INEQUALITIES IN HEALTH TECHNOLOGY DEVELOPMENT: A TALE OF TWO DISEASES

Panel: Multidisciplinary Perspectives on Appropriate Technology
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I develop diagnostic technologies against infectious diseases, including tuberculosis (TB)
TB diagnostic technology development span over a century

1882: Microscopy
1895: Radiography
1908: PPD skin test
1985: PCR
1998: Antibody test
2010: Sequencing
2019: Updated smear testing

Hundreds of Covid-19 diagnostic tests available within months

- Coronavirus genome sequence published
- World Health Organization (WHO) declared the SARS-CoV-2 a pandemic disease
- 1st antibody test approved by US FDA
- NIHR Innovation Observatory list 1608 tests (1250 regulatory approved tests)

- 10th January
  - 1st RT-PCR tests for SARS-CoV-2 deployed within China
- 16th January
- 11th March
  - NIHR Innovation Observatory commenced scanning for diagnostics
- 16th March
- 4th April
- 30th June
- 16th October
  - NIHR Innovation Observatory list 282 CE marked approved tests
Global SARS-CoV-2 diagnostics landscape is primarily led by corporations in high income countries

Majority of Covid-19 cases were registered in the global north

Distribution of Covid-19 cases (Last updated January 31, 2023)
Average of ~ 2M deaths per year since 2020

TB cases cluster in low/middle income countries

Distribution of Tuberculosis cases (in 2020)
Average of ~ 1.5-2M deaths per year

Global funding for tuberculosis research totaled $915 million in 2020 — less than half of the $2 billion goal set at the 2018 United Nations High-Level Meeting on TB.

WHO calls for more investments towards TB research
Q&A
Engineer Change.