

Women and Cancer: Key challenges and why gender matters



Photo: Carolyn Taylor

I have no relevant financial relationships to disclose.

Objectives

- Debunking a few myths and misconceptions about cancer in women
- Brief overview of The Lancet Commission on Women and Cancer
- A few provocative questions for your consideration..

Myth #1

Women are just like men ... only different...

The Lancet Commission on Women and Cancer

Breast (108)
Cervix uteri (41)
Lung (28)
Liver (4)
Stomach (3)
Oesophagus (1)

Not applicable
No data



REVIEW

Gender medicine and oncology: report and consensus of an ESMO workshop

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[https://www.annalsofoncology.org/article/S0923-7534\(20\)32564-3/fulltext](https://www.annalsofoncology.org/article/S0923-7534(20)32564-3/fulltext)
<https://www.esmo.org/about-esmo/organisational-structure/esmo-task-forces/esmo-gender-medicine-task-force>
[https://www.annalsofoncology.org/article/S0923-7534\(21\)04826-2/fulltext](https://www.annalsofoncology.org/article/S0923-7534(21)04826-2/fulltext)

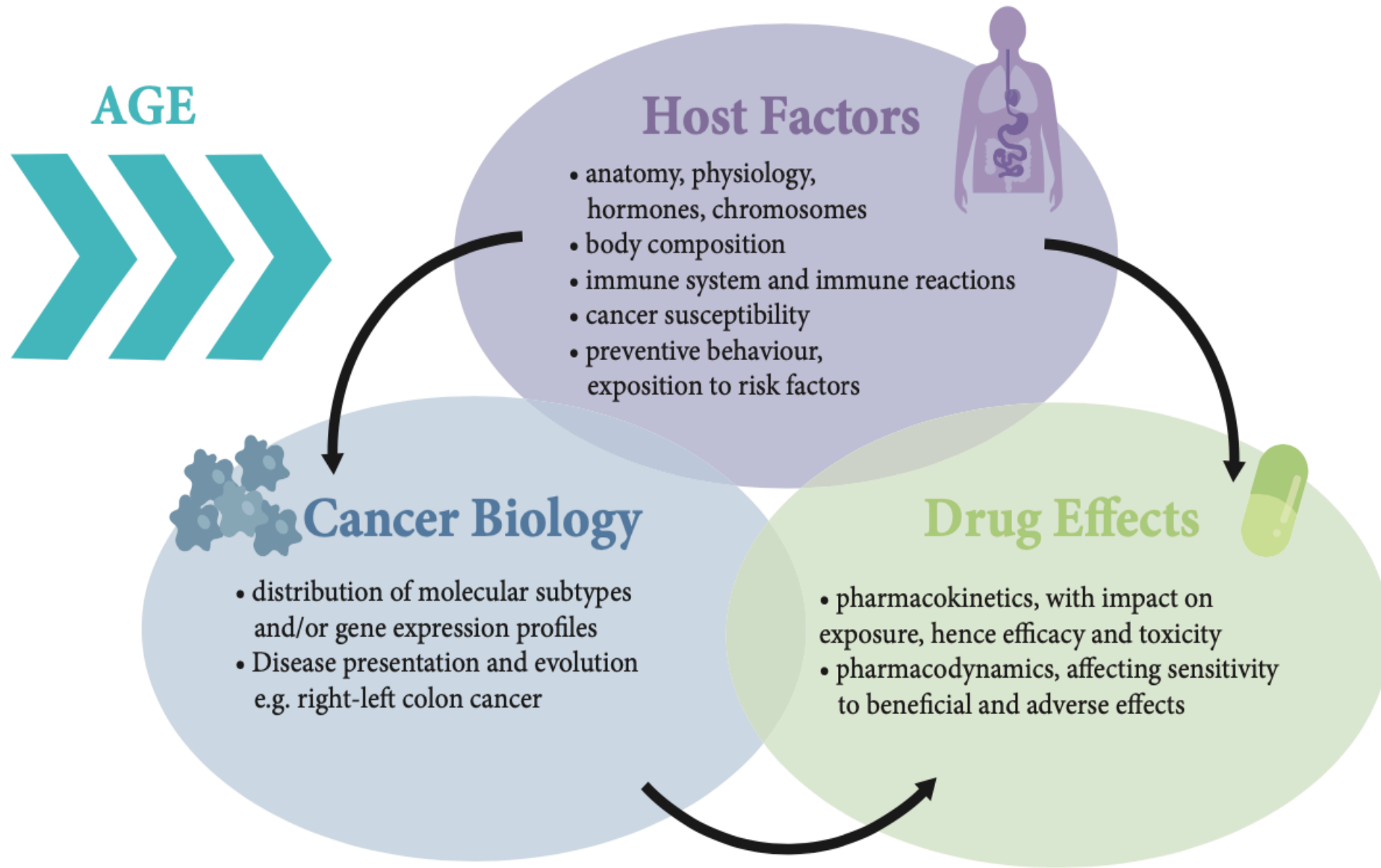


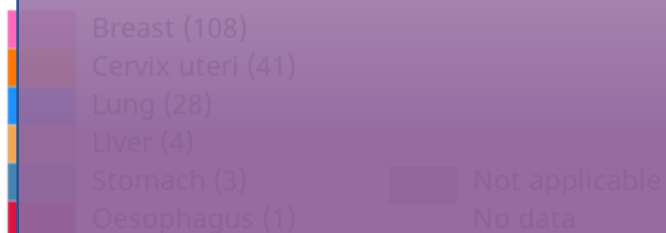
Figure 1. Sex and gender differences may influence cancer treatment outcomes in different ways. All effects are modulated by age.

ESMO

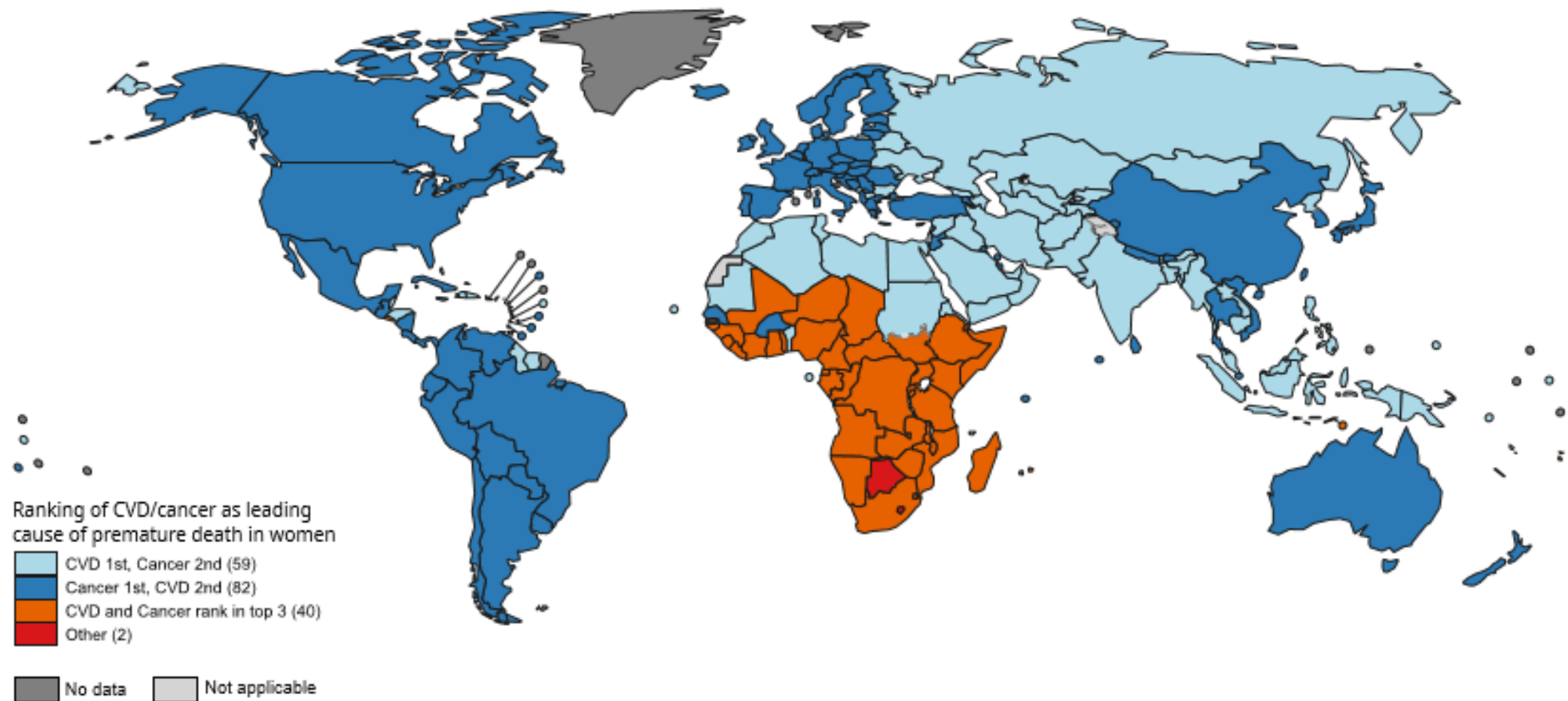
Considering the increasing evidence for sex differences in cancer biology and drug effects, men and women with non-sex-related cancers should no longer be considered as subgroups, but as biologically distinct groups of patients for whom specific treatment approaches merit consideration.

