



Epidemiology of Cancers in Sri Lanka - 2024

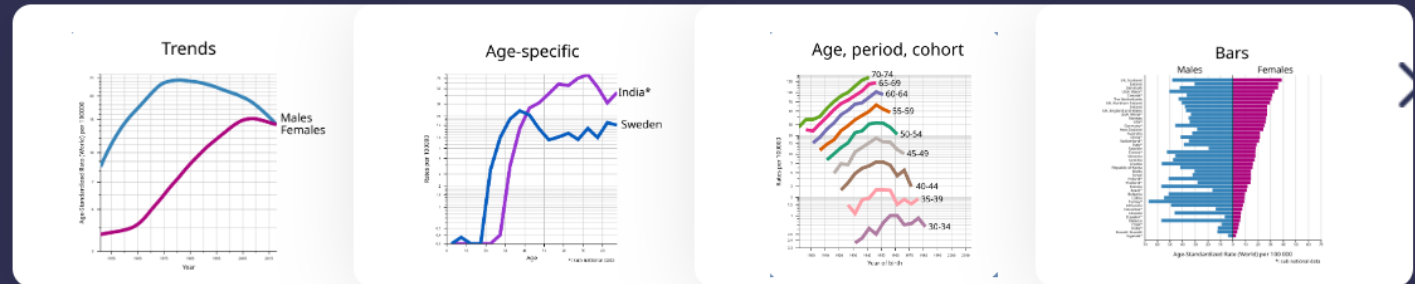
National Cancer Control Programme - Ministry of Health



CANCER OVER TIME

Cancer Over Time

Predict the future cancer incidence and mortality burden worldwide up until 2040.



CANCER
TODAY

CANCER
OVER TIME

CANCER
TOMORROW

CANCER
CAUSES

CANCER
SURVIVAL

CANCER
@CSU

Global burden of Cancer

Absolute numbers, Incidence, Both sexes, in 2022

All cancers
Continents

Oceania
269 088 (1.3%)

Africa
1 185 216 (5.9%)

LAC
1 551 060 (7.8%)

Northern America
2 673 174 (13.4%)

Europe
4 471 422 (22.4%)

Asia
9 826 539 (49.2%)

Total : 19 976 499

Global burden of Cancer

Absolute numbers, Mortality, Both sexes, in 2022

All cancers
Continents

Oceania
73 776 (0.76%)
Northern America
706 427 (7.2%)

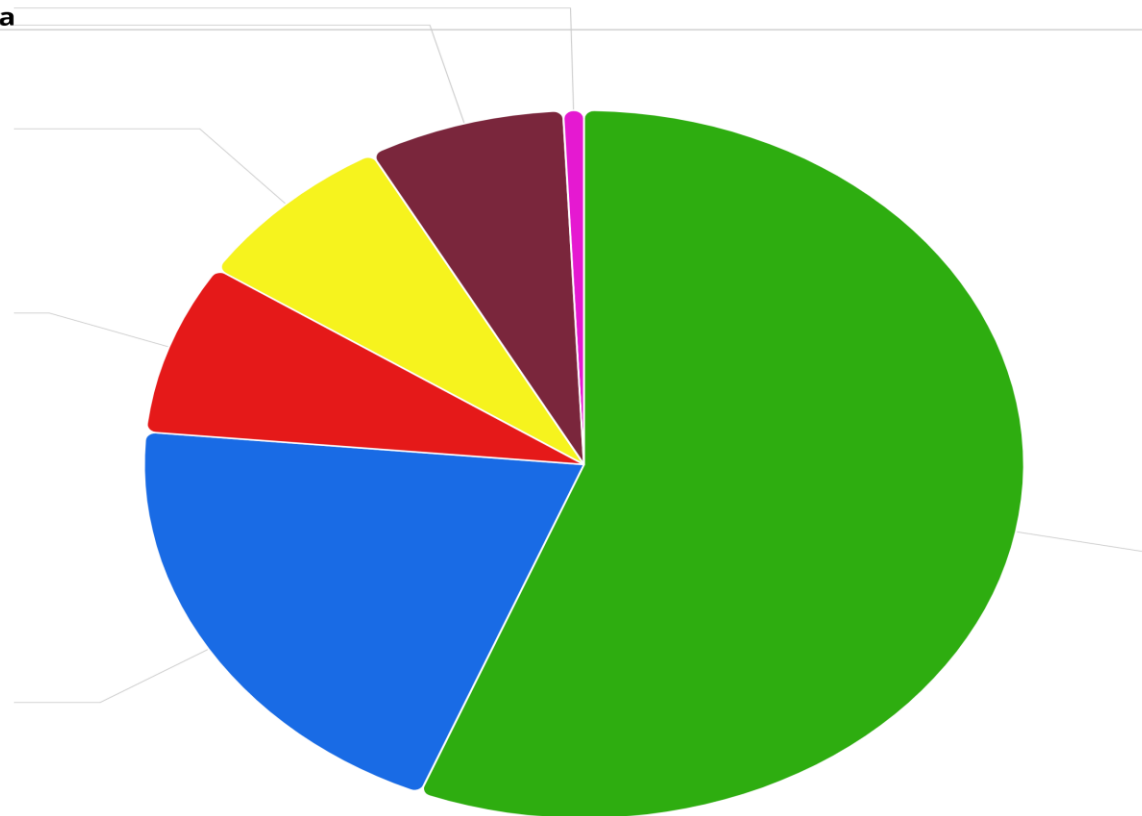
LAC
749 242 (7.7%)

Africa
763 843 (7.8%)

Europe
1 986 093 (20.4%)

Asia
5 464 451 (56.1%)

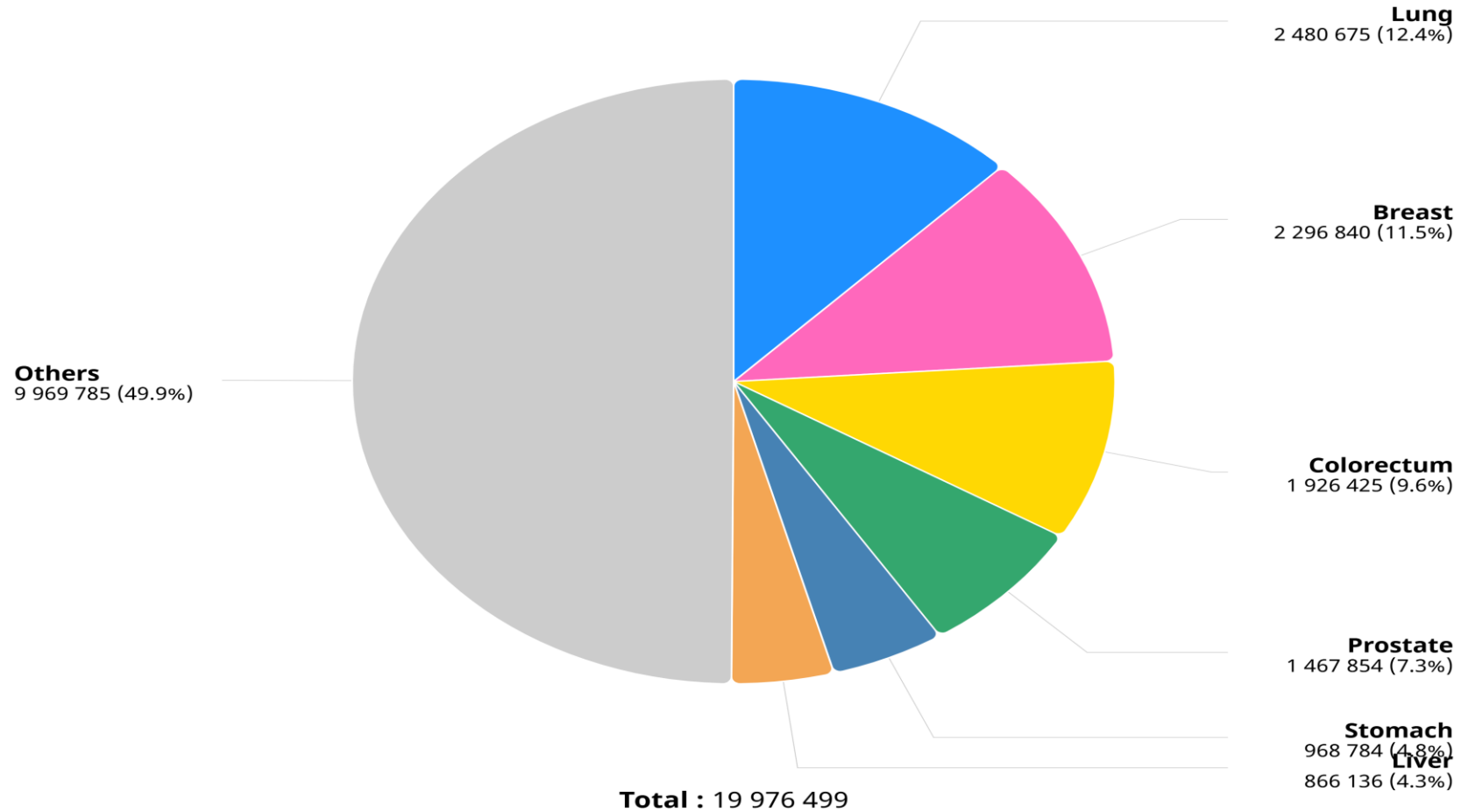
Total : 9 743 832



Global burden of Cancer

Absolute numbers, Incidence, Both sexes, in 2022

Continents

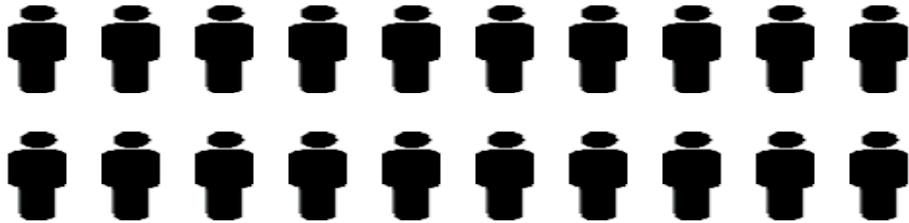


Cancer tomorrow

Estimated number of new cases from 2022 to 2045, Both sexes, age [0-85+]
All cancers
World

