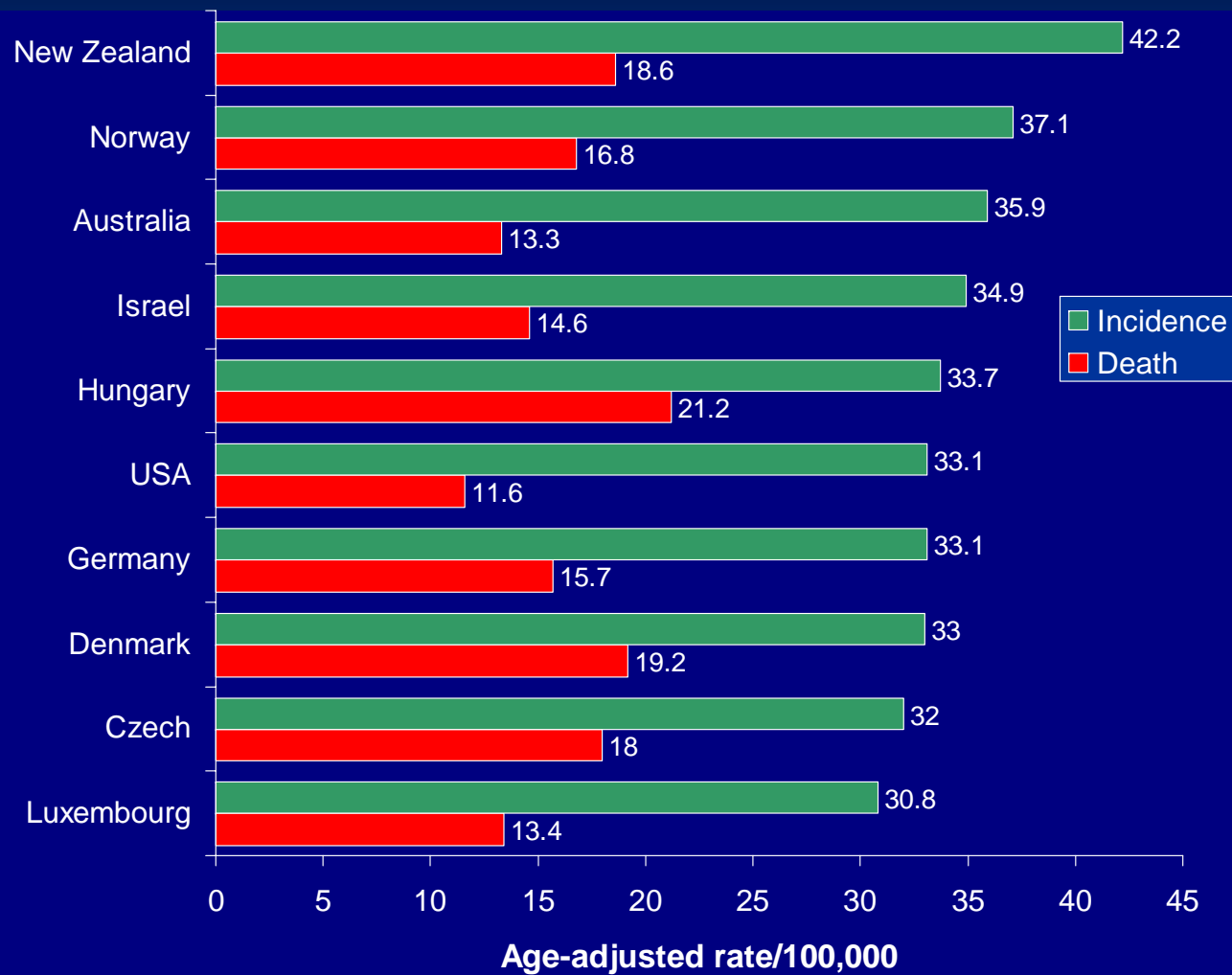
*Incidence per 100,000 population.

Globocan, 2002.