Myth #2

Outside of wealthy countries or “Western” countries, cancer is a relatively rare disease in women.



The Lancet Commission on Women and Cancer

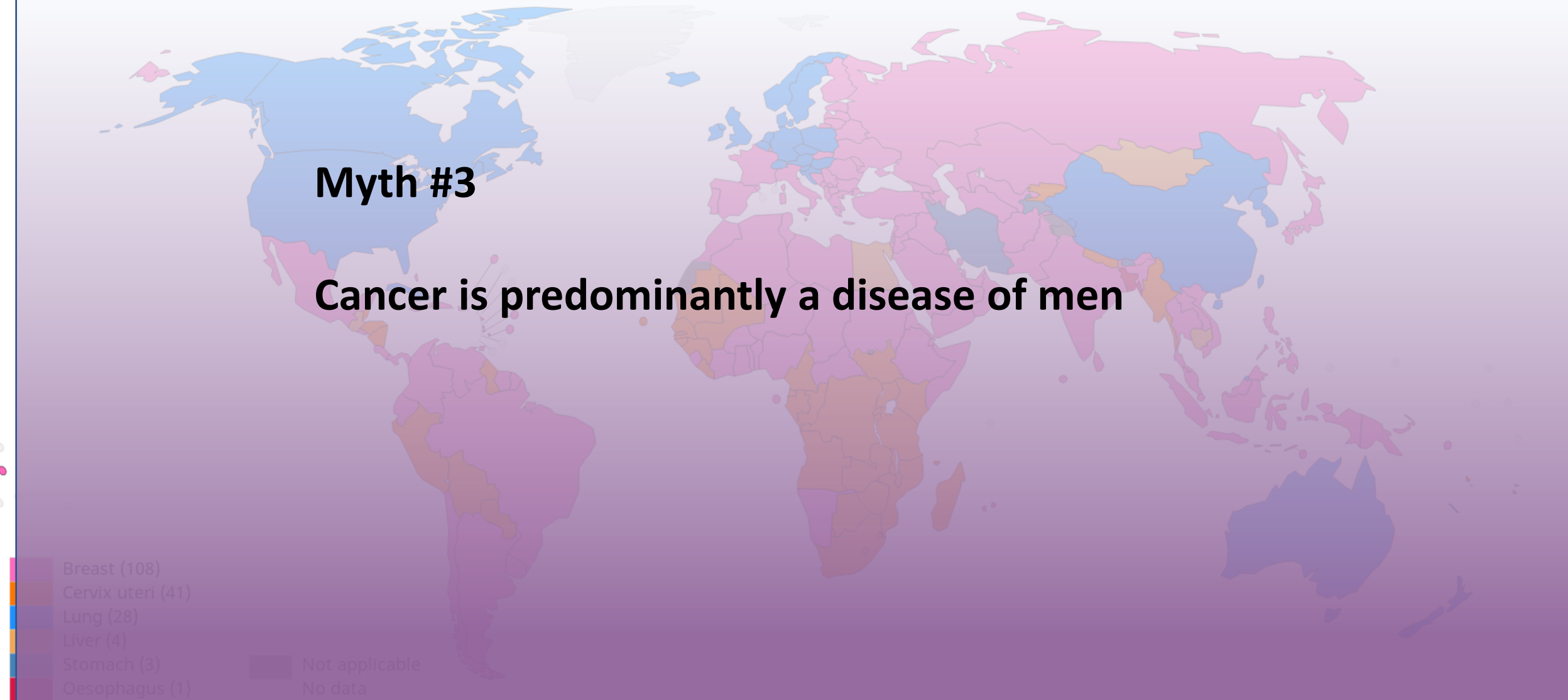