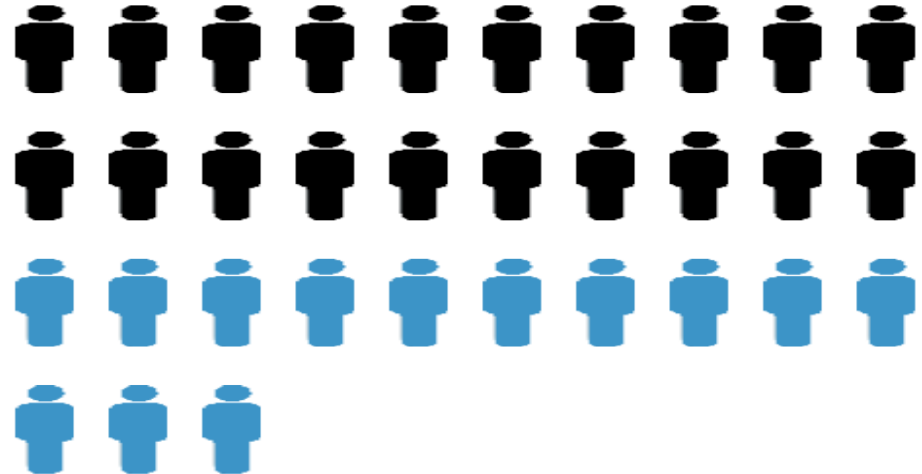


2022



20.0M

2045

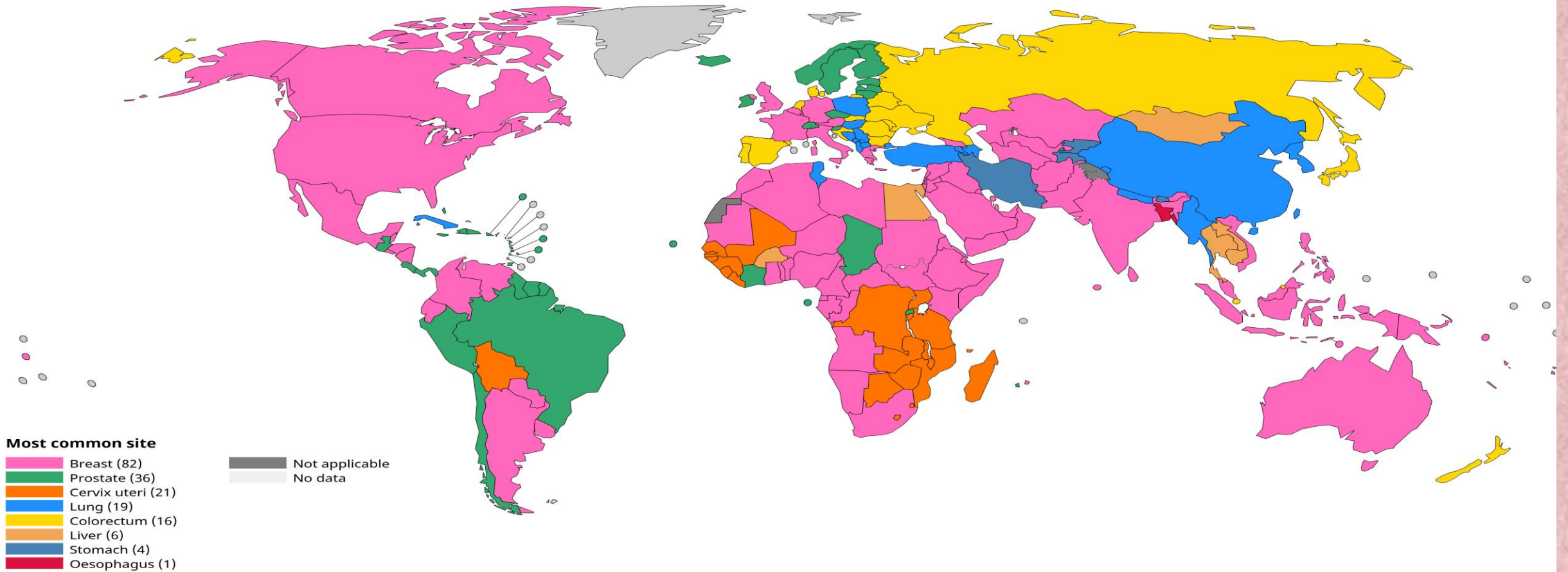


32.6M



Most common cancer sites in the world 2022

Most common site per country, Absolute numbers, Incidence, Both sexes, in 2022 (excl. NMSC)

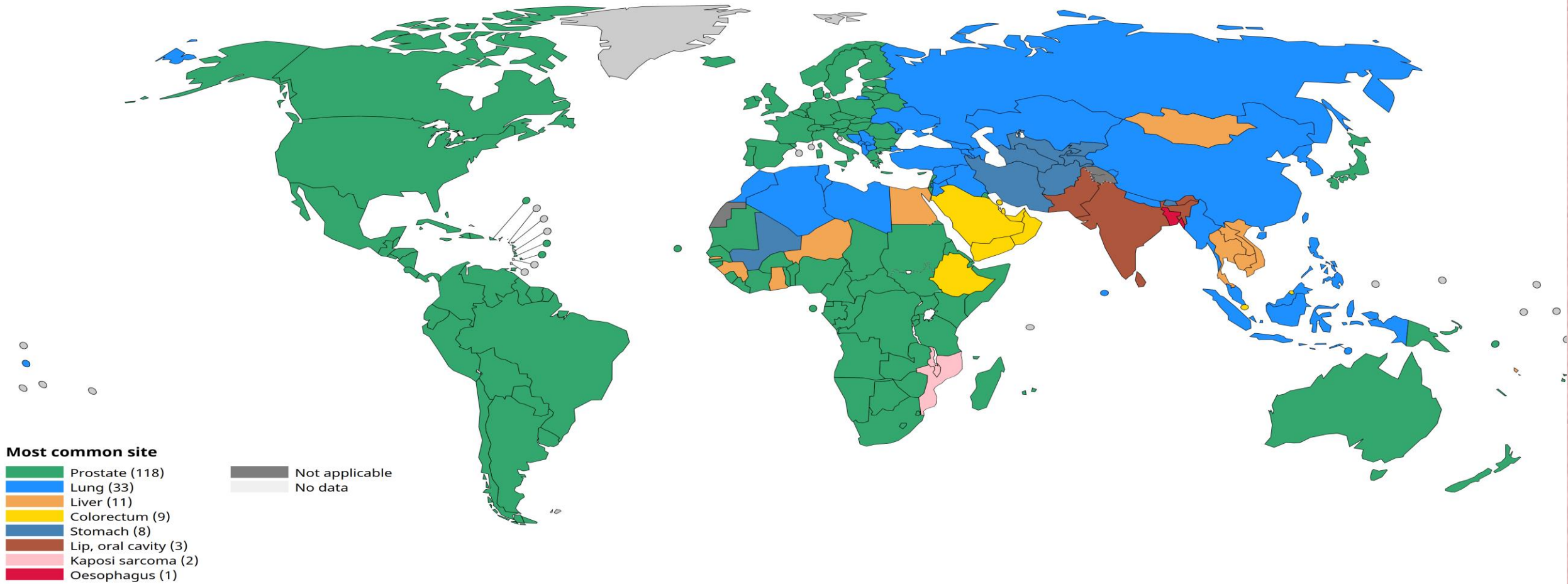


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Cancer TODAY | IARC
<https://gco.iarc.who.int/today>
 Data version: Globocan 2022 (version 1.1) - 08.02.2024
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Most common cancer sites in males in the world 2022

Most common site per country, Absolute numbers, Incidence, Males, in 2022 (excl. NMSC)

