



Reducing the global cancer burden: *failure is success in progress*

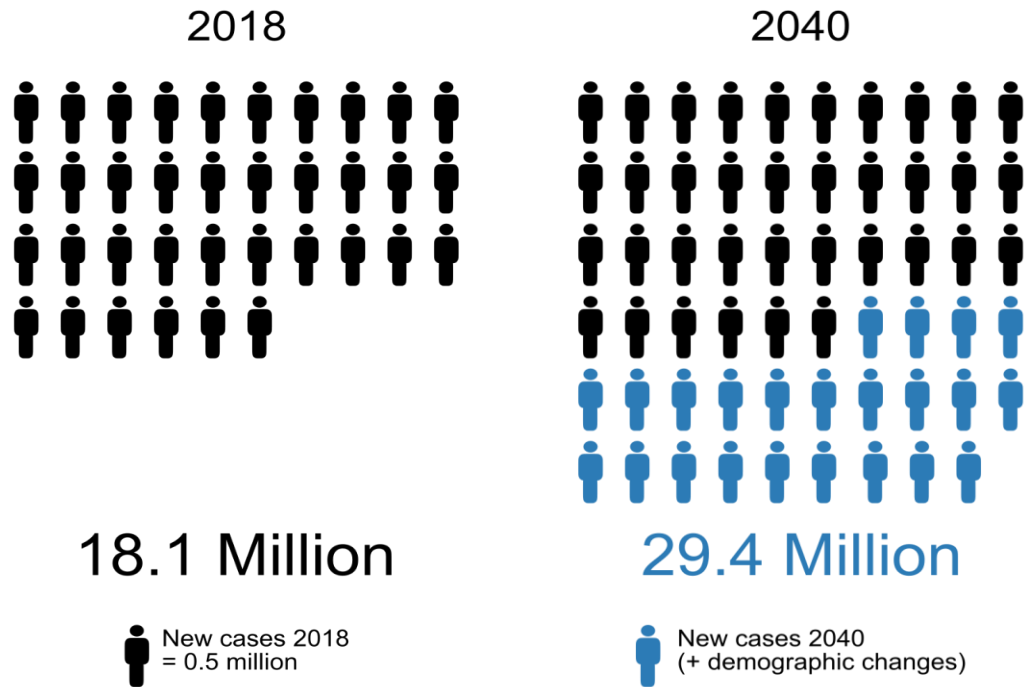
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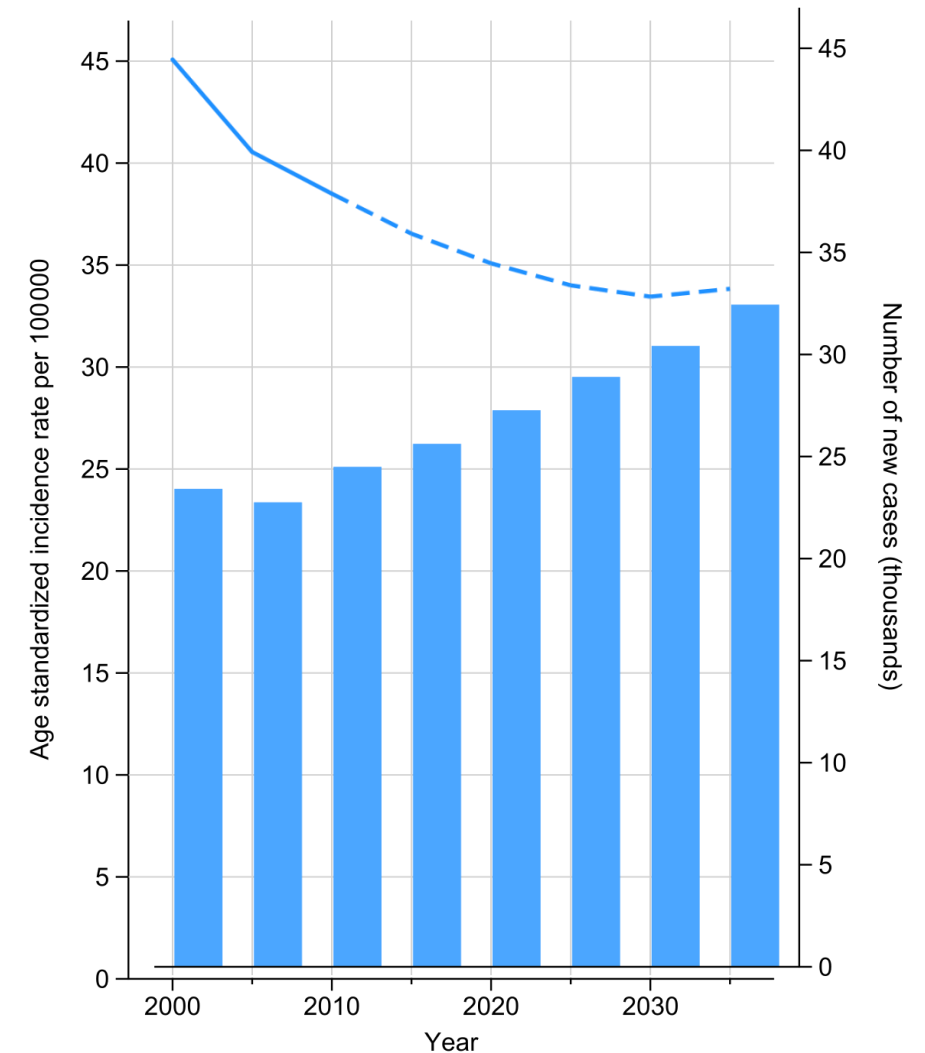
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Cancer is a disease of uncontrolled growth

