

In order to mitigate human and financial losses as a result of future global pandemics, we must plan now.

Of great concern is the increasing frequency of pandemics occurring over the last few decades. Clearly, the window of opportunity to act is closing.

This presentation is about

- the emerging and reemerging infectious diseases;
- the challenges of meeting international health regulations;
- the strengthening of global health systems;
- the global pandemic funding; and,
- the approach to future pandemic planning.

In 2005, following the Severe Acute Respiratory Syndrome (SARS) pandemic, the International Health Regulations (IHR) were modified.

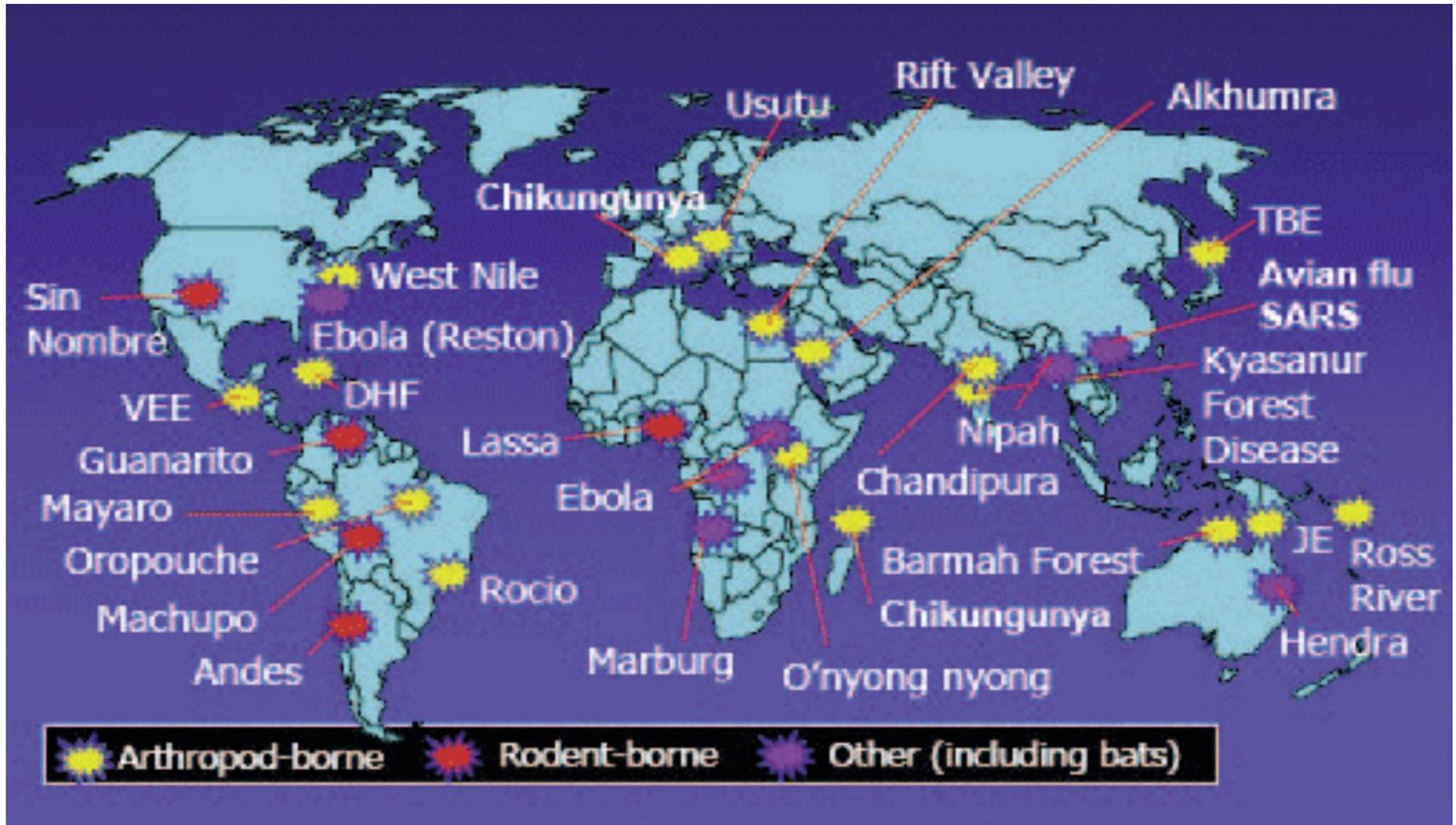
While two thirds of the 194 World Health Assembly countries have failed to comply with the regulations as of 2015, and for the one third who say they did, there are serious concerns about the reliability of their self-assessment.