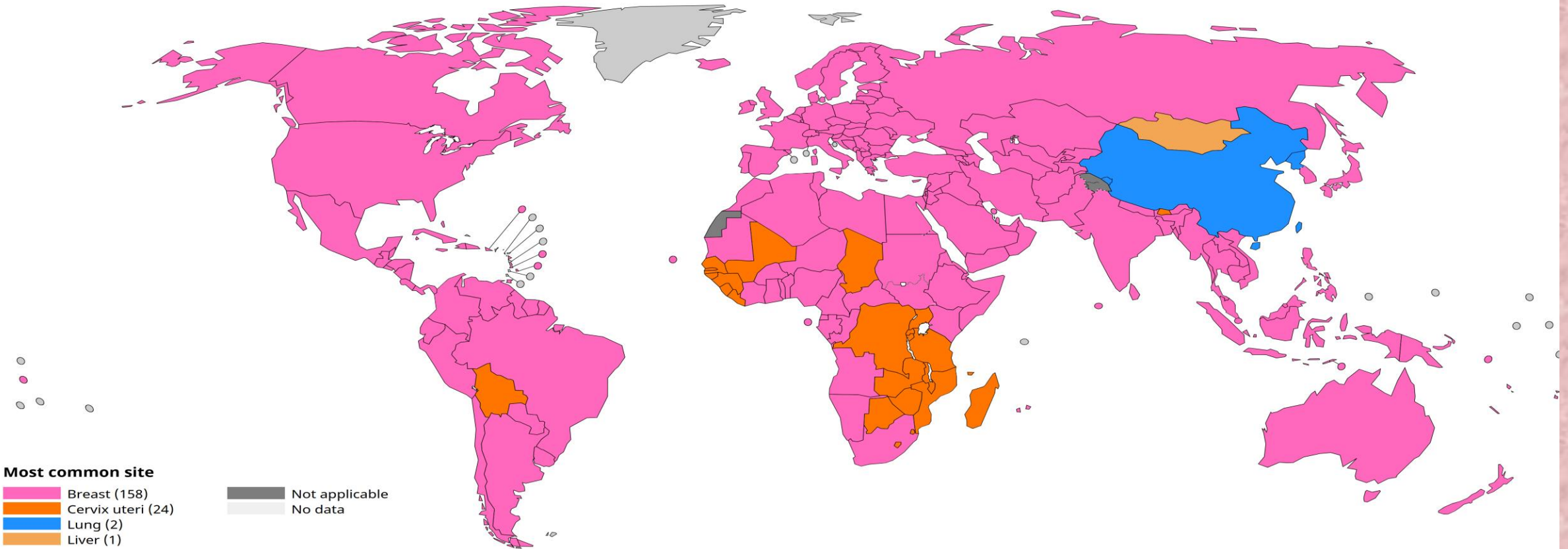


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Most common cancer sites in females in the world 2022

Most common site per country, Absolute numbers, Incidence, Females, in 2022 (excl. NMSC)



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Cancer TODAY | IARC ⁹
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Cancer Today Sri Lanka- 2021

37753 new cases during the year

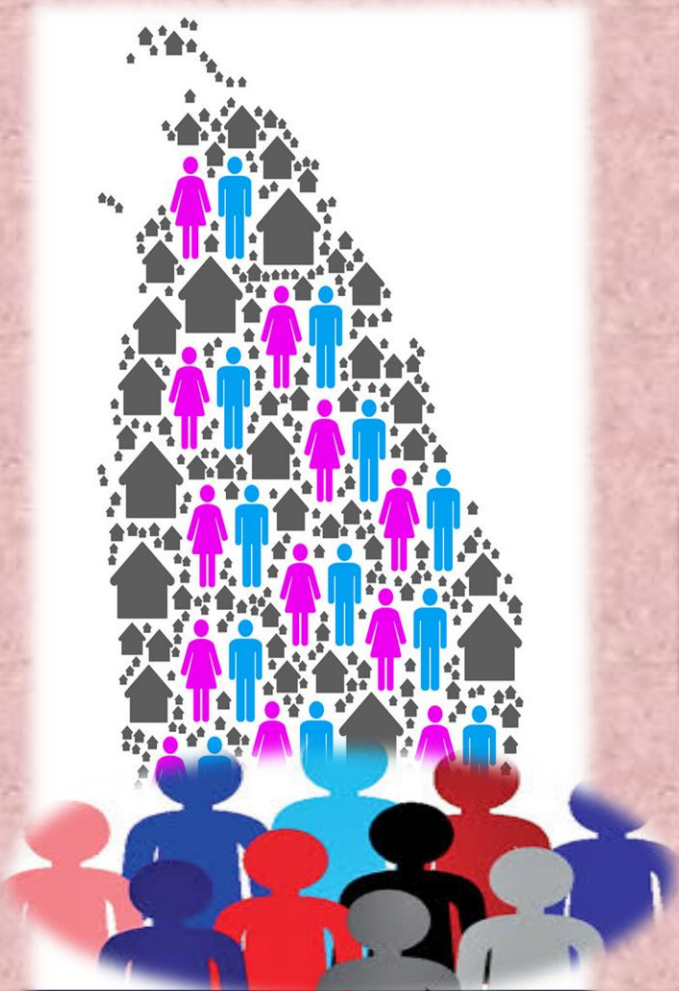
103 new patients per day

4 new patients per hour

15599 deaths (DCS- 2019),
19145 in 2022 (Globocan)

43 Deaths per day

2 Deaths per hour



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Cancer incidence in Sri Lanka (2005-2021)

