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

Dr Christopher P. Wild, Director

International Agency for Research on Cancer

Lyon, France
Cancer is a disease of uncontrolled growth

Number of new cancer cases 2018 and 2040 worldwide

<table>
<thead>
<tr>
<th>Year</th>
<th>Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>18.1 Million</td>
</tr>
<tr>
<td>2040</td>
<td>29.4 Million</td>
</tr>
</tbody>
</table>

Lung cancer incidence 1998-2035, UK males

- New cases 2018 = 0.5 million
- New cases 2040 (+ demographic changes)

Action on cancer control is needed now
Cancer is a disease of difference

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

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

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

Arnold M et al., Lancet Oncol, 2014

Cancer control priorities should be tailored to the local setting

Plummer et al. 2016 - Lancet 2016 e609-e616
Cancer is a disease plagued by inequality

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

Productivity loss in Brazil, Russia, India, China and South Africa in 2008
- $46.3 billion (0.33% GDP)

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

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

---

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


Karikios et al., Internal Med. J., 458-463, 2014
Cancer is increasingly drawing political attention

- **2011**: First UN High-Level meeting on NCDs - 2011
- **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
Cancer needs long-term targets

Male lung cancer mortality rates and selected tobacco control interventions

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

- Prevention: 31%
- Biology: 26%
- Causes/etiology: 13%
- Early Detection, Diagnosis and Prognosis: 13%
- Cancer control, Survivorship and Outcomes: 10%
- 7%

Cancer research funders should aim for a balanced portfolio

24 partners
129 funding organizations
Over 50 billion USD since 2000

International Agency for Research on Cancer
World Health Organization
International Cancer Research Partnership
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