Number of new cancer cases 2018 and 2040 worldwide



Lung cancer incidence 1998-2035, UK males



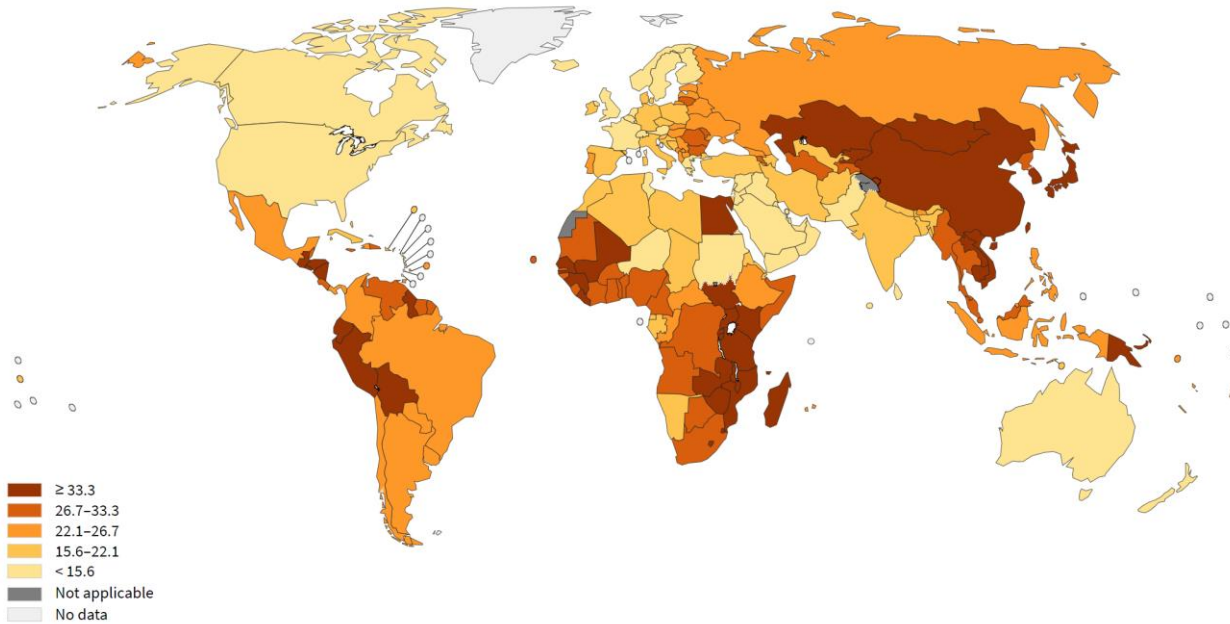
Action on cancer control is needed now

Cancer is a disease of difference

Cancer control priorities should be tailored to the local setting

Global burden of cancer attributable to **infections in 2012** (overall 2.2 million - 15.4% of all cancers)

