

## The *Lancet* Commission for Breast Cancer is launched

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Breast cancer is an increasing global health, gender, socioeconomic and equity challenge. In 2020, 2.3 million women were diagnosed with breast cancer and there were 685,000 deaths worldwide<sup>1</sup>. Not only is it the highest incident cancer globally but is also the most prevalent, causing more disability-adjusted life years lost than any other malignancy<sup>1</sup>. As such, tackling breast cancer is a formidable task for healthcare systems, policy makers and many other stakeholders. The numbers of people with metastatic breast cancer who go uncounted are poignant. Cancer registries record patients initially presenting with *de novo* metastatic breast cancer, but information on those developing metastases after a diagnosis of early breast cancer is virtually non-existent<sup>2</sup>. In a world focussed on breast cancer cure, these “uncounted” people living with metastatic disease face abandonment and stigma<sup>3</sup>.

With only 0.5-1% of breast cancers occurring in men, this disease disproportionately affects women whose premature disability and deaths have immediate and devastating effects on entire families, especially children<sup>4,5</sup>. There are far-reaching consequences on society and the economy given the pivotal role of the female labour force globally, whether paid or often unpaid, in caregiving and community leadership roles<sup>6</sup>. Given the medical costs, care-giving burden and tragic loss of life, breast cancer is financially damaging to families. Financial toxicity is intersectional and intricately linked to empowerment: women often rely on partners for financial support to access care and can face abandonment at diagnosis or during treatment and rejection by their families due to high out of pocket care costs. This is compounded by cultural barriers including cancer myths, stigma, and fatalism, causing workplace discrimination, community neglect and psychological trauma.

Perhaps the most difficult issue to tackle is inequity. Access to early detection, comprehensive diagnostic work-up, and timely high-quality breast cancer management depend on who you are and where you live<sup>7</sup>. There is a strongly positive and unacceptably steep relationship between 5-year survival rates and country income<sup>8</sup>. Whilst there are stark inequities comparing high, middle and lower income countries, there are also inequities *within* countries with intersectionality between race and poverty<sup>8</sup>. How can it be acceptable for the survival estimates of some black African women to be as low, or lower, than women treated in the USA nearly a century ago<sup>9</sup> Or as a UK study of women with screen-detected breast cancer showed, why is the excess hazard ratio of death more than 50% higher for those with social deprivation after adjusting for individual, tumour, treatment factors, lead-time bias and over-diagnosis?<sup>10</sup>

Against this background, there have been dramatic improvements in breast cancer management over the last 4 decades, resulting in falling mortality rates in mostly higher income countries. Extraordinary advances in genomics are rapidly unravelling the complex breast cancer biology leading to new strategies in personalised cancer management, enabling right sizing extent of surgery, radiation and systemic treatment to optimise oncologic outcomes and minimise collateral damage. Globally, we are at pivotal point whereby either the rapid progress in breast cancer medicine/science is capitalised to ensure equitable access for all *or* the current inequalities between and within countries widen into a chasm.

The *Lancet* Breast Cancer Commission is timely: its over-arching aim is to present a compelling forward-thinking story to influence global policy and ultimately improve lives for those affected by breast cancer wherever they live. The Commission unites a multidisciplinary international team of leaders to present a bold key message, under-pinned with high-quality evidence-based recommendations. Proposals for transformative change will be actionable with key metrics to measure success. The Commission represents high/low/middle-income countries from 6 continents and includes patient advocate commissioners with lived experience of early and metastatic breast cancer to ensure a person-centred approach. Financial support for 1 in-person 2-day meeting in Cambridge, UK and reimbursement for patient advocates has been provided by Breast Cancer Now.

The first commission meeting identified 5 workstreams: closing the global gap in breast cancer survival; optimising prevention and early detection; effective use of personalised breast cancer management; enabling safe de-escalation of treatment; and improving lives for patients with metastatic breast cancer. Paired workstream co-chairs will co-ordinate the commissioners and collaborators in scoping and evidence synthesis to generate material with assistance from early career researchers (See Appendix 1 for list of those involved). Twelve key questions were agreed (see Panel 1) at the second meeting and a workplan developed defining specific tasks to investigate, describe and ultimately make actionable recommendations regarding these themes.

The commission has linked with other key commissions including Cancer and Health Systems and Women and Cancer, WHO's Global Breast Cancer Initiative and ABC Global Alliance<sup>6,11,12,13</sup>. This collaborative and synergistic approach has highlighted that breast cancer is not only a test case for other cancers, but also a model for other chronic diseases within health care systems<sup>11</sup>. Breast cancer illustrates the far-reaching influence of women in society<sup>6</sup>. A collaboration with commissioners from the Palliative Care and Pain Relief commission will also explore the value to patients and society of reducing the avoidable pain and suffering from breast cancer<sup>14</sup>. The final commission publication is planned for Autumn 2023.

In summary, this *Lancet* Breast Cancer Commission will investigate key biomedical topics and explore cross-cutting social, behavioural, economic, and ethical themes. As such, it is hoped that this truly person-centred approach will provide impetus to not only improve breast cancer management but for breast cancer to become an icon for wider positive culture change. This commission has a sense of urgency; the time to act is now!

