

Diseases of poverty – where are we today?

- Infectious diseases kill 11 million people every year globally; nearly all these deaths occur in poor countries
- This includes 5.5 million deaths a year due to AIDS, TB, malaria, and Neglected Tropical Diseases (Chagas disease, trypanosomiasis, etc..)
- The remaining deaths are due mainly to diarrhea and respiratory diseases



R&D for the poor – where are we today?

- Between 1975-1999, only 16 of almost 1,400 new medicines were developed for tropical diseases and TB
- Between 1974-2004, 174 drugs for cardiovascular diseases but only 21 drugs for tropical diseases and TB entered the market
- Existing diagnostics, vaccines, and drugs could be improved to better meet the needs of people in developing countries (eg, children need special formulations; heat-stable products are also necessary in areas where the electricity supply is unreliable)

Why the gap in R&D for diseases of poverty?

Securing profits



•No financial incentive for the private sector: low returns in poor-country markets

•Strict intellectual property agreements make drugs, diagnostics, and vaccines unaffordable for the poor and impede innovation for neglected diseases

Neglecting the poor

- Donor countries have not prioritized health R&D for the voiceless and vulnerable
- Insufficient scientific, regulatory, and production capacity prevents developing countries from addressing their own R&D needs



Promoting R&D for diseases of poverty

New ideas for pro-poor R&D

- The Medicines Patent Pool: to facilitate innovation and reduce prices
- Global prize fund: promoting needs-driven health research and rewarding public health impact
- Advance Market Commitments as secured by GAVI
- Product Development Partnerships (PDPs): a new paradigm that has been making a difference



PDPs: how do they work?

- Breaking down barriers among research institutions and industry to fill the research gap for neglected diseases
- Combining the strengths of the public and private sectors to develop new, pro-poor health technologies and deliver them to those who need them most



PDPs: promising results

- 16 PDPs established between 1999-2003, with the support of the Gates Foundation
- PDPs have increased R&D activity for diseases of the poor: 12 new technologies have been developed and licensed, with 122 candidates in the pipelines
- Only 16% of PDP funding is provided by governments of rich countries; much applause to Germany's commitment to support PDPs



**Maximizing the impact of PDPs in Africa:
Examples of good practice**

Collaboration provides insights into complex puzzles

- The International AIDS Vaccine Initiative (IAVI) has created a model collaboration agreement among scientists to search for breakthroughs

- Intellectual Property (IP) master agreement that gives participating organizations a share of licensing revenues

- This joint scientific effort brings great hope to Africa, which counted 22.4 million people living with HIV in 2008



Working closely with affected populations to develop effective, appropriate tools



- Medicines for Malaria Venture, (MMV), and Novartis conducted clinical trials with African children to ensure that Coartem® Dispersible is effective and child-friendly

- Malaria Vaccine Initiative (MVI) conducts clinical trials in Africa and where the greatest number of deadly malaria Falciparum infections occur; MVI collaborates with 11 clinical research centres in 7 African countries

Building scientific capacity of developing countries



- Many PDPs, including DNDi, FIND, IAVI, IPM, IVCC, MMV, MVI, help to build in-country scientific capacity

- This includes upgrading hospitals, laboratories, and clinics; providing specialist equipment; training health workers on clinical trial methodology and training laboratory staff on good laboratory practice

- Since 2005, MMV's clinical trials have led to an improvement in R&D capacity in 24 countries

Promoting community empowerment



- IAVI works with clinical research centres in Kenya, Uganda, Rwanda, to conduct clinical trials among volunteers

- Community awareness raising and the creation of safe, non-judgmental spaces help to empower local populations at risk of HIV

Affordable drugs through free patents

- Sanofi-aventis and the Drugs for Neglected Diseases initiative (DNDi) have developed ASAQ, a patent-free malaria drug, which will bring prices down even further by allowing companies to compete

- The International Partnership for Microbicides (IPM) has obtained several royalty-free licenses from pharmaceutical companies, allowing product distribution at low cost



Facilitating health product availability

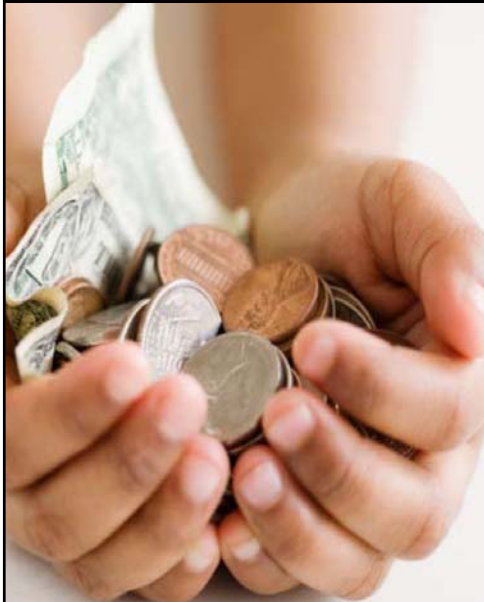
- Aeras TB supports two WHO-led initiatives: the Developing Countries Vaccine Regulators Network and the African Vaccine Regulatory Forum, which strengthen participant countries' systems for evaluating vaccines and help regulators make informed decisions

- PATH's Malaria Vaccine Initiative (MVI) is working with WHO, RBM, and African Ministries of Health to establish a decision-making framework for vaccine use



Securing a future free from the diseases of poverty: ways forward

Suggested ways forward



- Global advocacy framework for R&D for neglected diseases

- Donor governments should scale up their contributions to R&D for diseases of poverty

- R&D for diseases of poverty could benefit from an international coordination mechanism

Suggested ways forward

- Government, civil society groups, and researchers from poor countries should be better represented on all neglected-disease R&D decision-making bodies
- Pharmaceutical companies should support PDPs by providing expertise and access to compounds
- Building the capacity of poor countries to develop, produce and deliver drugs could reduce prices and improve access



Suggested ways forward

- Global incentives for R&D such as the Medicines Patent Pool, Advance Market Commitments and a global prize fund should be further explored and evaluated
- Developing countries should prioritize R&D for their health needs



With the promise of science and the power of partnership,



we can bring hope to millions of forgotten patients

Thank you!

Sources

Case studies for global health. Alliance for case studies for Global Health. 2009.

Delivering innovation and building a robust pipeline. Drugs for Neglected Diseases initiative. 2009.

Ending the R&D crisis in public health: promoting pro-poor innovation. Oxfam Briefing Paper, 122. 2008.

Innovative Product Development Partnerships. International AIDS Vaccine Initiative Policy Brief, 26. 2010.

Global Strategy and plan of action on public health, innovation and intellectual property. World Health Organization. 2008.

Product Development Partnerships: Lessons from PDPs established to develop new health technologies for neglected diseases. UK Department for International Development. 2010.

World Health Statistics 2010. World Health Organization. 2010.