Countries with Highest Age-Adjusted Rates, Males, Globocan 2002



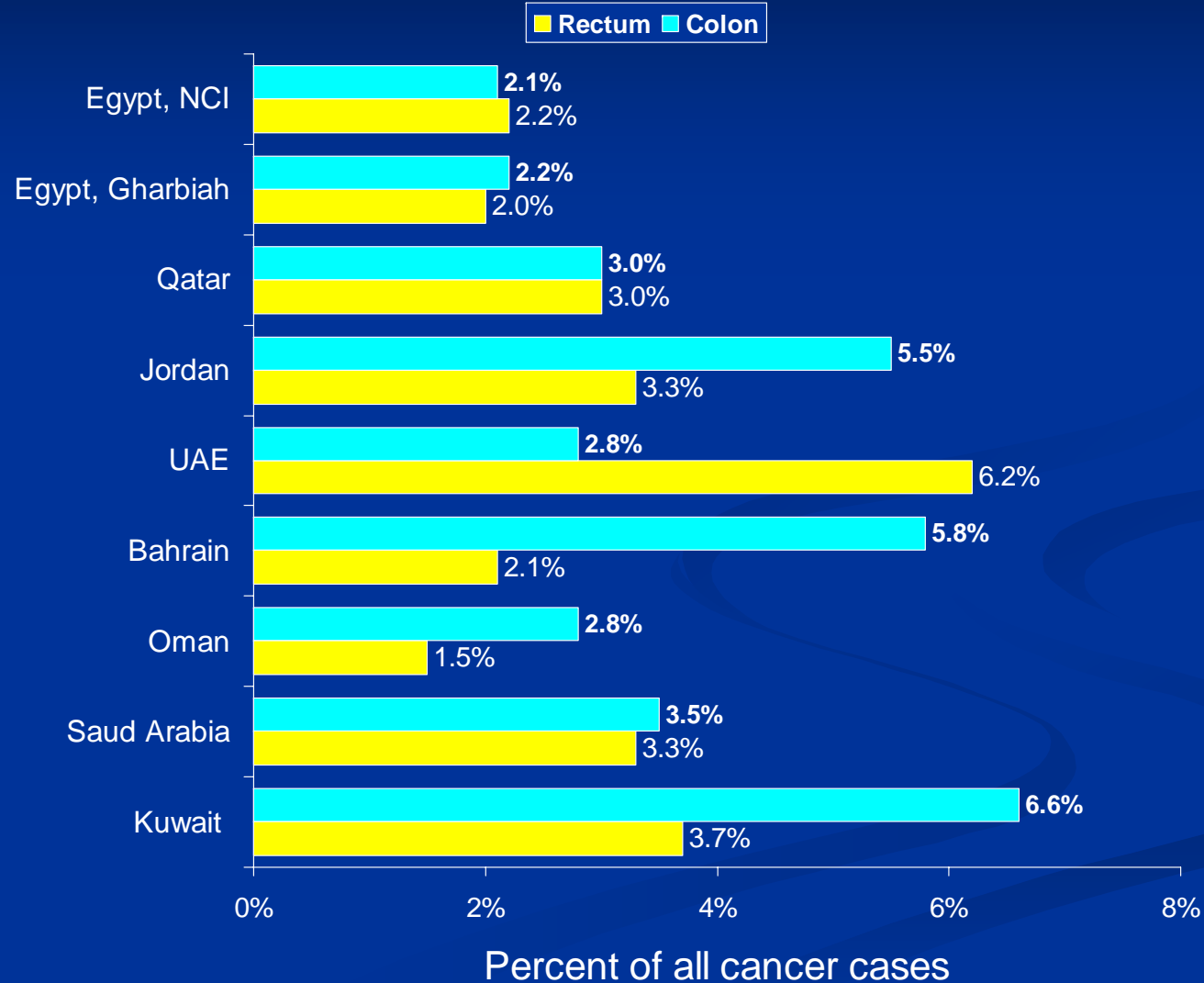
Countries with Highest Age-Adjusted Rates, Females, Globocan 2002



Most Common Cancer Sites in Selected Arab Countries, Males

Egypt	Tunisia	Algeria	Jordan	KSA	Kuwait
Bladder	Lung	Lung	Lung	NHL	Colorectal
Liver	Bladder	Bladder	Bladder	Liver	NHL
NHL	Prostate	Stomach	Prostate	Leukemia	Prostate
Lung	Larynx	Prostate	NHL	Colorectal	Lung
Leukemia	Colorectal	Colorectal	Skin	Lung	Liver
Colorectal	NHL	Naso-pharynx	Brain& CNS	Prostate	Brain& CNS