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BOA is a staff member of WHO at the time of the writing of this manuscript. The authors alone are responsible for the views expressed in this article as they do not necessarily represent the decisions, policies, or views of WHO.

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### Panel 1: Key questions identified by the breast cancer commission

1. How do we change the mindset that it is inevitable and therefore acceptable for 1 in 8 women to develop breast cancer during their lifetime and how do we reverse this increasing trend?

2. What lessons can we learn from the COVID-19 global response and how can we apply these to tackling breast cancer worldwide to move forward together in solidarity?
3. What can we learn from patient/public advocacy movements as a powerful & effective mechanism in other disease/health issues in order to close the global breast cancer gap?
4. What is the impact of stage shift to earlier breast cancer presentation on global survival rates
5. Financial toxicity and health-related suffering: what are the wider consequences of inaction beyond immediate healthcare costs and how can we quantify the value to patients and society of reducing the avoidable pain and suffering of breast cancer?
6. How can we introduce an aspirational goal of systematic risk assessment and precision breast screening and prevention for young women as part of routine broader health care?
7. How can we enable personalised breast cancer management to become universally applicable?
8. How can we transition from traditional siloed care to integrated patient-centred management, ensuring that all breast cancer patients (early and metastatic) have access to multidisciplinary specialised care?
9. How can patient choice in their breast cancer management be empowered through a holistic benefit-risk approach and shared decision making?
10. How do we design innovative clinical trials to test safe reduction in *overall* patient burden of treatment/management?
11. How can we quantify the hidden/forgotten global population with metastatic breast cancer?
12. How can we change the mindset around metastatic breast cancer from a rapidly fatal disease to potentially curable?

**Appendix 1: Lancet Breast Cancer commission commissioners, collaborators, early career researchers and other stakeholders**

**Commissioners**

Jean Abraham, medical oncologist, UK  
 Ben Anderson, breast surgeon, USA (WHO Medical Officer leading Global Breast Cancer Initiative)  
 Fabrice André, medical oncologist, France  
 Carlos Barrios, medical oncologist, Brazil  
 Judith Bliss, statistician and methodologist, UK  
 Judy Boughey, breast surgeon, USA  
 David Cameron, medical oncologist, UK (Chair of Breast International Group: BIG against breast cancer)  
 Fatima Cardoso, medical oncologist, Portugal (President of the ABC Global Alliance)  
 Lisa Carey, medical oncologist, USA  
 Sanjoy Chatterjee, clinical oncologist, India  
 Charlotte Coles, clinical oncologist, UK (Chair of Lancet Breast Cancer Commission)  
 Jack Cuzick, epidemiologist, UK  
 Dorothy Du Plooy, nurse and midwife, South Africa  
 Prue Francis, medical oncologist, Australia  
 Julie Gralow, medical oncologist, USA  
 Reshma Jagsi, radiation oncologist, USA  
 Felicia Knaul, health economist and patient advocate, Mexico (Co-chair of Lancet Healthcare Systems and Cancer Commission)  
 Fei Ma, medical oncologist, China  
 Ritse Mann, radiologist, Netherlands  
 Stuart McIntosh, breast surgeon, UK  
 Shirley Mertz, patient advocate, USA  
 Miriam Mutebi, breast surgeon, Kenya (Linking Commissioner for Lancet Women and Cancer Commission)  
 Funmi Olopade, medical oncologist, USA

Kelly-Anne Phillips, medical oncologist, Australia  
Philip Poortmans, radiation oncologist, Belgium  
Tanja Spanic, patient advocate, Slovenia  
Dingle Spence, palliative medicine physician, Jamaica  
Hilary Stobart, patient advocate, UK  
Fraser Symmans, pathologist, USA  
Cynthia Villarreal-Garza, medical oncologist, Mexico  
Cheng-Har Yip, breast surgeon, Malaysia

#### **Early Career Researchers**

Maya Bienz, UK  
Lynsey Drewett, UK  
Alex Fulton, UK  
Dharnesha Inbah Rajah, USA  
Farasat Kazmi, UK  
Mareike Thompson, UK  
Jeffrey Rubasingham, UK  
Valentina Vargas, USA

#### **Collaborators**

Hector Arreola, economist, Mexico  
Raj Badwe, surgical oncologist, India  
Rajiv Dave, breast surgeon, UK  
Ruth Etzioni, biostatistician, USA  
Indraneel Mittra, surgical oncology, India  
Patricia Moreno, clinical psychologist, USA  
Renu Sara Nargund, research associate, USA  
Cara Noble, patient advocate, South Africa  
Robert Smith, epidemiologist, USA  
Didier Verhoeven, medical oncologist, Belgium  
Jiani Wang, research associate, China

#### **Administrators**

Catherine Durance, UK  
Jane Sales, UK

#### **Editor**

Naomi Lee (The Lancet), UK (Editor for Lancet Breast Cancer Commission)

#### **Funders**

Simon Vincent, Breast Cancer Now, UK  
Bunia Gorelick, Breast Cancer Now, UK

#### **Other stakeholders**

Nicola Keat, National Cancer Research Institute, UK  
Iain Frame, National Cancer Research Institute, UK