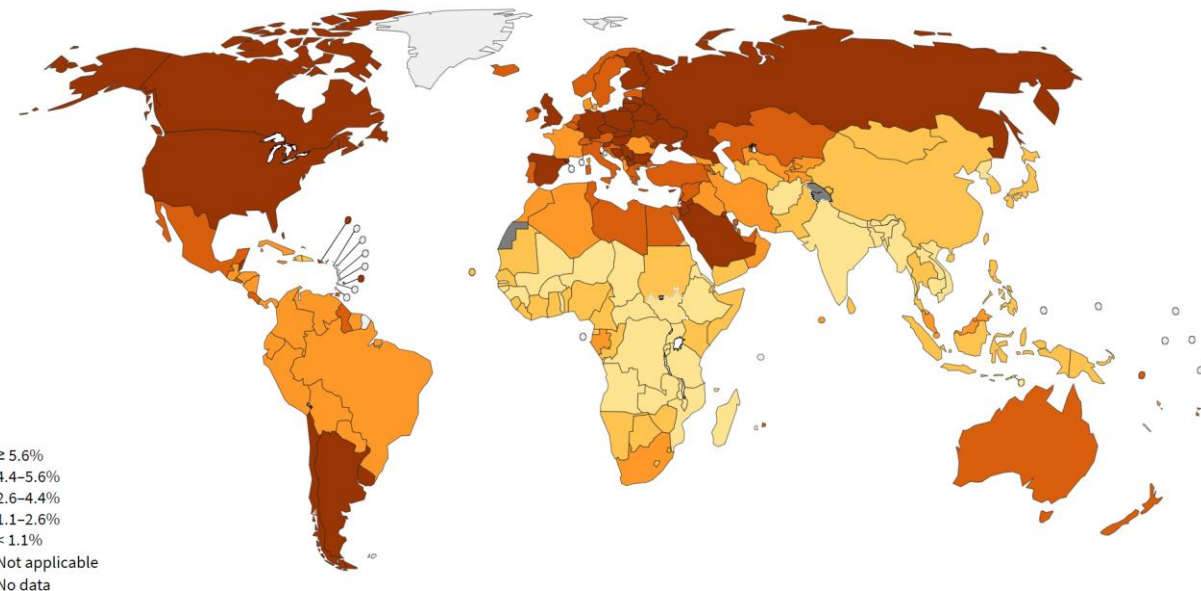
Plummer et al. 2016 - Lancet 2016 e609-e616



Global burden of cancer attributable to **high BMI in 2012** (overall 481 000 - 3.6% of all cancers*)

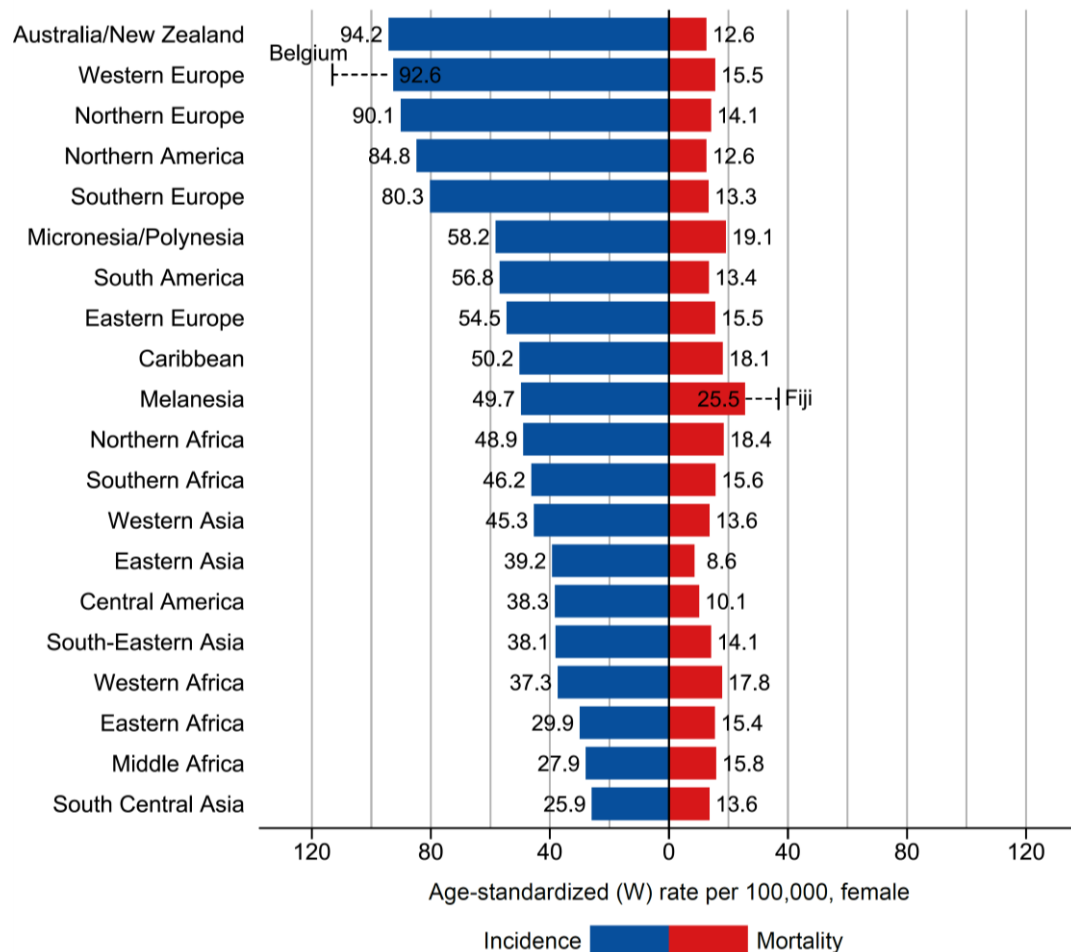
*of new cancer cases in men and women aged 30 years and older