The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

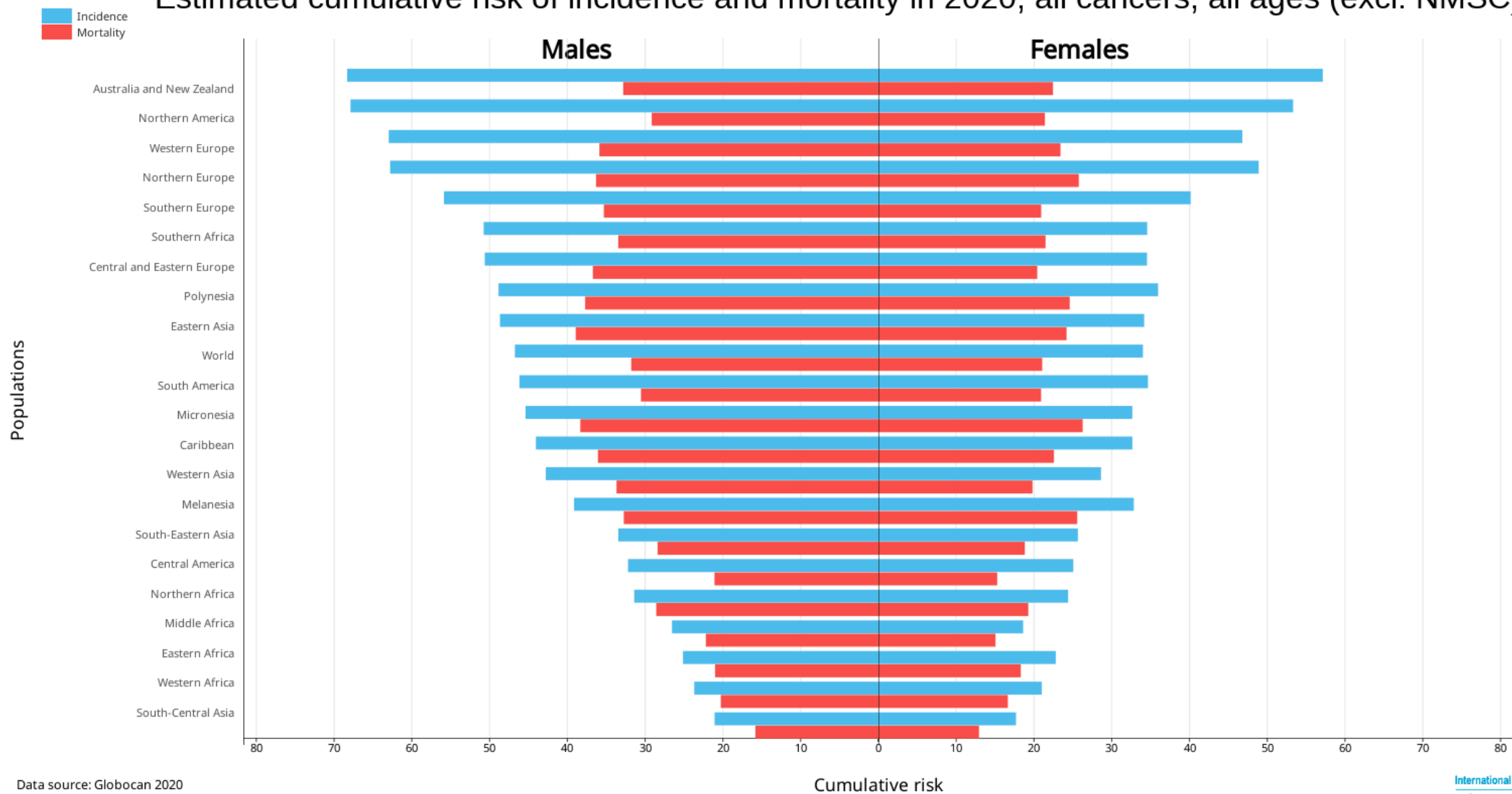
Data source: GHE 2020
Map production: CSU
World Health Organization