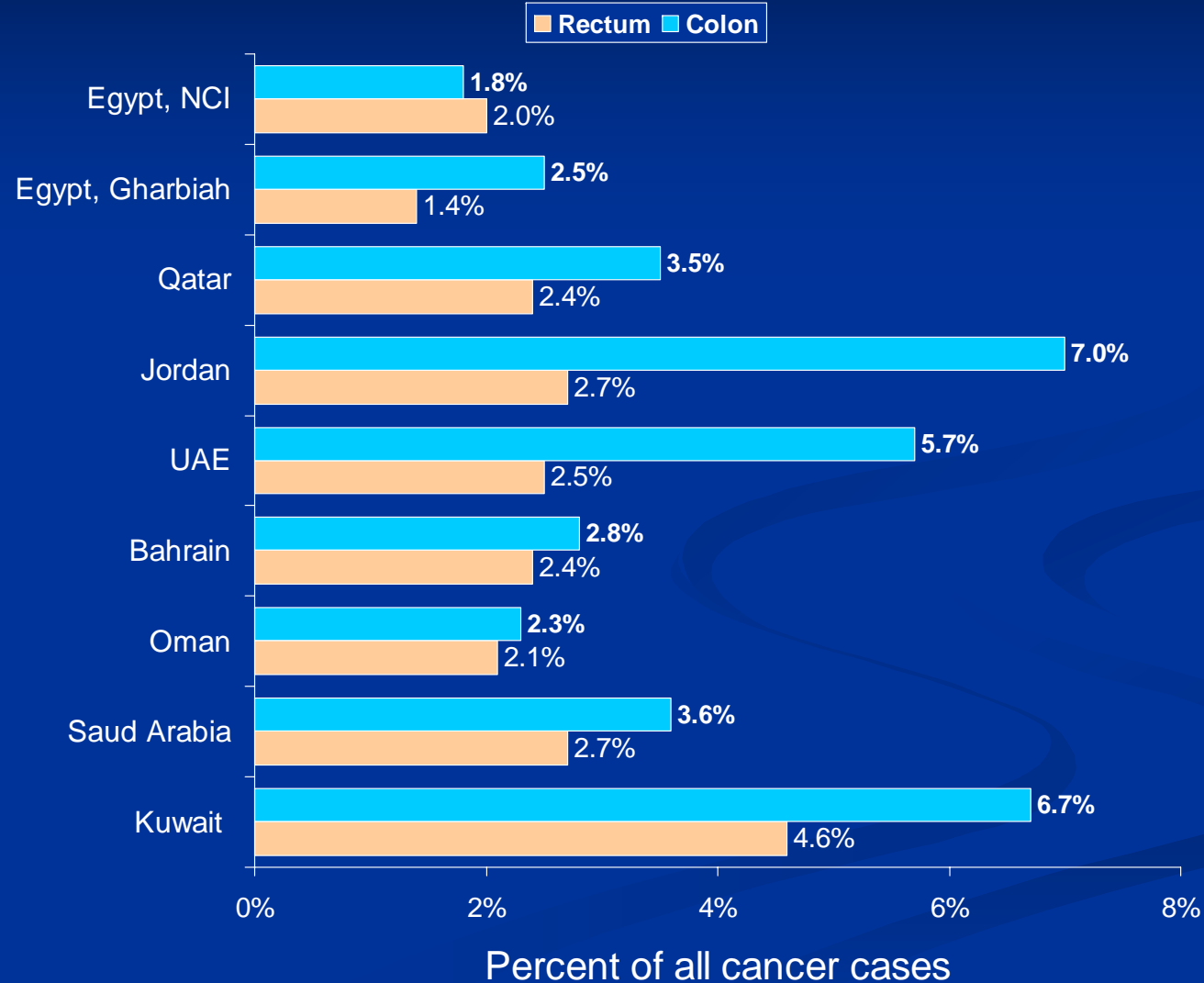
Frequency of Colon & Rectum Cancer in Arab World (Males)



Most Common Cancer Sites in Selected Arab Countries, Females

Egypt	Tunisia	Algeria	KSA	Jordan	Kuwait
Breast	Breast	Breast	Breast	Breast	Breast
NHL	Colorectal	Cervix	Thyroid	Colorectal	Colorectal
Leukemia	Cervix	Colorectal	Leukemia	Ovary	Thyroid
Liver	Leukemia	Ovary	Colorectal	Thyroid	NHL
Colorectal	NHL	NHL	NHL	Skin	Cervix
Ovary	Stomach	Thyroid	Ovary	Uterus	Uterus