Arnold M et al., Lancet Oncol, 2014

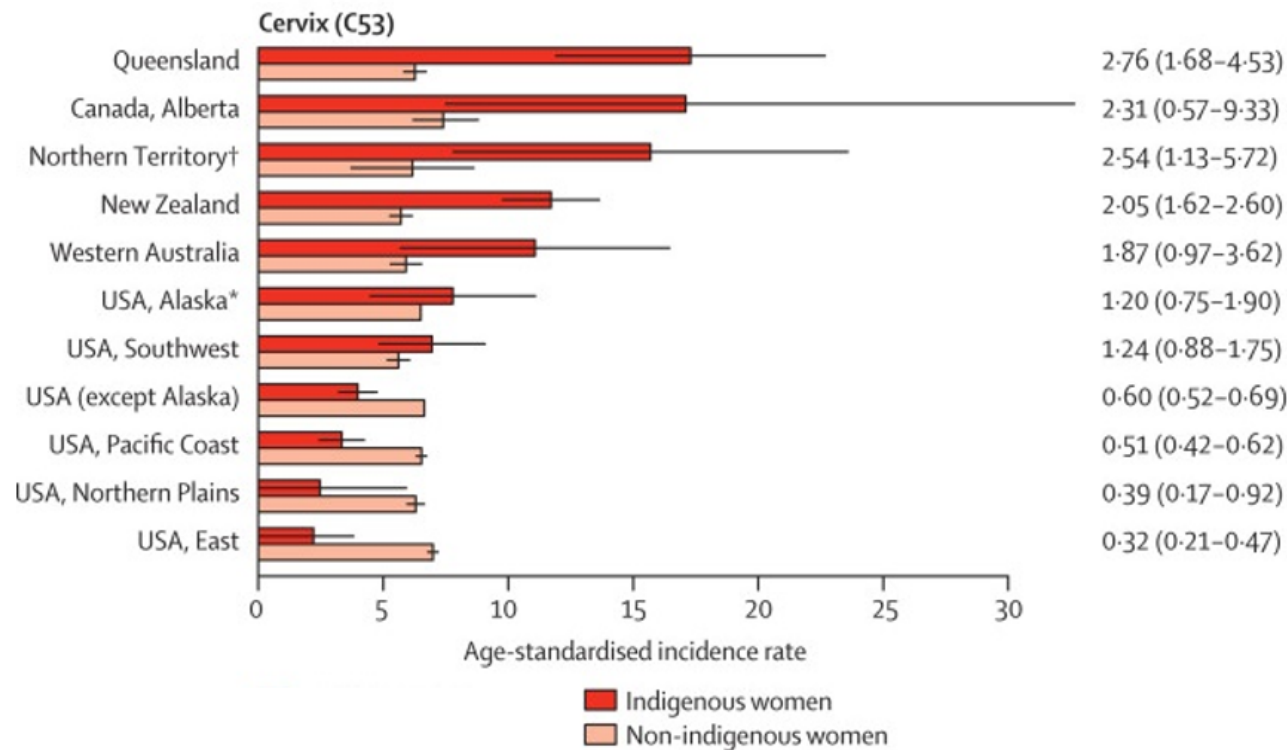


Cancer is a disease plagued by inequality

Female breast cancer: incidence and mortality rates



Cervical cancer within populations among indigenous and non-indigenous women



Moore SP Lancet Oncol., 16: 1483-1492, 2015

Bray F et al., CA Cancer J. Clin., 2018 doi: 10.3322/caac.21492.

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Every cancer control measure should be evaluated for its impact on inequalities

Cancer is costly to health, economies and societies

Out-of-pocket expenses burden on households in India

- ~40% of annual household expenditure on inpatient cancer care;
- lower adult workforce participation rates in families affected by cancer

Mahal et al., PLOS One, 8: e71853, 2013

Productivity loss in Brazil, Russia, India, China and South Africa in 2008

- \$46.3 billion (0.33% GDP)

Pearce et al, Cancer Epid., 53: 27-34, 2018.