 **World Health Organization**
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Top cancer per country, estimated age-standardized mortality rates (World) in 2020, females, all ages



Estimated cumulative risk of incidence and mortality in 2020, all cancers, all ages (excl. NMSC)

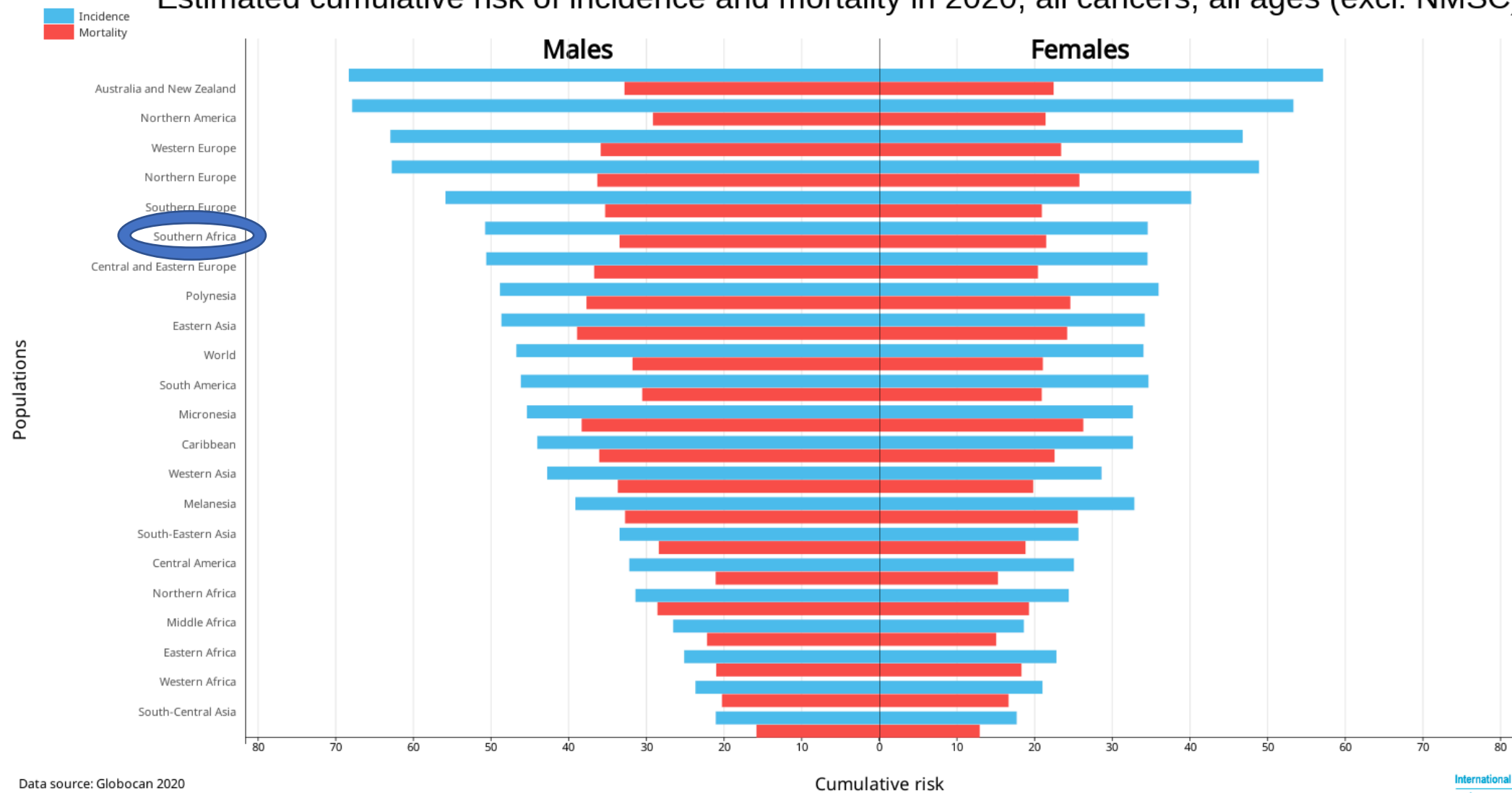


Data source: Globocan 2020
 Graph production: Global Cancer
 Observatory (<http://gco.iarc.fr>)