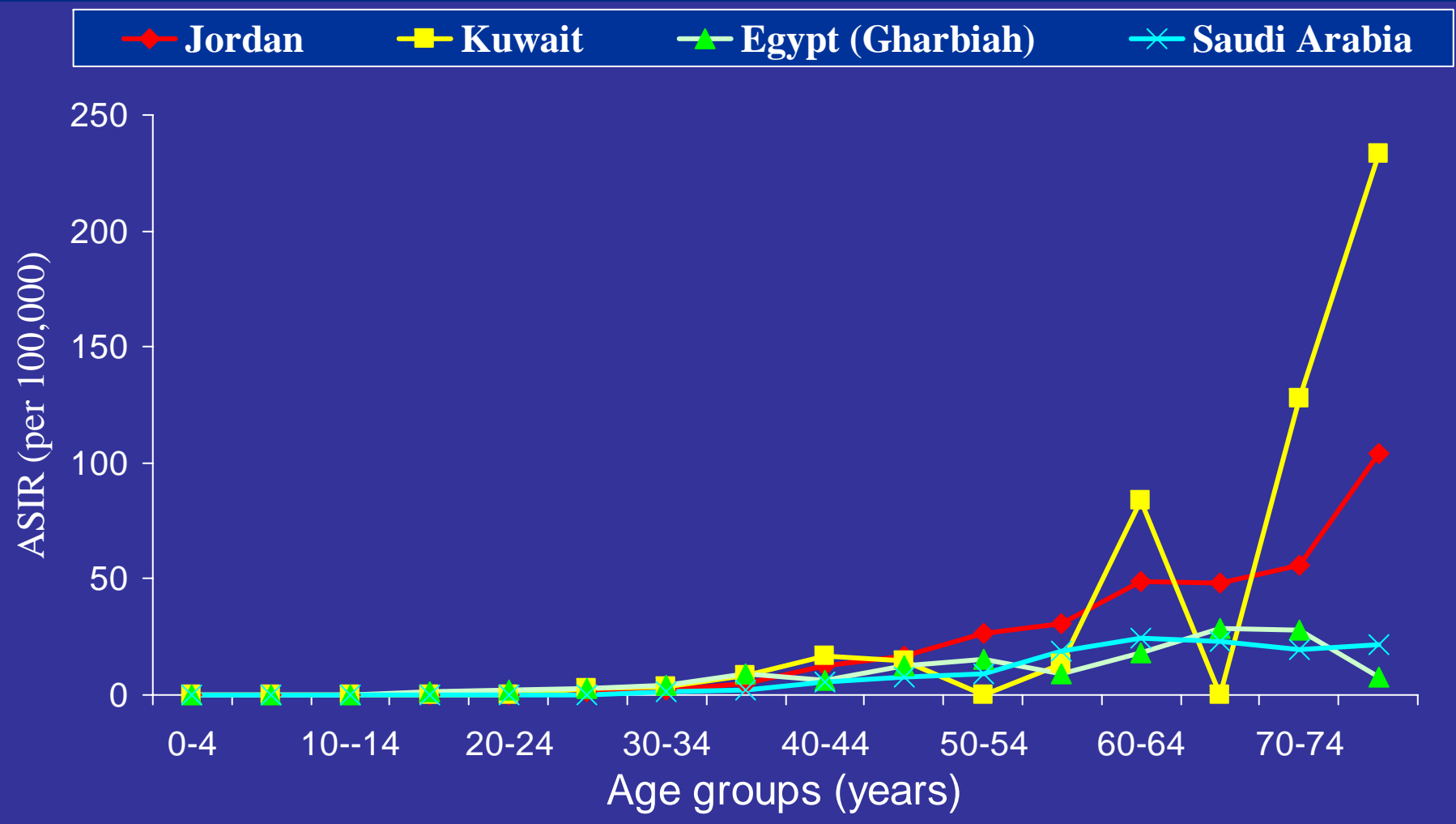
Frequency of Colon & Rectum Cancer in Arab World (Females)



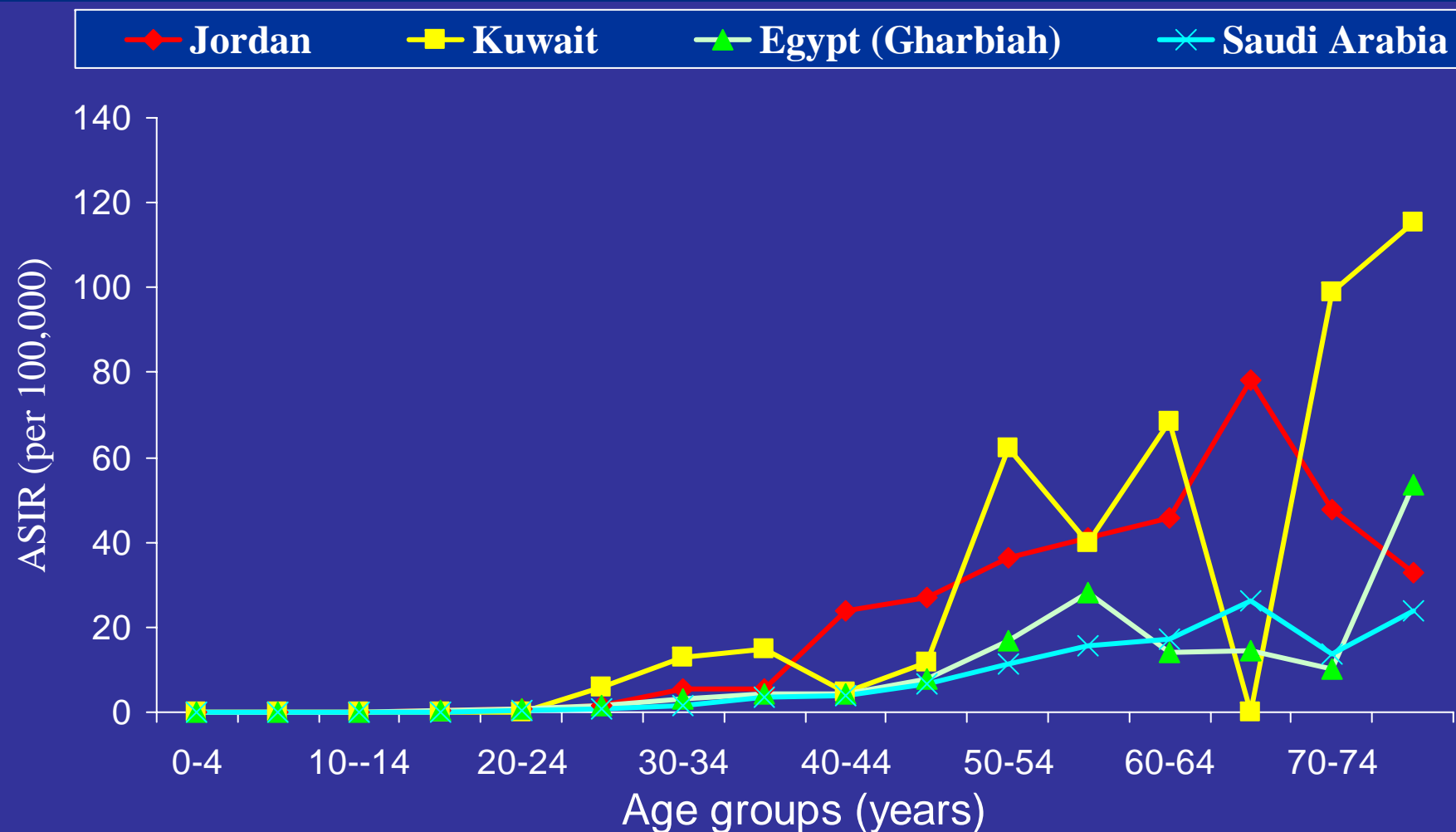
Median Age of Colorectal Cancer Cases in Selected Arab Countries