Cost of anticancer drugs in Australia

- Expenditure on Pharmaceutical Benefits Scheme rose 19% per annum
- A\$65 million in 1999-2000 to A\$466 million in 2011-2012

Karikios et al., Internal Med. J., 458-463, 2014

Continue to highlight the economic benefits of cancer prevention and cancer control

Cancer is increasingly drawing political attention

- **2011: First UN High-Level meeting** on NCDs - 2011
- **2013: WHO Global Action Plan** for the Prevention and Control of NCDs 2013-2020 (25 x 25 target)
- **2015: Sustainable Development Goals** include target (3.4) for NCDs:
 - *by 2030, reduce by one third premature mortality from NCDs through prevention and treatment and promote mental health and well-being*
- **2017: WHA 70.12 resolution** - Cancer prevention and control in the context of an integrated approach
- **2018: Third UN High-Level meeting** on NCDs - 2018 - to review implementation of commitments
- **2018: WHO call to Action** to eliminate cervical cancer

Hold to account those responsible through the use of reliable measurements of progress

Cancer needs scientific evidence-based policies



More scientists must be willing to cross the bridge, carrying something that can be used by those on the other side

Evidence-informed, rather than evidence-based, health policy *acknowledges that policy-making is an inherently political process in which research evidence is only one, albeit the most important, factor that influences decision-making.*

European Health Report 2018

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Cancer needs long-term targets

Male lung cancer mortality rates and selected tobacco control interventions



UK
(1950-2013)



Lung cancer mortality



Smoking prevalence in adult males



POLAND
(1960-2013)