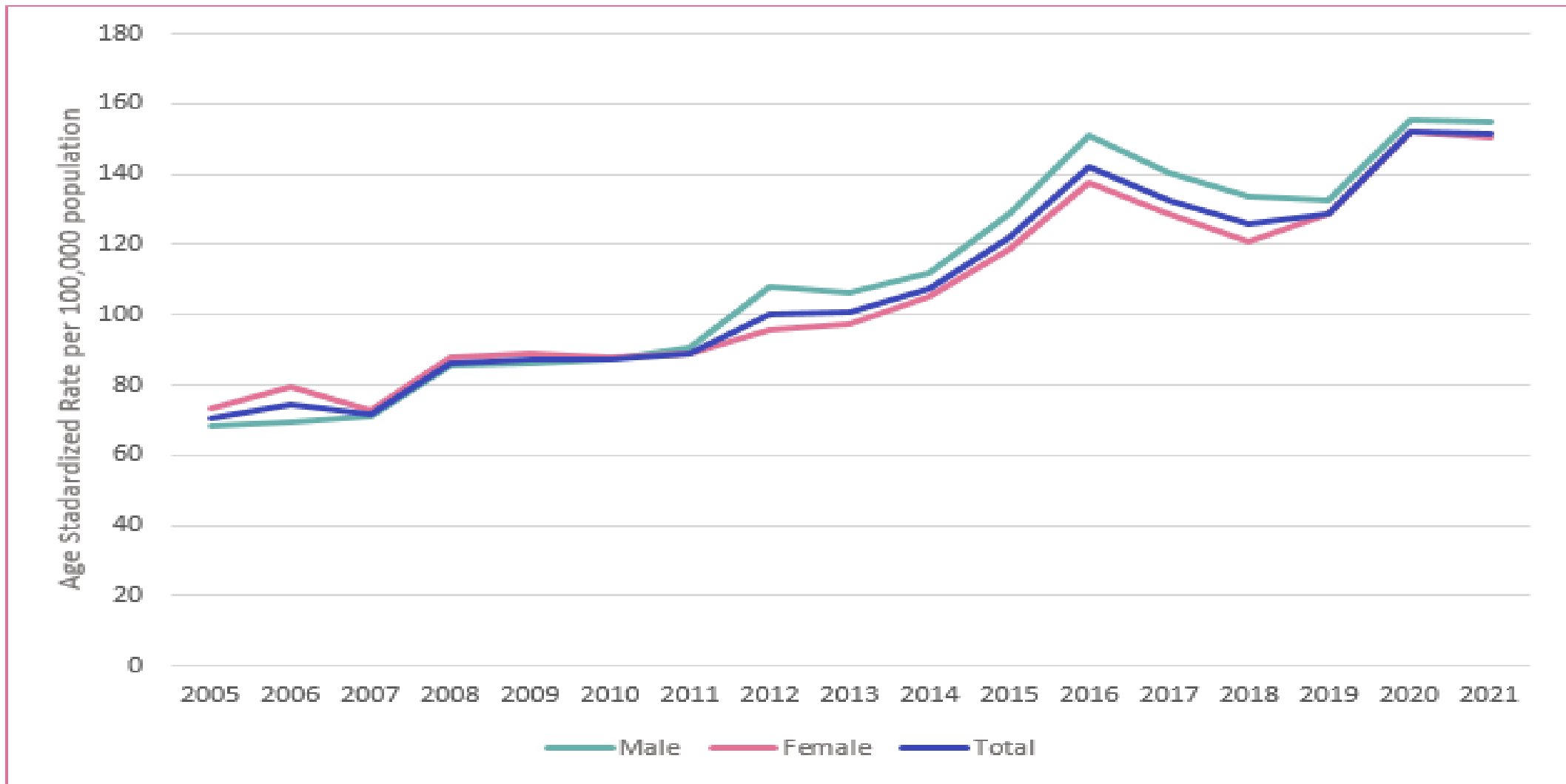


Figure 4: Age Standardized Cancer Incidence Rates of Sri Lanka, 2005-2021

Leading cancers in males in Sri Lanka

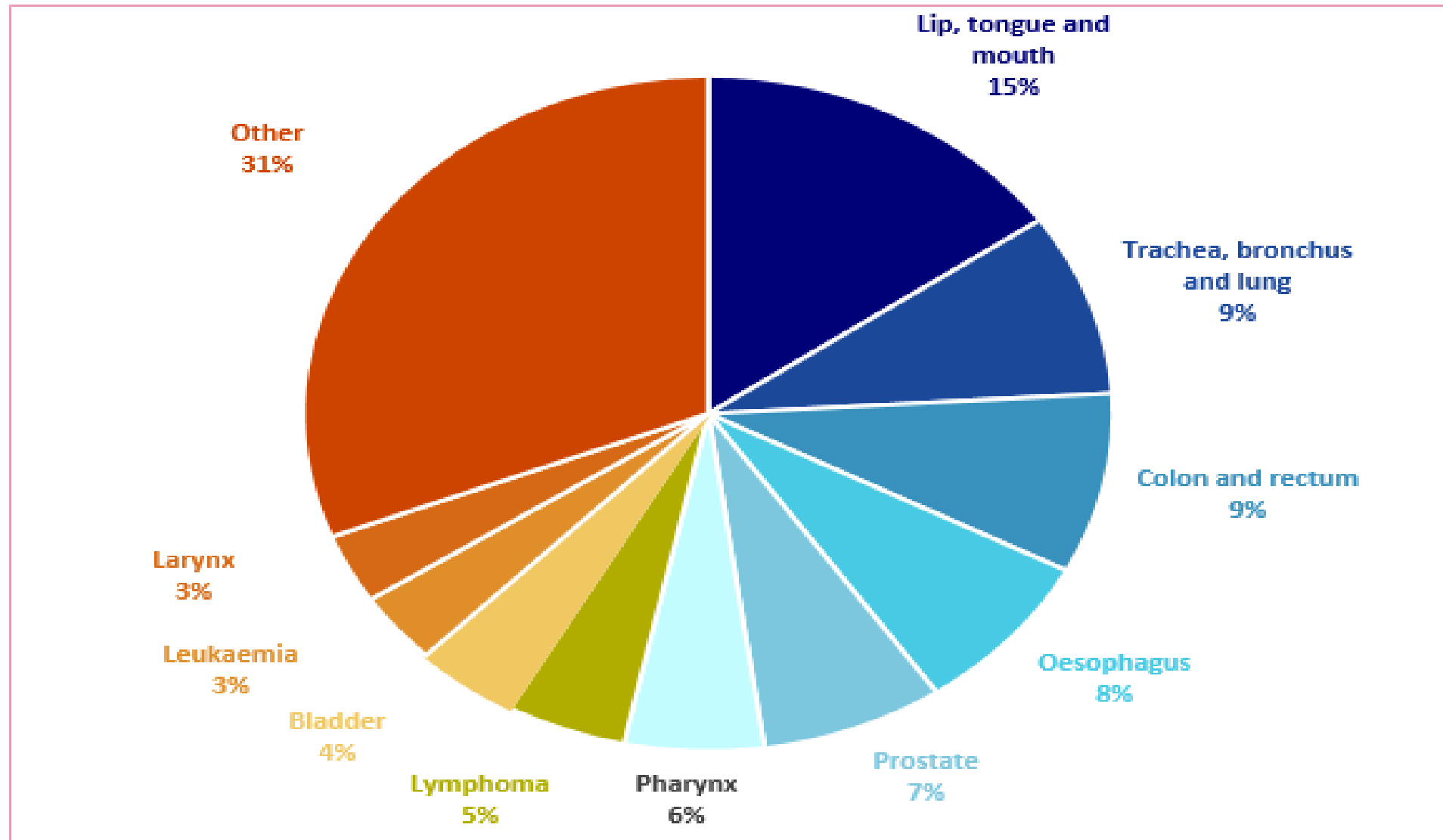


Figure 7: Proportion of leading cancers in males in Sri Lanka, 2021

Leading cancers in females in Sri Lanka

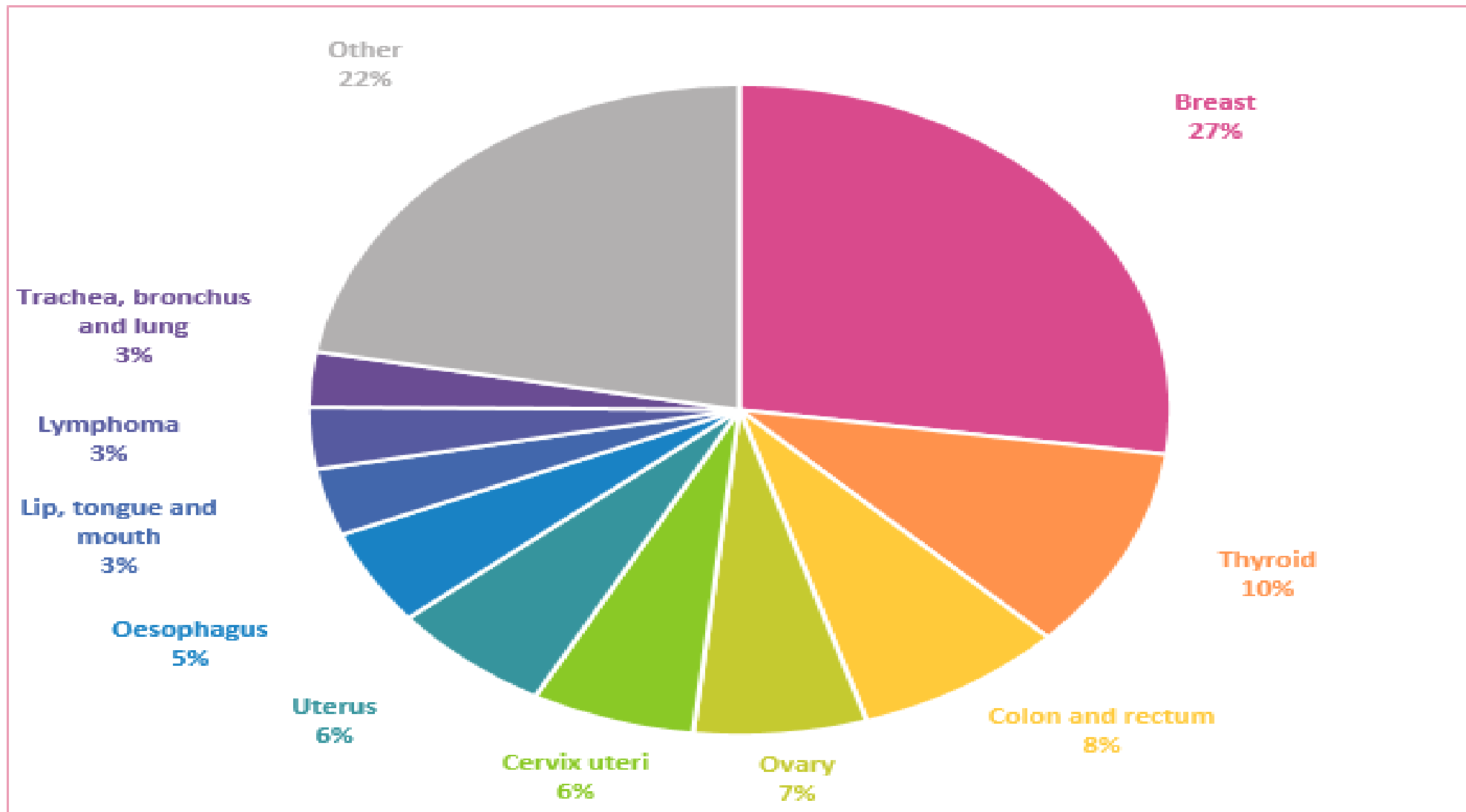


Figure 8: Proportion of leading cancers in females in Sri Lanka, 2021

Leading cancer sites 2021

Male					Female				
ICD code	Site	No	CR	ASR	ICD code	Site	No	CR	ASR
C00-C06	Lip, tongue, and mouth	2687	25.0	23.1	C50	Breast	5485	48.0	40.5
C33-C34	Trachea, bronchus, and lung	1540	14.4	13.7	C73	Thyroid	2043	17.9	15.9
C18-C20	Colon and rectum	1522	14.2	13.3	C18-C20	Colon and rectum	1596	14.0	11.6
C15	Oesophagus	1364	12.7	11.9	C56	Ovary	1308	11.4	9.9
C61	Prostate	1286	12.0	11.6	C53	Cervix uteri	1238	10.8	9.1
C09-C14	Pharynx	980	9.1	8.5	C54-C55	Uterus	1228	10.7	9.0
C81-C85,96	Lymphoma	842	7.8	7.5	C15	Oesophagus	965	8.4	6.8
C67	Bladder	731	6.8	6.5	C00-C06	Lip, tongue, and mouth	674	5.9	4.8
C91-C95	Leukaemia	602	5.6	5.7	C81-C85, C96	Lymphoma	619	5.4	4.8
C32	Larynx	586	5.5	5.1	C33-C34	Trachea, bronchus and lung	551	4.8	4.0
	All sites	17582	163.9	155.1		All sites	20171	176.5	150.4

Reducing the burden

- ❑ 30-50% of all cancers can be prevented by avoiding risk factors and implementing existing evidence-based prevention strategies
- ❑ The cancer burden can also be reduced through early detection of cancer and appropriate treatment and care of patients who develop cancer
- ❑ Others could have an improved quality of life through evidence-based management and palliative care services



OCTOBER ENDS

BREAST
CANCER
AWARENESS

CONTINUES.....