Country	Males	Females
Egypt (NCI)	48.0	48.0
Egypt (Gharbiah)	48.1	49.5
Saudi Arabia	59.9	56.4
Jordan	57.6	53.4
Kuwait	63.5	53.3

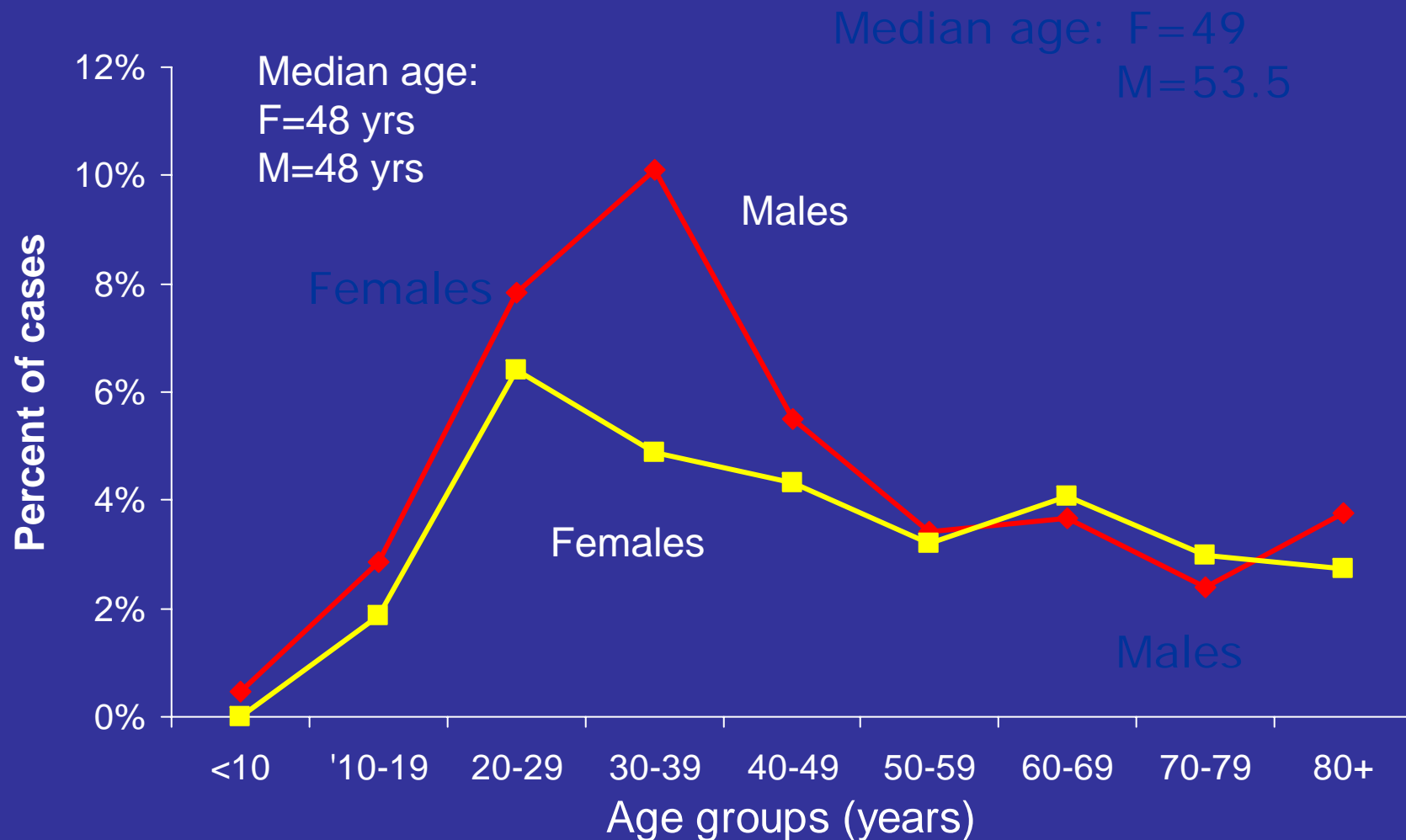
Age-Specific Incidence Rates (ASIR) of Colorectal Cancer in Selected Arab Countries (Males)