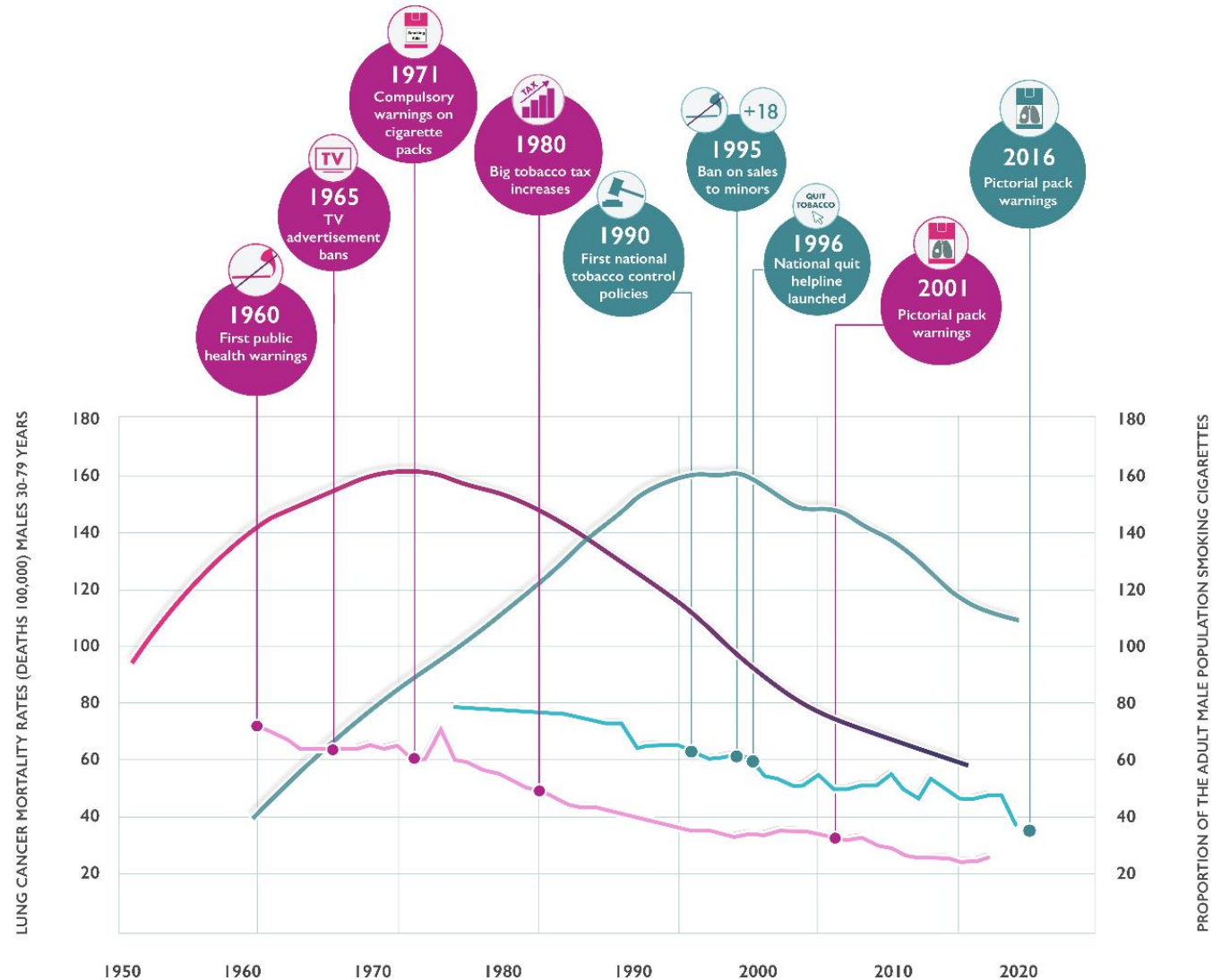


Lung cancer mortality



Smoking prevalence in adult males

Avoid being driven by short-term goals or purely by large numbers

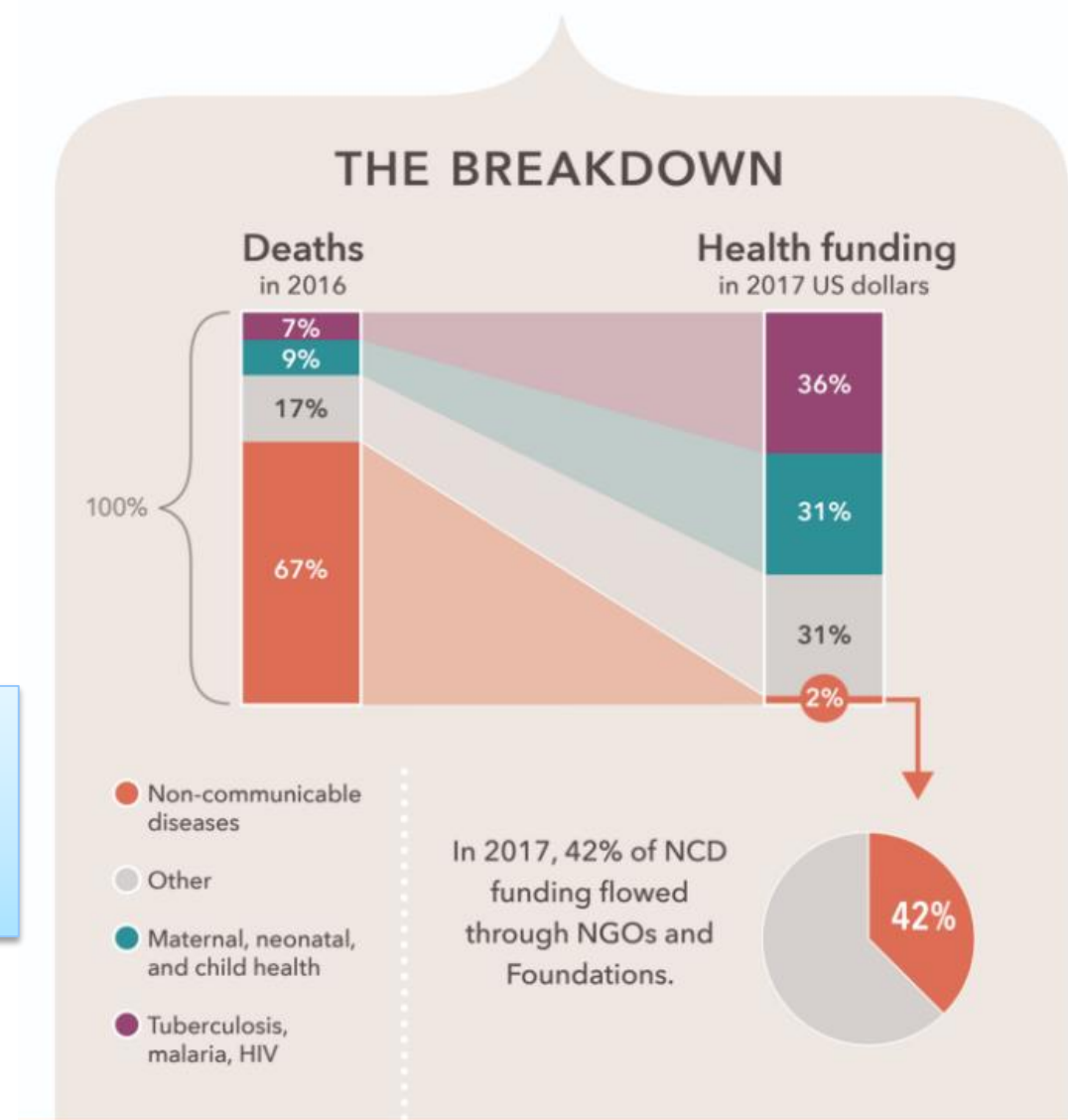


Cancer needs more development assistance for health

NCDs account for **67%** of all **deaths** yet only receive **2%** of the **funding** to improve health in LMIC