International Agency for Research on Cancer

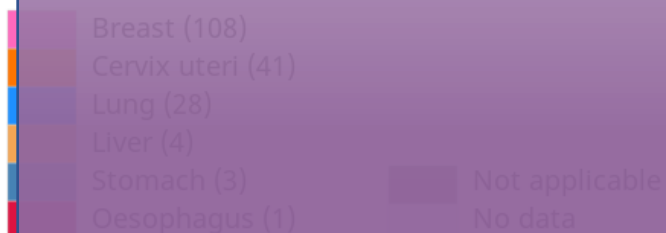


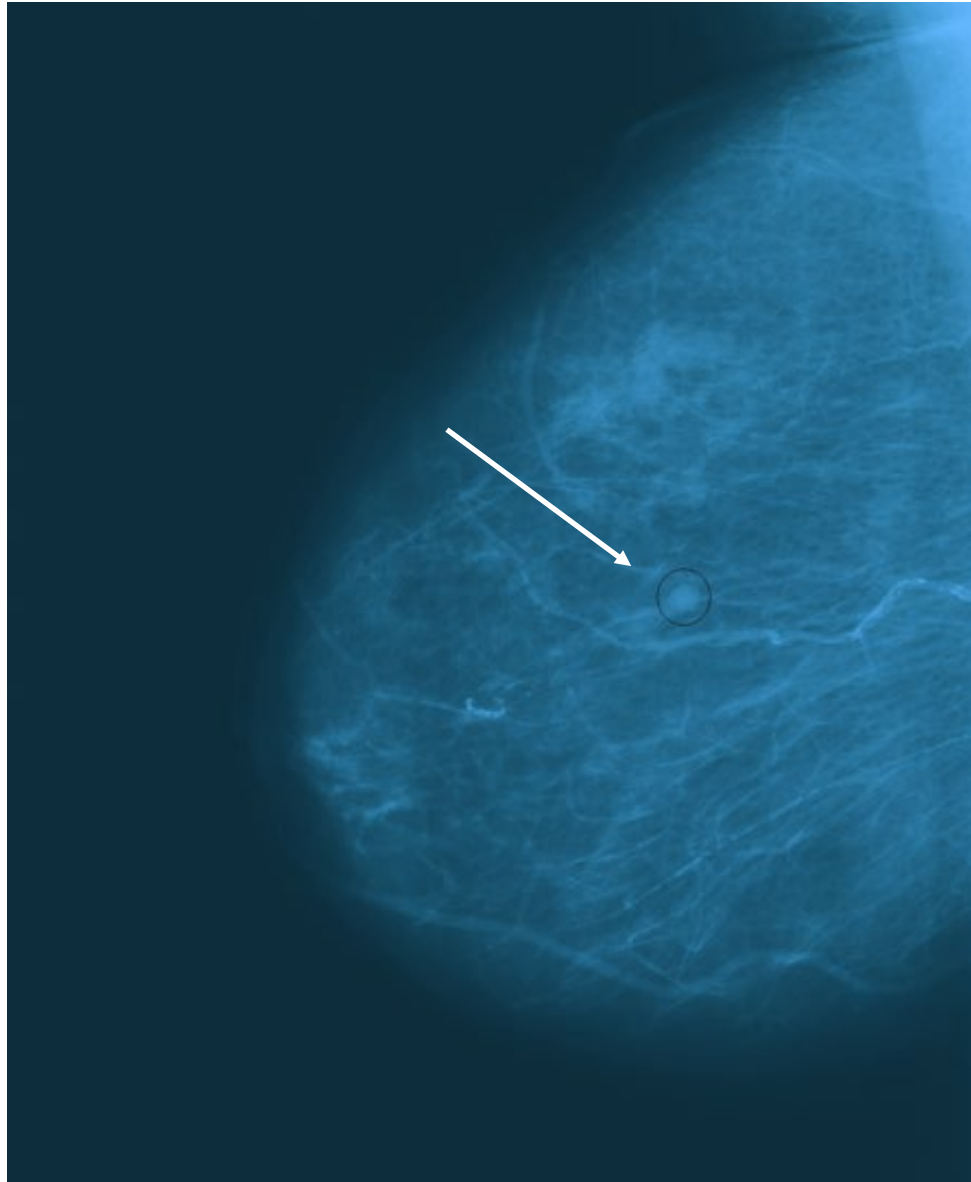
Estimated cumulative risk of incidence and mortality in 2020, all cancers, all ages (excl. NMSC)