Age-Specific Incidence Rates (ASIR) of Colorectal Cancer in Selected Arab Countries (Females)

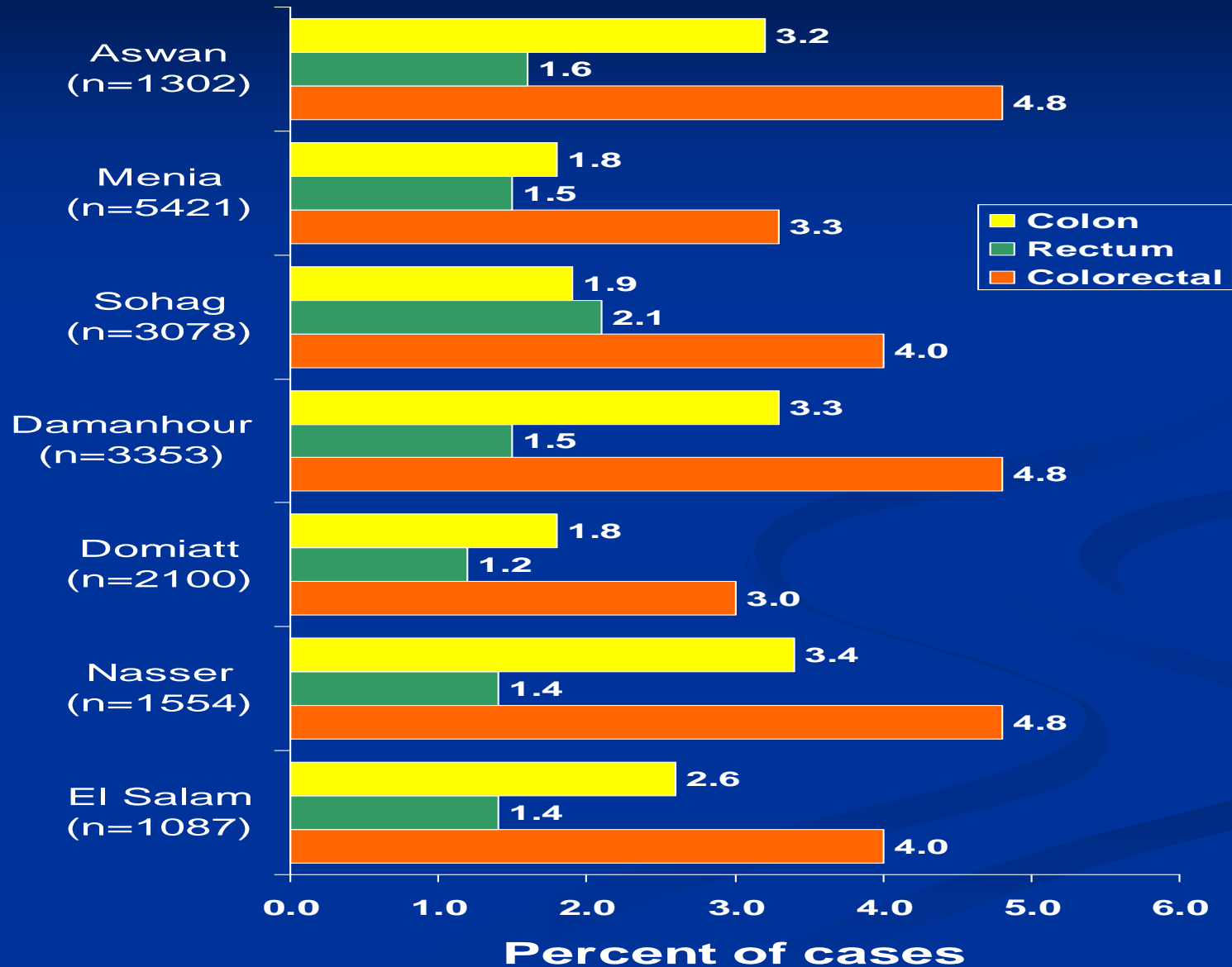


Age-Specific Frequency of