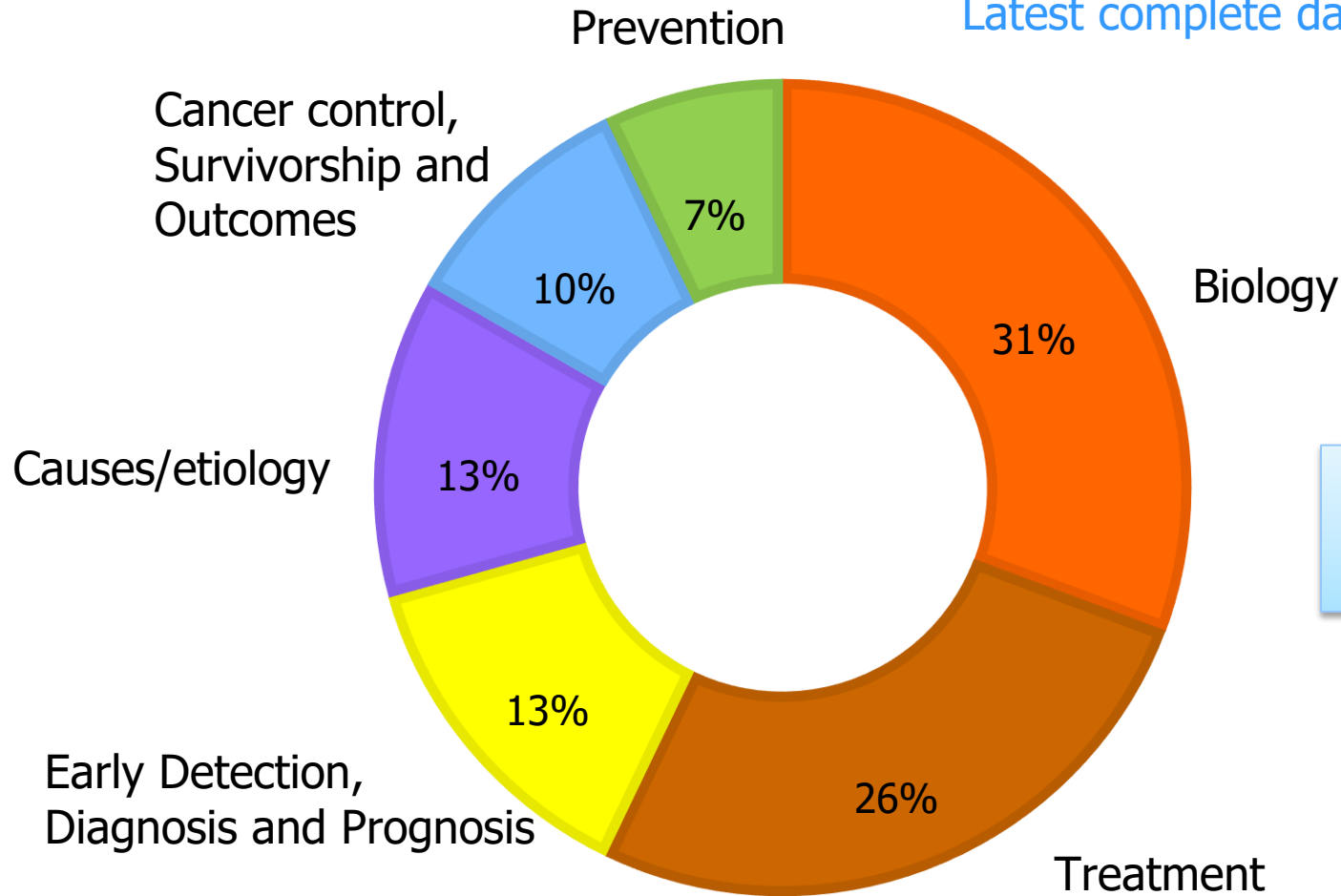


Clear planning from the cancer community on what would be done with additional financing