Myth #4

Women would surely come earlier for care if they only knew about the importance of early detection.





An equity imperative

Why didn't she present sooner?



Knaul et al, (GTF.CCC) 2011

An equity imperative

You have to understand me to help me...

Dr Verna Venderpuye
Korle Bu Teaching Hospital Accra, Ghana
Co-chair, *The Lancet Commission on Women and Cancer*



Myth #5

When a woman dies of cancer, it is a personal tragedy.





Gender inequalities in cancer among young adults



Will & Deni McIntyre/Science Photo Library

For visualisation tools
examining the burden of
cancer globally for 2020 see
<https://gco.iarc.fr/today>

Assessing the current cancer landscape, a perhaps overlooked finding concerns the unique profile of cancer among young adults. Among individuals aged 20–49 years, over 3 million cancer cases occurred in 2020,¹ a non-trivial proportion equivalent to 19.2 million men and women diagnosed with cancer worldwide. With close to two-thirds of cancers diagnosed occurring in women, here, we highlight the unequal burden of disease between the sexes in this age range. We assessed the underlying reasons, which are diverse in nature and impact, and are associated with geography, socioeconomic conditions, and unbalanced access to health care.²

Irrespective of sex, cancers of the breast, cervix, and thyroid are by far the most commonly diagnosed malignancies in younger adults, affecting exclusively or predominantly women (eg, 77% of cases of thyroid cancer are in women; appendix p 1). Breast cancer

common in economically transitioning countries. The ratio of the incidence of thyroid cancer is approximately 3:1 female-to-male, whereas mortality rates are comparable and low in both sexes, and remaining stable, or are decreasing, over time.⁶ Overdiagnosis (ie, diagnosis of tumours that would not lead to symptoms or death) is the most likely explanation for the vast increase in the incidence of thyroid cancer.⁶ The increased surveillance and scrutiny of the thyroid gland with imaging techniques such as ultrasonography might lead to the detection of tumours of subclinical relevance. Therefore, unlike cervical cancer, an excess of diagnoses of thyroid cancer is more common in individuals with higher, and often unregulated, access to health-care service,⁶ as is the case for women of reproductive age who are referred to private or public clinics for gynaecological reasons. Overdiagnosis of thyroid cancer

See Online for appendix



Gender inequalities in cancer among young adults



Will & Deni McIntyre/Science Photo Library

For visualisation tools
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See Online for appendix

In 2020, two-thirds of the 3 million adults diagnosed with cancer <age 50 were women

Assessing the current cancer landscape, a perhaps overlooked finding concerns the unique profile of cancer among young adults. Among individuals aged 20–49 years, over 3 million cancers were diagnosed in 2020, a non-trivial proportion equivalent to 19.2 million men and women diagnosed with cancer worldwide. Of these, two-thirds of cancers diagnosed occurring in women, here, we highlight the unequal burden of disease between the sexes in this age range. We assessed the underlying reasons, which are diverse in nature and impact, and are associated with geography, socioeconomic conditions, and unbalanced access to health care.²