Colorectal Cancer, NCI, Egypt 2002- 03



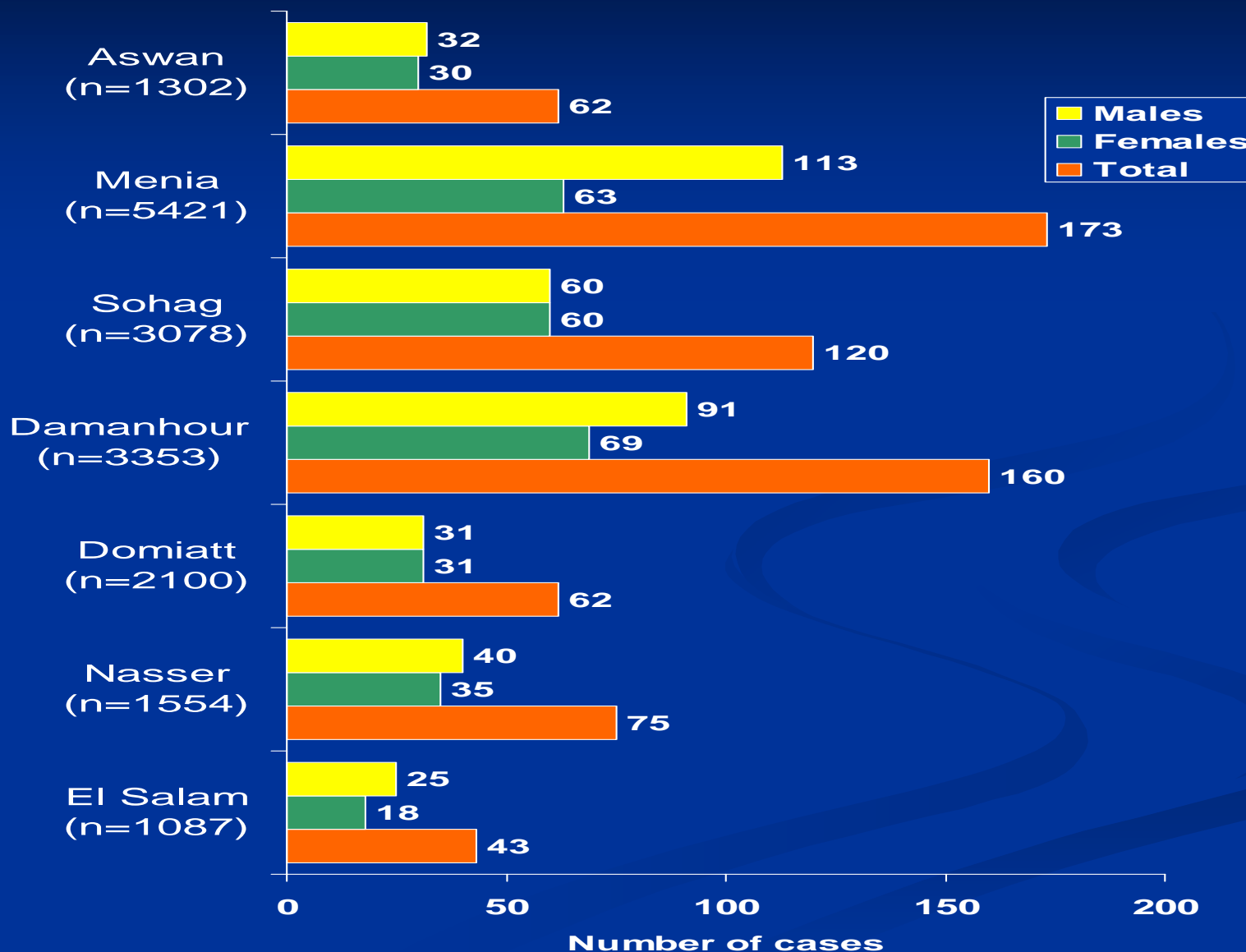
Frequency of Colorectal Cancer

Central Cancer Registry, Egypt (1/1/00-1/12/01)