1 *in* **8**

WOMEN

WILL BE DIAGNOSED WITH

Breast Cancer

IN THEIR LIFETIME



Breast Cancer Today World 2022

- Commonest cancer in the world
- 2.3 million new cases & 666,103 deaths from breast cancer globally
- Leading cause of cancer deaths among women
- Prognosis – Good if diagnosed in early stages

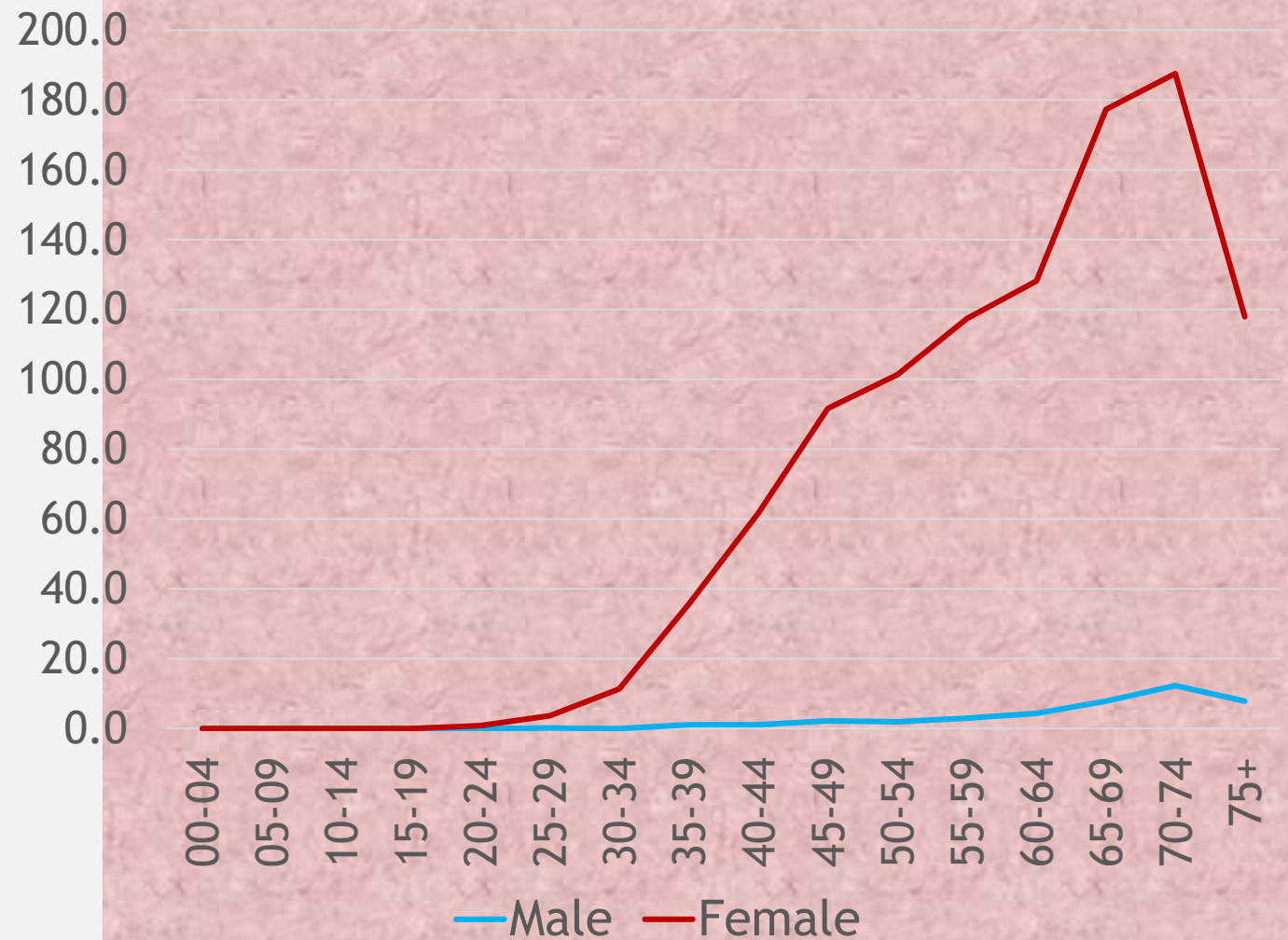
Breast Cancer Today World 2022

- Deaths disproportionately affect low- and middle-income countries
- 5- year survival rate
 - High income countries - > 90%
 - India - 66%
 - South Africa - 40%
- GBCI goal - to reduce breast cancer mortality by 2.5% per year, which over a 20-year period would save 2.5 million lives

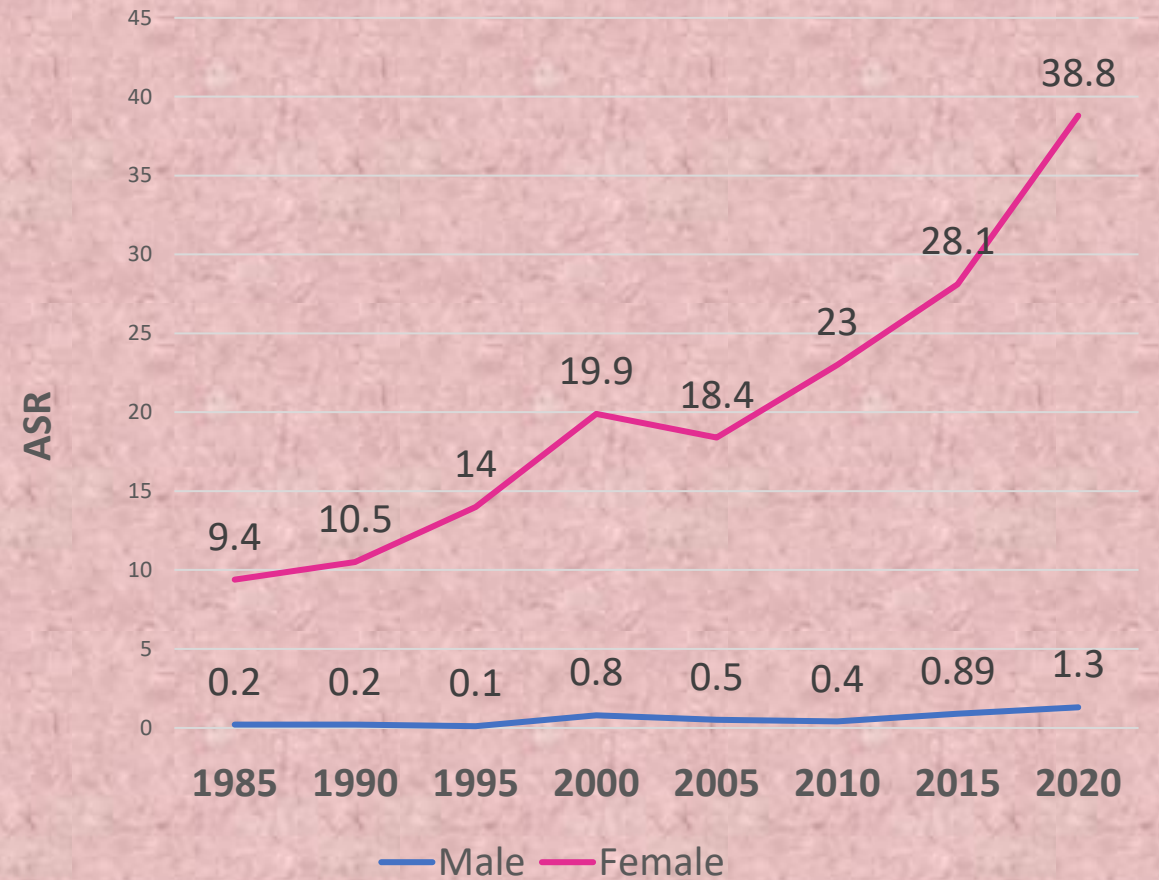
GBCI three pillars towards achieving reduction of breast cancer mortality by 2.5% per year

		KPI
Pillar 1	Health promotion for early detection (pre-diagnostic interval)	KPI: >60% of invasive cancers are stage I or II at diagnosis
Pillar 2	Timely breast diagnostics (diagnostic interval)	KPI: diagnostic evaluation, imaging, tissue sampling and pathology within 60 days
Pillar 3	Comprehensive breast-cancer management (treatment interval)	KPI: >80% undergo multimodality treatment without abandonment