Irrespective of sex, cancers of the breast, cervix, and thyroid are by far the most commonly diagnosed malignancies in younger adults, affecting exclusively or predominantly women (eg, 77% of cases of thyroid cancer are in women; appendix p 1). Breast cancer is common in economically transitioning countries. The ratio of the incidence of thyroid cancer is approximately 3:1 female-to-male, whereas mortality rates are comparable and have remained stable, or are decreasing, over time.⁶ Overdiagnosis (or diagnosis of cancers that would not lead to symptoms or death) is the most likely explanation for the vast increase in the incidence of thyroid cancer.⁶ The increased surveillance and scrutiny of the thyroid gland with imaging techniques such as ultrasonography might lead to the detection of tumours of subclinical relevance. Therefore, unlike cervical cancer, an excess of diagnoses of thyroid cancer is more common in individuals with higher, and often unregulated, access to health-care service,⁶ as is the case for women of reproductive age who are referred to private or public clinics for gynaecological reasons. Overdiagnosis of thyroid cancer



Research

JAMA Oncology | **Brief Report**

Maternally Orphaned Children and Intergenerational Concerns Associated With Breast Cancer Deaths Among Women in Sub-Saharan Africa

Moses Galukande, MD; Joachim Schüz, PhD; Benjamin O. Anderson, MD; Annelle Zietsman, MD; Charles Adisa, MD; Angelica Anele, MD; Groesbeck Parham, MD; Leeya F. Pinder, MD; Songiso Mutumba, MD; Dorothy Lombe, MD; Anna Cabanes, PhD; Milena Foerster, PhD; Isabel dos-Santos-Silva, PhD; Valerie McCormack, PhD

<https://jamanetwork.com/journals/jamaoncology/fullarticle/2774304>



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Cohort study with 1541 women newly diagnosed with breast cancer from Nigeria, Uganda, Namibia, Zambia

Age at diagnosis was 50.4 (14.3) years, and 149 women (10%) were HIV-positive.

3-year survival = 50%

<https://jamanetwork.com/journals/jamaoncology/fullarticle/2774304>



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Of the 795 women who died, 49% were <age 50.

For every woman in the study who died < age 50, 210 children became maternally orphaned...

<https://jamanetwork.com/journals/jamaoncology/fullarticle/2774304>



Global and regional estimates of orphans attributed to maternal cancer mortality in 2020

Received: 3 October 2022

Accepted: 25 October 2022

Published online: 20 November 2022



Check for updates

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> 1 million children maternally orphaned due to cancer in 2020

>50% due to breast (258,000, 25%), cervix (210,000, 20%) and upper-gastrointestinal cancers (136,000, 13%)

most occurred in Asia (48%: India 15%, China 10%, rest of Asia 23%) and Africa (35%)



Health, equity, and women's cancers

Published: November 2, 2016

Executive Summary

Breast and cervical cancers receive far less funding, advocacy, and public and political attention in low-income and middle-income countries (LMICs) than in high-income countries (HICs). Yet women in these settings have higher burdens of these diseases, poorer access to care, present with more advanced stages of disease, and are more likely to die from their disease than women in HICs.

The *Lancet* Series, Health, equity, and women's cancers, explores this neglected global health issue. The papers cover the global burden of breast and cervical cancers and inequities in their incidence, survival, and mortality; interventions that could close the divide between resource-rich countries and LMICs; and the changes to global policy that are needed to deliver safe, equitable, and affordable care for women.



Photo credit: Carolyn Taylor
Global Focus on Cancer


The Lancet Commission on Women & Cancer



Website:

<https://womenandcancercommission.org/>

Ophira Ginsburg MSc MD
Senior Advisor – U.S. NCI Center for Global Health



*The Lancet Commission on
women and cancer will address urgent
questions at the intersection of social
inequality, cancer risk
and outcomes, and the status of
women in society.*

Women interact with cancer in complex ways, as healthy individuals participating in cancer prevention and screening activities, as people experiencing cancer undergoing care, as cancer health professionals, researchers, advocates, policymakers, and as unpaid caregivers looking after the needs of their own family members or friends, often at home.

The Lancet Commission on Women and Cancer Report (under review)

Questions to consider...

- Why have potential sex/gender differences in cancer risk and outcomes not been explored adequately to date?
- What- and who- drives decision-making: what research questions are prioritized and what gets funded?
- How can we ensure that equity is baked into cancer-related policymaking for people of all genders?



I'm no longer accepting the
things I cannot change...
I'm **changing the things**
I cannot accept.

— *Angela Davis*

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Isabelle Soerjomataram (Co-chair)
Verna Vanderpuye (Co-chair)

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