WHO AND SCIENCE:

Vasee Moorthy on behalf of Soumya Swaminathan
Chief Scientist

IAP, Seoul, 11 April 2019

Challenges to achieving health for all

Conflict
Inequality
Poverty
Climate change
Environmental degradation
Demographic changes
Fragile states – health emergencies
Outbreaks of high threat pathogens
The rise of NCDs
Opportunities

Political will to achieve UHC:
   Points to major need for research on how best each
country can expand UHC, deliver PHC, address NCD
Potential of digital health to increase reach of the health
system
Potential of emerging technologies to prevent and cure
many more diseases
Existential threats may catalyse effective multisectoral action

WHO’s new technical strategy
(GPW13): achieving impact for
people at country level
Promote health
Keep the world safe
Serve the vulnerable
Science Division: Harnessing the power of science and innovation to achieve health for all

- Renewed emphasis on science to support countries in achieving SDG3 and the “triple billion” targets:
  - Ensure WHO anticipates and stays ahead of the curve on the latest scientific developments and identify opportunities to harness those developments to improve global health; and
  - Ensure the excellence, relevance and efficacy of our core technical functions, including norms and standards and research.

WHO Guidelines: Science and Evidence-based

Considered as independent and trustworthy by policymakers in countries around the world
Working to re-engineer guidelines processes: eg 28 day process used for Ebola and living guidelines

Better Anticipating Impact of Emerging Technology
Human Genome Editing: Governance Options

The New York Times

W.H.O. Panel Demands a Registry for Human Gene Editing

The panel, established after a Chinese experiment produced embryo-edited babies, said all human genome editing research should be listed in a registry.

By Pam Belluck

March 19, 2019
Better Anticipating Potential of New Medical Products

**Better Anticipate**
- Unmet public health needs
- Early framing of potential policy recommendations

**Develop Policy**
- Open & transparent process
- Shortened timelines
- Simplified taxonomy & documents
- Digital dissemination tools

**Optimize Uptake**
- Support and monitor implementation
- Feedback loop

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Global Malaria Programme

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TRANSPORTATION CLUSTERS

12.04.2019
BEFORE EPIDEMIC
Prepare for the inevitable

1 Governance & Coordination
2 Knowledge sharing
3 Assess threat & define priority pathogens
4 R&D Roadmap
5 Funding
6 Get regulatory pathway
7 Collaboration & Partnerships
8 Expand local capacity
9 Regulatory review & Policy development

Research agendas

A roadmap for MERS-CoV research and product development: report from a World Health Organization consultation

Kayvon Modjarrad, Vassilis Mourits, Peter Ben Embarek, Maria Van Kerkhove, Jerome Kim & Marie-Paule Kieny

Nature Medicine 22, 701–705 (2016) | Download Citation

As part of the World Health Organization (WHO) R&D Blueprint initiative, leading stakeholders on Middle East respiratory syndrome coronavirus (MERS-CoV) convened to agree on strategic public-health goals and global priority research activities that are needed to combat MERS-CoV.
Achieving broad, timely pathogen sequence sharing

Status quo represents a major risk to public health

Up for debate — WHO guidelines on prompt release of outbreak data

To understand and control disease outbreaks, researchers need free access to the genetic sequences of pathogenic organisms as

WHO promotes AMR R&D

Are you ready for a world without antibiotics?

Antibiotics are a bedrock of modern medicine. But in the very near future, we’re going to have to learn to live without them once again. And it’s going to get nasty
Global Action Plan for Healthy Lives and Well-being for All

Twelve of the world’s health and development organizations are uniting to accelerate progress towards the health-related SDGs.

The Innovation Hub Will Serve as a Strategic Translation Pillar across WHO

**CONNECT**
1. Link with research, UN partners, private sector/public sector,
2. Partner in shaping calls for innovations or challenges matched to specific, identified health-related needs and gaps aligned with WHO strategic priorities

**SCALE**
1. Identify country needs
2. Connect innovations, innovators and founders with governments
3. Maximize opportunities for replication and scalability

**AMPLIFY**
1. Communicate successes and lessons learned
2. Develop and deliver innovation-related trainings and talks.

Innovating by Example: Group Prenatal Care can Accelerate Several GPW Impact Indicators
Accelerator 6: Data and Digital Health

1. Assuring fundamentals for all health data, standards, and interoperability
2. Exploring potential of,
   1. Cloud-based visual analytics
   2. Automation
   3. Social media nudges
   4. Secure digital identities
   5. Unique identifiers

WHA2020: WHO global strategy on digital health

Develop and assist in adoption of good practices

Anticipate impacts on health systems/delivery; manage challenges and take opportunities
Conclusions

WHO has recently established a Chief Scientist position.

Conclusions

Science academies can contribute to health policy by:

- Supporting national research and innovation agendas
- Responding to WHO calls for science-policy documents
- Partnering with WHO for public engagement on health science; dialogue with all countries and communities will be key if we are to accelerate health for all
- Make the case for a public access model for pathogen sequence sharing
- Help us to partner with you
Science Division: harnessing the power of science and innovation to achieve health for all

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