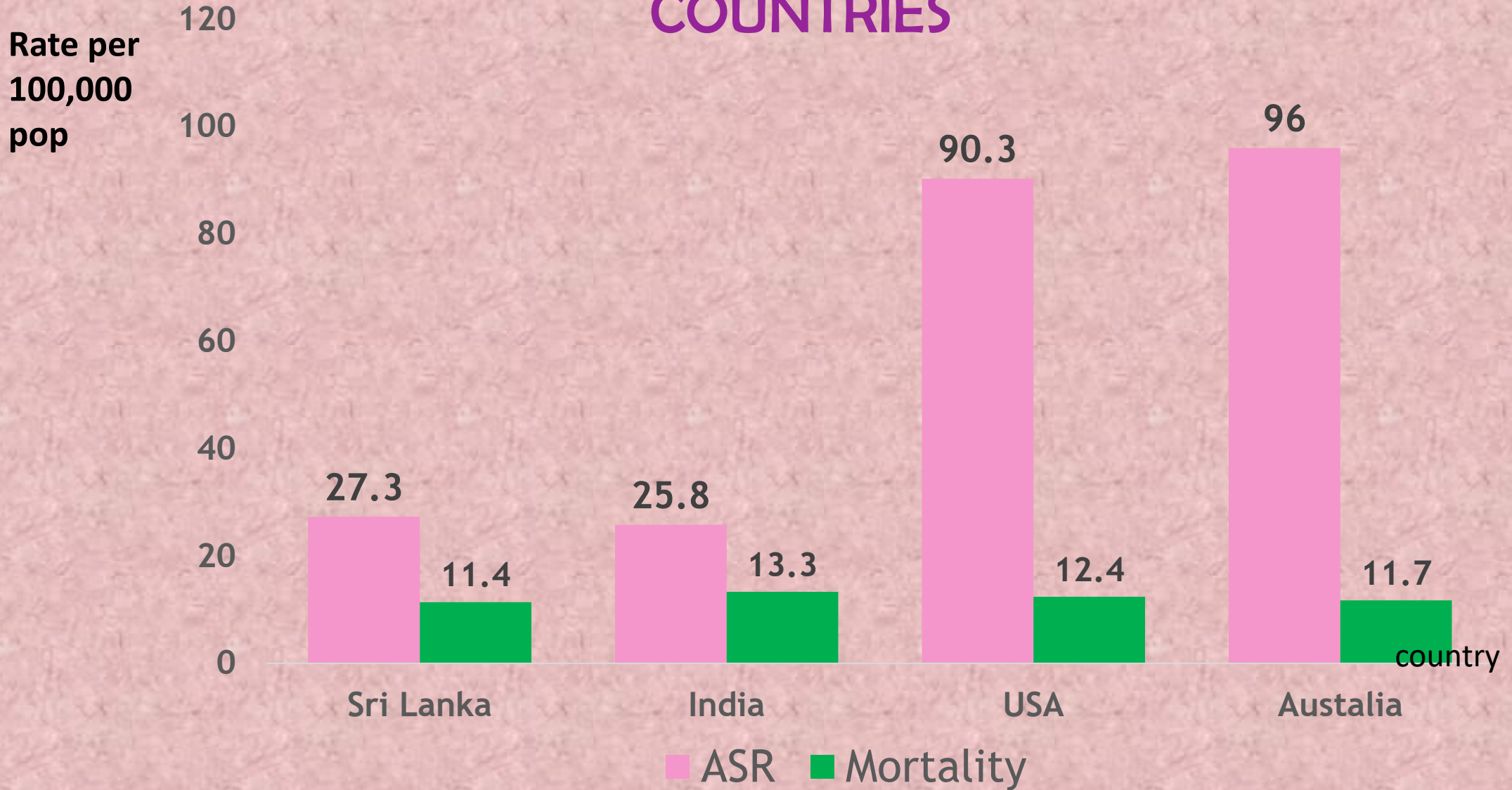
Age specific incidence of breast cancer



Breast cancer trend in Sri Lanka (1985-2020)

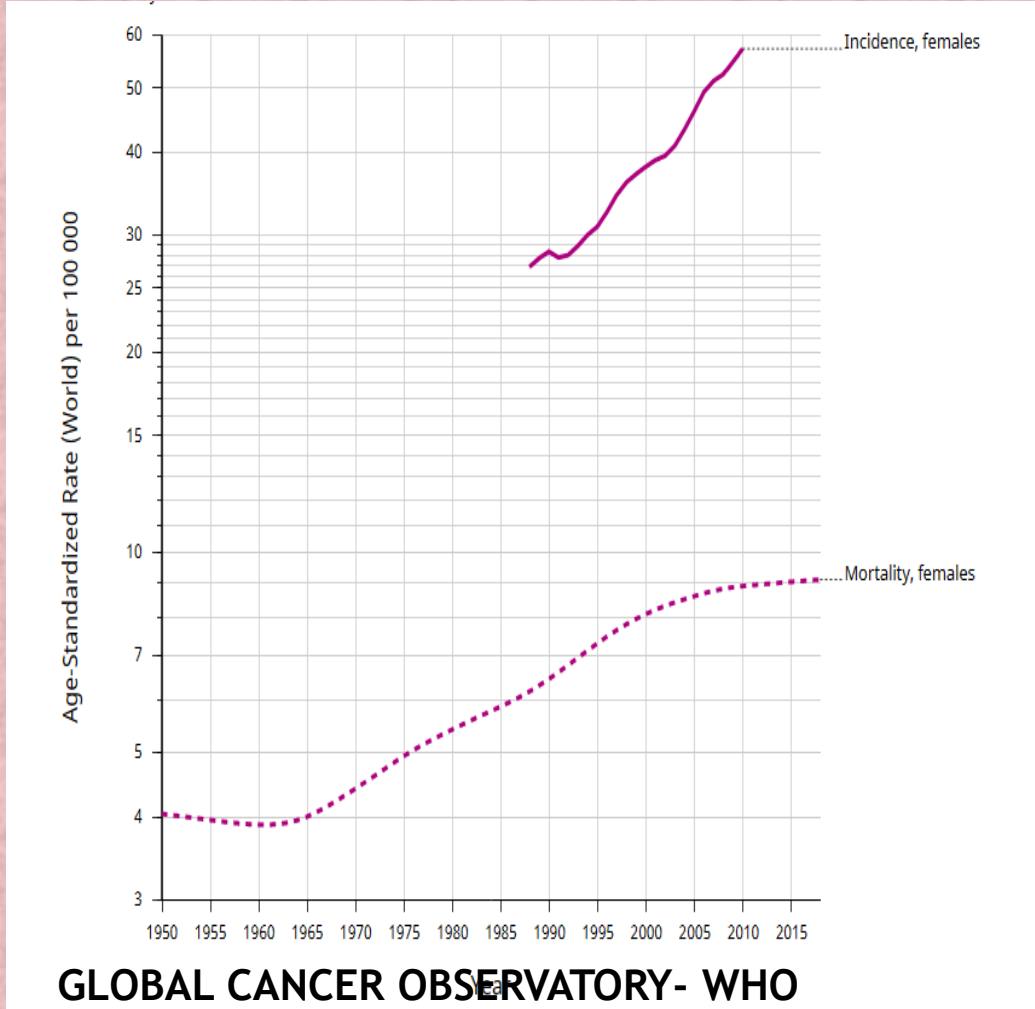


BREAST CANCER INCIDENCE AND MORTALITY IN DIFFERENT COUNTRIES

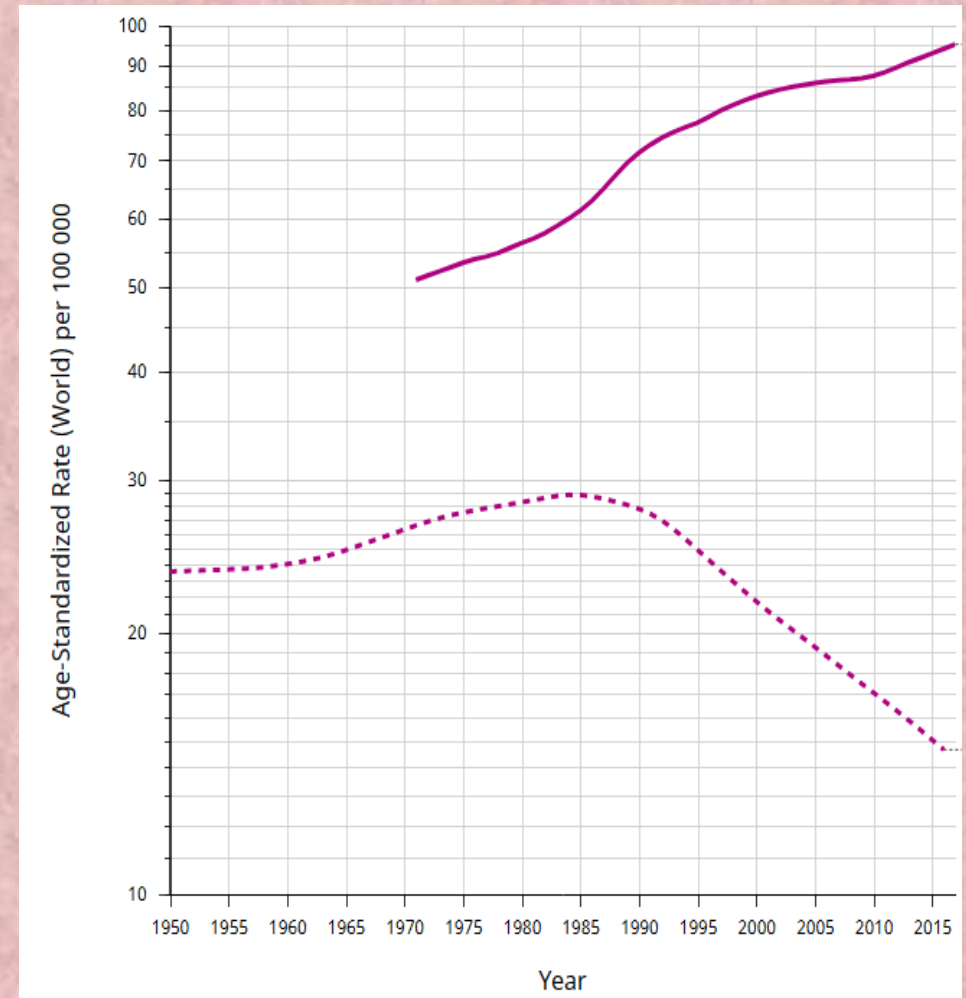


Incidence and mortality trends

JAPAN



UK



15

**Breast cancers per
day**

**More than one in
every 2 hours
time**



5485

NEW BREAST CANCER PATIENTS

CANCER REGISTRY 2021



National Cancer Control Programme

MALE BREAST CANCER

124

MALE BREAST CANCER PATIENTS
IN 2021



Risk Factors

Factors that increase the chance of getting cancer

- Non-modifiable risk factors
- Modifiable risk factors



Non-modifiable risk factors of breast cancer



- ▶ Increasing age
- ▶ Female sex
- ▶ Genetic factors
- ▶ Family history of breast cancer
- ▶ Personal history of breast cancer
- ▶ Lifetime exposure to estrogen and progesterone hormones
 - Early menarche (<11yrs)
 - Late menopause (>55 years)
- ▶ Never having children