Cancer needs more research investment in prevention

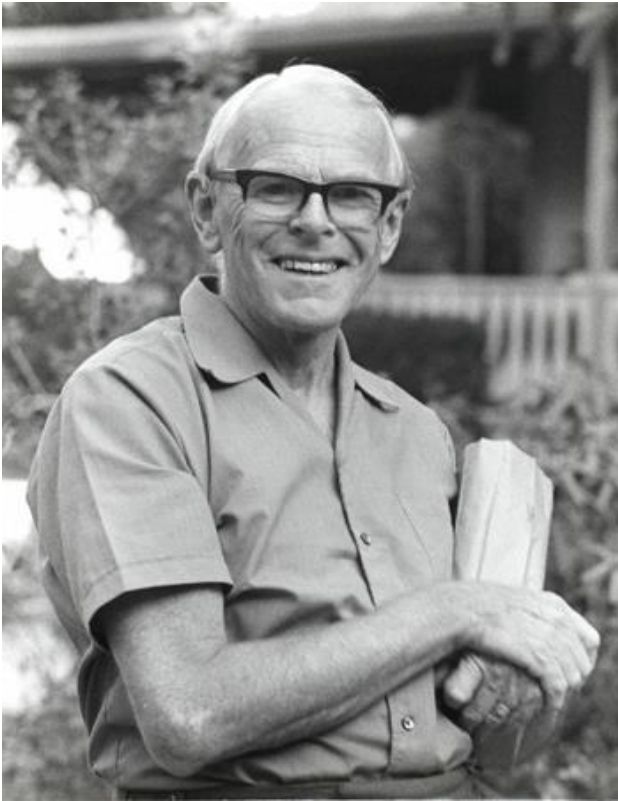
Latest complete data for 2014/2015



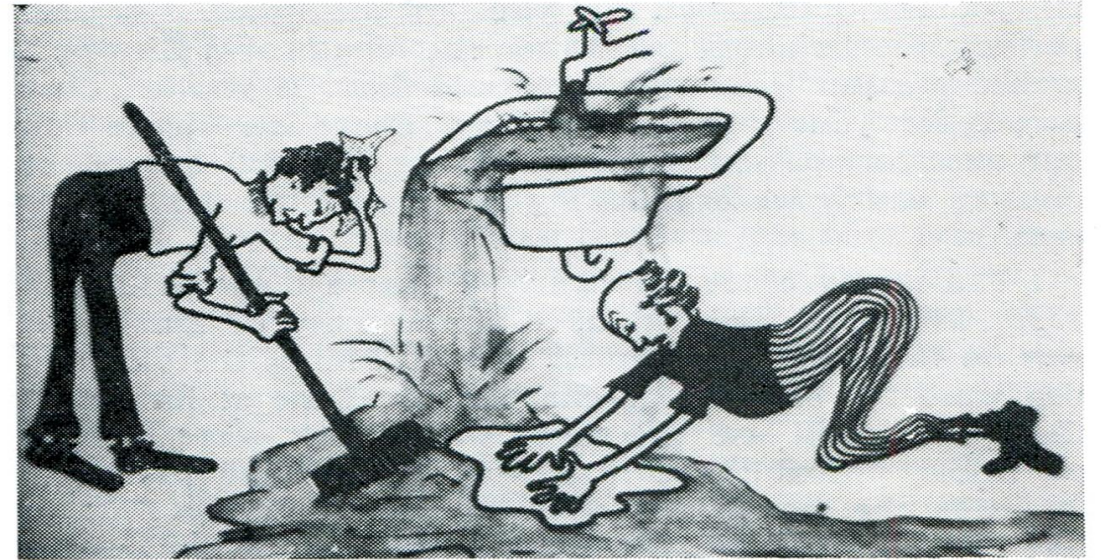
Cancer research funders should aim for a balanced portfolio

24 partners
129 funding organizations
Over 50 billion USD since 2000

Cancer needs a balanced, integrated and equitable approach



- Described the occurrence
- Identified a cause (foundation to prevention)
- Developed an affordable and effective treatment



From description to understanding to change

“Wild cards” - failure is success in progress

- **The number of reliable cancer registries is increasing** (www.gicr.iarc.fr) – *major gaps remain in LMIC and underfunding*
- **More emphasis is being placed on prevention and implementation** – *for many cancers still little knowledge of causes and for others lack of evidence-based prevention*
- **Cancer biology promises major benefits in early detection and precision medicine** – *but may lead to even greater inequality*
- **NCD targets should not be met without major progress on cancer** – *cancer may be left behind*

Failure is success in progress: 10 observations about cancer

1. is a disease of uncontrolled growth
2. is a disease of difference
3. is a disease plagued by inequality
4. is costly to health, economies and societies
5. is increasingly drawing political attention
6. needs scientific evidence-based policies
7. needs long-term targets
8. needs more development assistance for health
9. needs more research investment in prevention
10. needs a balanced, integrated and equitable approach

Thank you for your
attention and collaboration