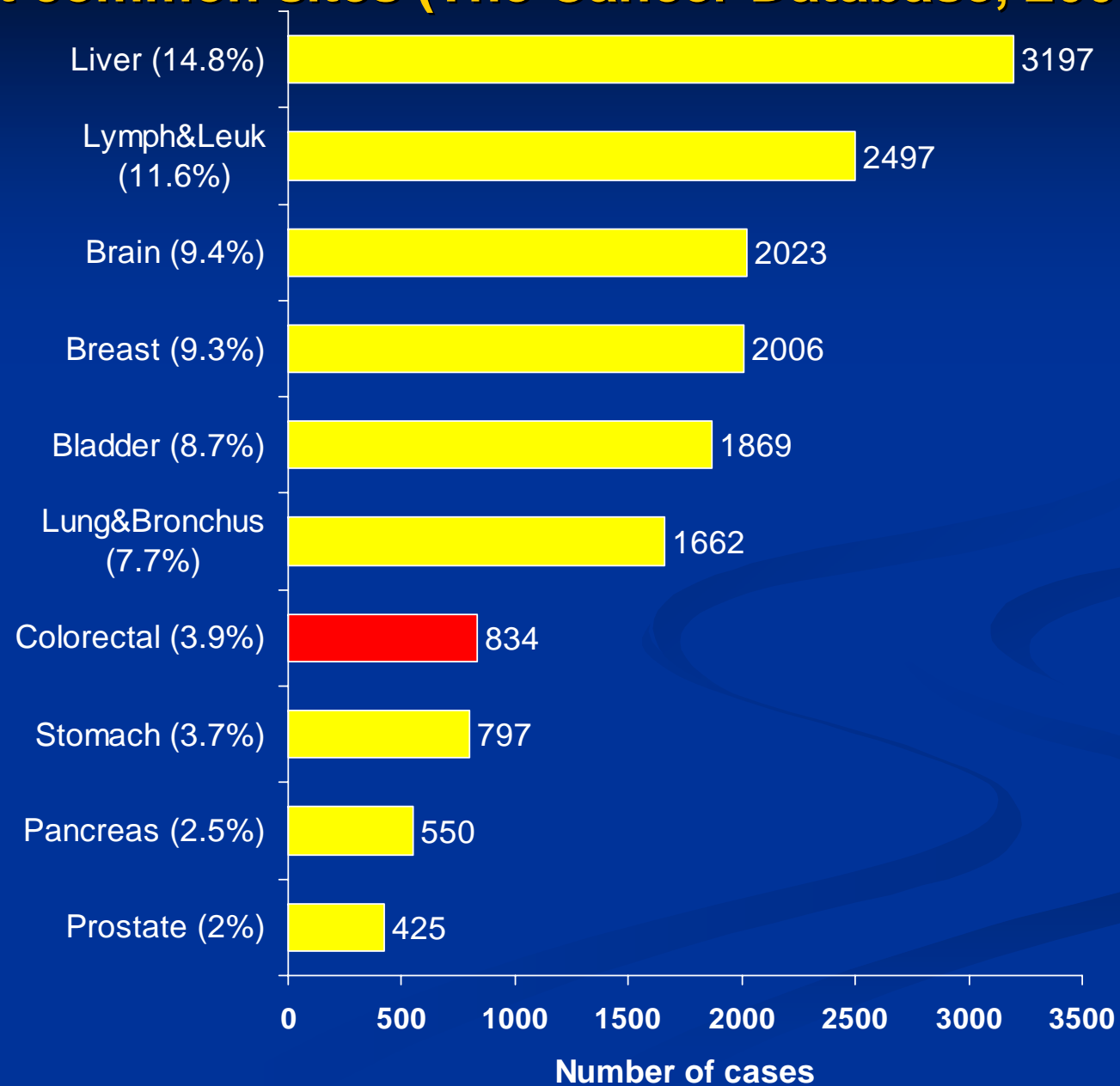
New Colorectal Cancer Cases by Gender

Central Cancer Registry, Egypt (1/1/00-1/12/01)



Egypt Mortality Statistics, 2001

Most common sites (The Cancer Database, 2001)



Egypt Mortality Statistics, Bladder Cancer, 2001 (The Cancer Database, 2001)

	Number of cases	% of all cancer deaths
Males	491	4.0%
Females	343	3.7%
Total	834	3.9%

Risk Factors of Colorectal Cancer

- **Family history of colorectal cancer: 1st degree relative (RR=1.8)**
- **Familial colorectal cancer syndromes: Familial adenomatous polyposis. By age 40 almost all people with disorder will have developed cancer**
- **Ethnic background: Jews of Eastern descent are thought to have a higher rate of colorectal cancer**
- **Personal history colorectal cancer: even though it has been completely removed**

Risk Factors of Colorectal Cancer, cont

- **Personal history of chronic inflammatory bowel disease: eg: ulcerative colitis**
- **Aging: In US, more than 90% of people found to have colorectal cancer are older than 50. Egypt: median age less than 50**
- **Diet high in fat: especially from animal sources (RR=1.5)**

Risk Factors of Colorectal Cancer, cont

- **Physical inactivity** : less than 3 hours per week (RR=1.7)
- **Obesity**: Being overweight (RR=1.5)
- **Diabetes**: 30% to 40% increased risk
- **Smoking**: (RR=1.5)
- **Alcohol intake**: more than 1 drink/day (RR=1.4)
- **Night shift work**: one study found that women who worked a night shift at least 3 nights a month for 15 years had a higher rate of colorectal cancer

Reducing your Risk

According to The National Cancer Institute (USA), studies are underway looking into a number of potential ways to reduce the risk of colorectal cancer, such as:

- **Smoking cessation**
- **Use of dietary supplements**
- **Use of aspirin**
- **Decreased alcohol consumption**
- **Increased physical activity**

Conclusions

- There is considerable international variation
- No significant variation by gender
- No noticeable variation in frequency between different centers in Egypt

Thank You