Risk factors

Aging



- ▶ Over 80% of all cancer occur among women aged 50+ years
- ▶ The chance of getting breast cancer increases with the age

Risk factors
Being a female



Females have a 100 times higher risk than males



Risk factors
**Genetic
Factors**

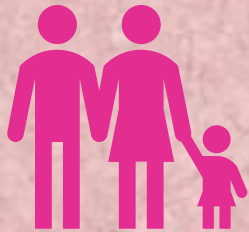


- ▶ Contribute to 5%-10% of all breast cancers
- ▶ Most common mutations
 - ▶ BRCA 1
 - ▶ BRCA 2



Risk factors

Family history



- ▶ Maternal side and paternal side have equal risk
- ▶ Breast cancer of 1st and 2nd degree relatives has higher risk
 - ▶ Having a first degree relative has two-fold risk
 - ▶ Having two first degree relatives has three-fold risk
- ▶ 85% of women with breast cancer **do not** have family history

Risk factors

Early menarche & late menopause



- ▶ Women who had more menstrual cycles have a higher risk of breast cancer
- ▶ May be due to prolonged exposure to estrogen and progesterone

Risk factors

Parity



▶ Women who do not have children

or

▶ Who have first child after the age of 30 years has higher risk

Modifiable risk factors

- ▶ Overweight and obesity
- ▶ Inadequate physical activity
- ▶ Unhealthy diet
- ▶ Tobacco and alcohol
- ▶ Hormone replacement therapy

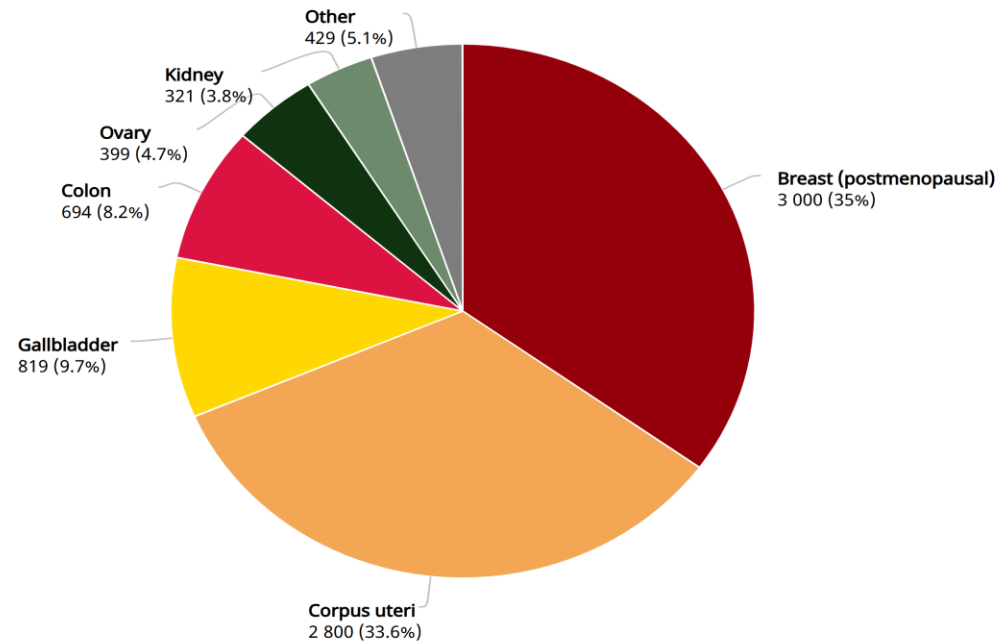
Being overweight and obese increases the risk

Risk factors

Overweight & Obesity



Cancer cases (at all anatomical sites) among females in South-East Asia in 2012 attributable to excess body mass index, shown by anatomical site as percentages of the total number of all such attributable cases at all anatomical sites in this population



Risk factors

Inadequate physical activity



▶ Inadequate physical activity increases the risk of breast cancer

- Brisk walking for 30 min per day 5day per day week reduces breast cancer risk by 18%

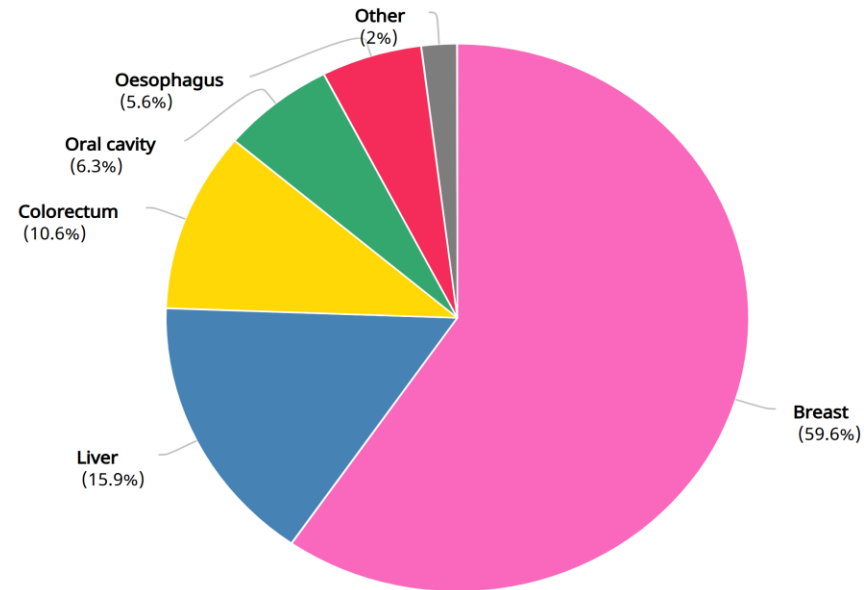


Risk factors Smoking and Alcohol consumption



- Smoking and alcohol consumption increase the risk of breast cancer
- Second-hand smoking is also a risk factor

Estimated number of new cancer cases in 2020 attributable to alcohol drinking, South-Eastern Asia, females



Total number of attributable cases: 4 700

Risk factors

Hormone replacement therapy



OCP & HRT with estrogen
increases the risk of
breast cancer.

Protective factor
Breastfeeding

- ▶ Reduces the risk of breast cancer
- ▶ Should be continued at least for one year



Stages of Breast Cancer



0

Abnormal cells in duct lining or sections of the breast. Increased risk of developing cancer in one or both breasts.

100%

SURVIVAL RATE



1

Cancer in breast tissue. Tumor is less than one inch across in size.

98%

SURVIVAL RATE

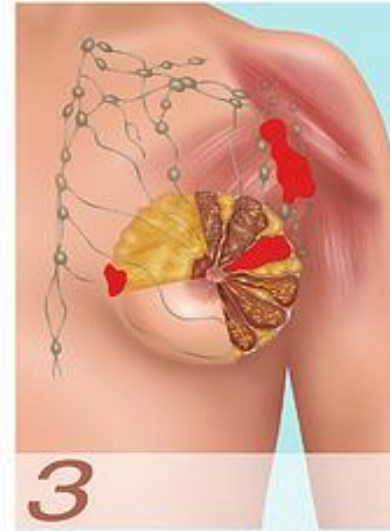


2

Cancer in breast tissue. Tumor is less than two inches across in size. Cancer may spread to the auxiliary lymph nodes.

88%

SURVIVAL RATE

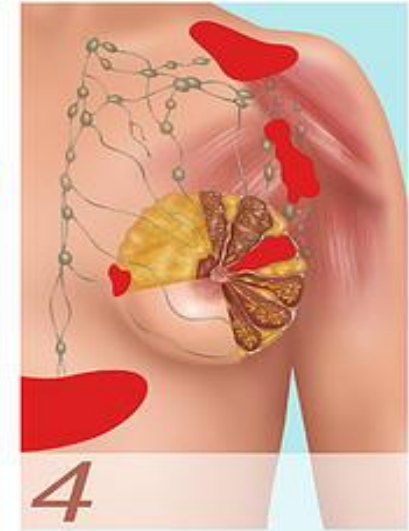


3

Tumor is larger than two inches across in size and cancer has spread to auxiliary lymph nodes. Possible dimpling, inflammation or skin color change.

52%

SURVIVAL RATE



4

Cancer has spread beyond the breast to other nearby areas of the body.

16%

SURVIVAL RATE

Early Detection



- Detecting cancer at an early stage
- Two strategies

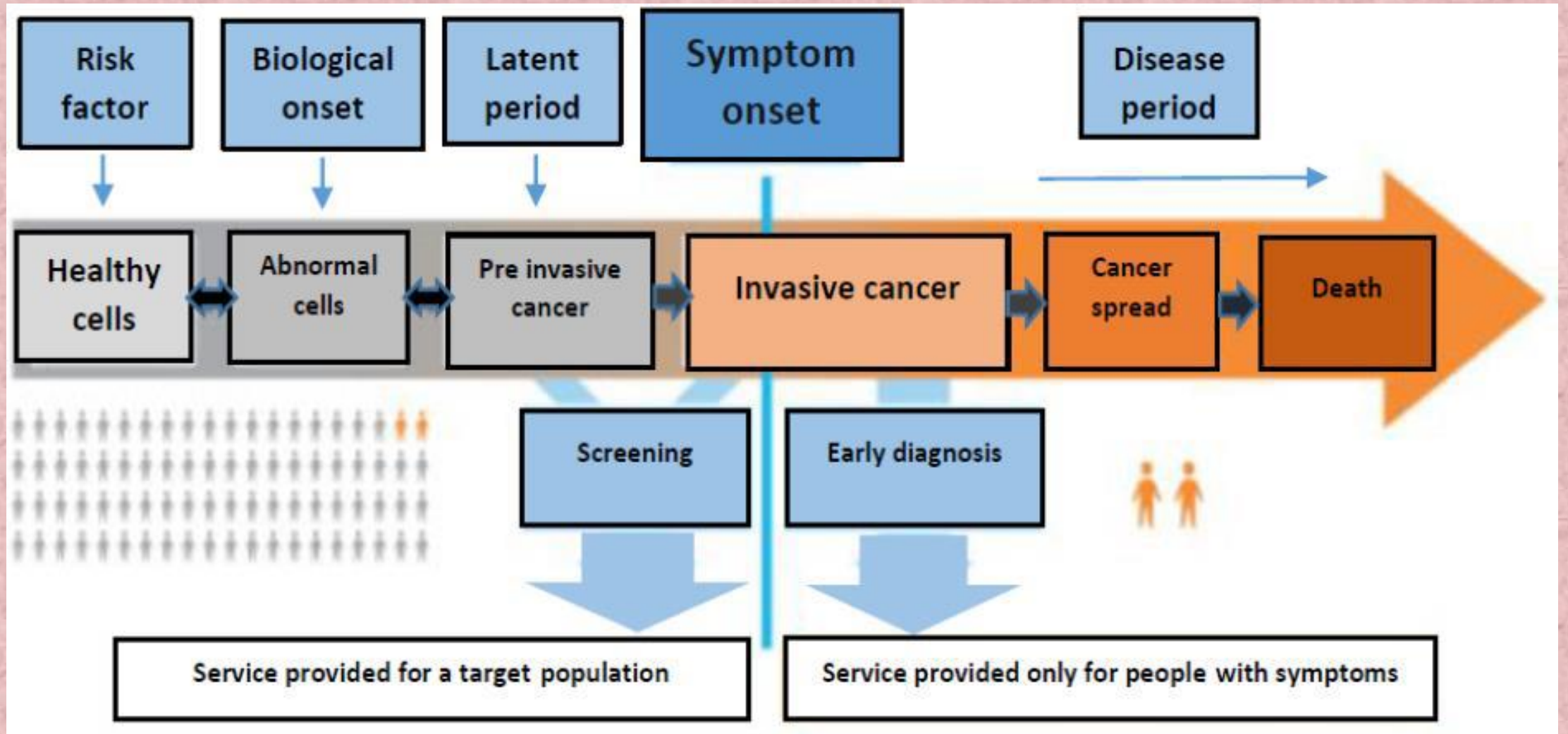
1. Screening

Detect a specific pre-cancer/ cancer before illness/ symptoms develop

2. Early diagnosis

Diagnosing cancer soon after symptoms develop when the chance of a cure is more likely

Distinguish screening from early diagnosis according to symptom onset



Early Detection of Breast cancer



Self Breast Examination
▶ **Done by the individual**

“ඔබ විසින්

ඔබ වෙනුවෙන්”

ඔබගේ පියයුරෙහි වෙනස්වීම් කලින්ම හඳුනා ගැනීමට
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ජාතික පිළිකා මර්දන වැඩසටහනේ පණිවිඩයකි
0112368627



Early Detection of Breast Cancer



Clinical Breast Examination

- ▶ Done by a trained healthcare provider
- ▶ Frequency
 - Age 20 to 40 : every 3 years
 - After 40 years: Annually

FNAC/Biopsy

USS/Mammography

46



Early Detection of Breast Cancer- Specialized services

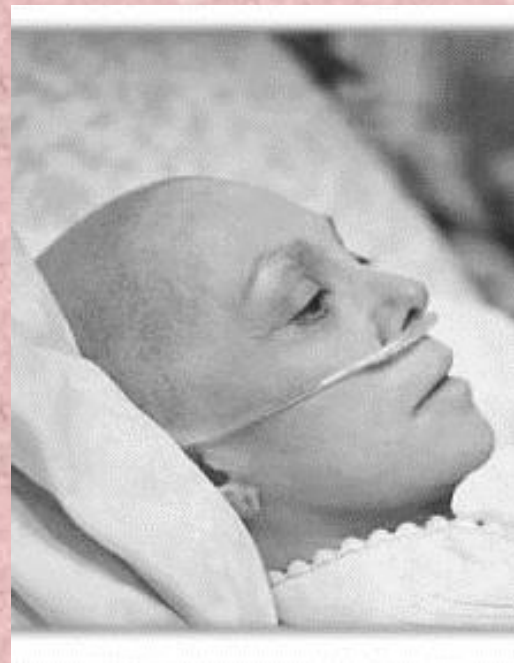


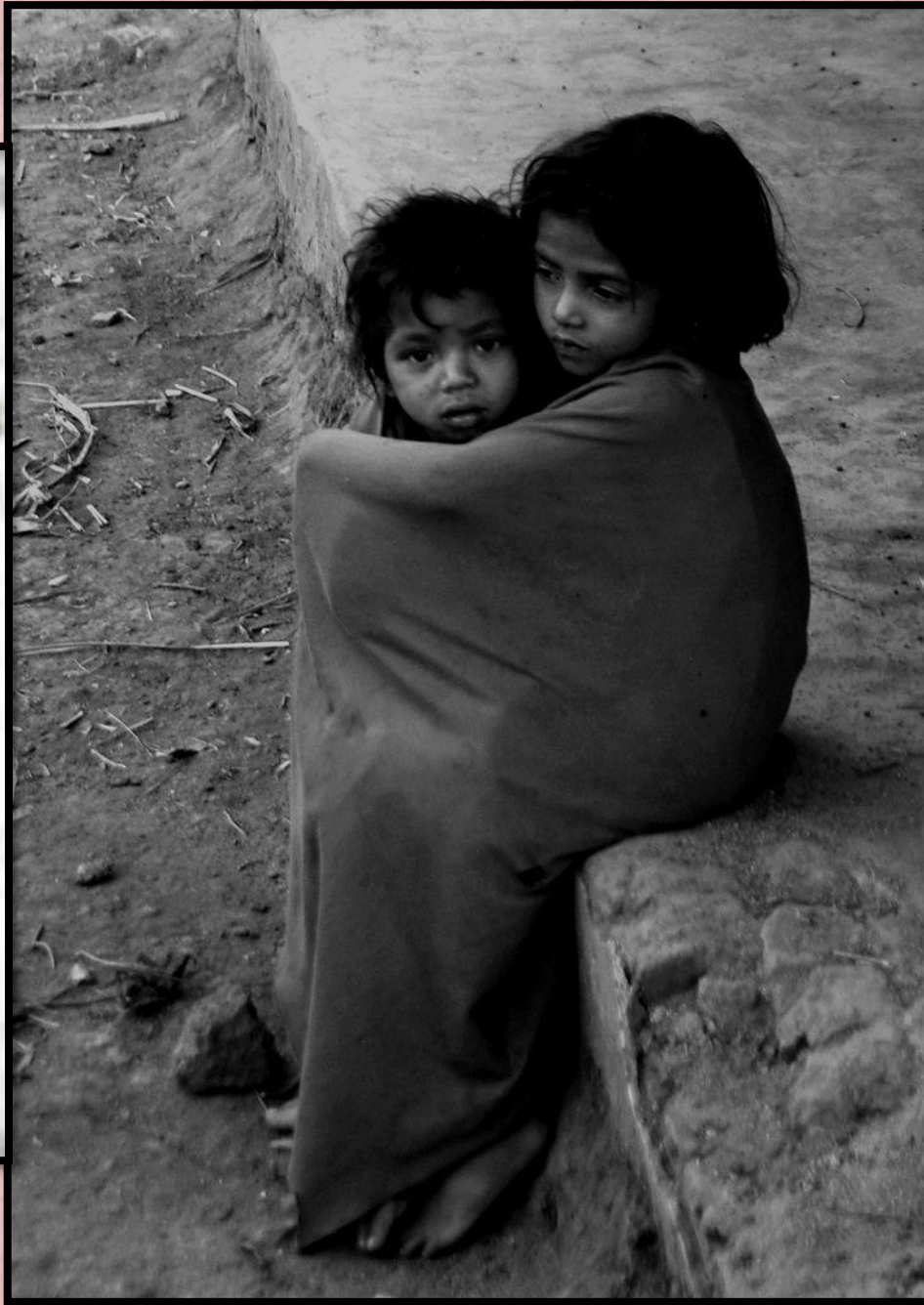
- Well Women Clinics
- Healthy Lifestyle Centres
- Breast clinics
- CEDC
- Surgical clinics





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Hope for a better
future



Thank you