Emerging and Re-emerging Infectious Diseases

If one looks at the history of emerging or re-emerging infectious disease pandemics globally, on average they have appeared every decade but now, worryingly, the frequency between pandemics seems to be disturbingly shorter as evident with

Severe Acute Respiratory Syndrome (SARS) in 2003,
Influenza A H1N5 (bird flu) in 2007,
H1N1 (swine flu) in 2009,
Middle East Respiratory Syndrome (MERS) in 2012 and,
Ebola in 2014

Overpopulation and poverty are the primary contributing factors that have brought about this change and are strongly linked with global warming, environmental degradation, habitat destruction, and increased human/host/reservoir interaction.



Recent emerging infectious diseases caused primarily by zoonotic disease transmitted to humans via insects vectors or animals

Global Health System Strengthening

For most countries in the developing world it is difficult to improve their health systems to a standard that is similar to that of high-income countries.

Moreover, most LMIC countries will not be able to establish core IHR capabilities without considerable donor support and international assistance for training, creating the necessary laboratory infrastructure for prompt diagnosis, and the technology required for 'real-time' reporting of epidemics

Global Health System Strengthening ...

Point of care screening tests for use in community health posts are increasingly available for rapid diagnosis of emerging pathogens and will shorten the time from presentation to treatment.

However improvements and access to diagnostic technologies will need to be supported by the capacity to interpret and act on the findings.

Presently limited health-care dollars are spent on running tertiary national hospitals with little, or none, spent on preventive services, disease control or epidemic preparedness.

International Health Regulations (IHR)

The 2014 outbreak of Ebola once again tested the revised 2005 IHR.

According to Gostin and Friedman (2015) “WHO fell short of its leadership responsibilities, and the IHR – the governing legal framework – displayed deficiencies”

The three West African countries involved (Guinea, Liberia, Sierra Leone) in the pandemic failed to comply with the IHRs capacity-building mandate and, to date, two thirds of WHA member countries have failed to comply with the same regulations.

International Health Regulations (IHR) ...

Of the one third of the WHA member nations that said they did comply, there has been no evaluation to verify their claims.

Like the outbreak of H1N1 in 2009, the response raises questions regarding the extent to which the IHR can serve as a framework for global pandemic responses.

Global Health System Strengthening

For most countries in the developing world it is difficult to improve their health systems to a standard that is similar to that of high-income countries.

Moreover, as mentioned, most LMIC countries will not be able to establish core IHR capabilities without considerable donor support and international assistance for training, creating the necessary laboratory infrastructure for prompt diagnosis, and the technology required for 'real-time' reporting of epidemics

Global Health System Strengthening ...

Point of care screening tests for use in community health posts are increasingly available for rapid diagnosis of emerging pathogens and will shorten the time from presentation to treatment.

However improvements and access to diagnostic technologies will need to be supported by the capacity to interpret and act on the findings.

Presently limited health-care dollars are spent on running tertiary national hospitals with little, or none, spent on preventive services, disease control or epidemic preparedness.

Global Pandemic Funding

On October 10, 2014, World Bank President, Dr Jim Yong Kim, has proposed a new pandemic emergency facility (PEF).

PEF is a global financing facility that would channel funds swiftly to governments, multilateral agencies, NGOs and others, to finance efforts to contain dangerous epidemic outbreaks before they turn into pandemics.

Global Pandemic Funding ...

Financing from the PEF will be linked to strong country-level epidemic and pandemic emergency preparedness plans, thereby incentivizing recipient governments and the international community to introduce greater rigor and discipline into crisis preparedness and reduce the potential for moral hazard.

The PEF is expected to cover a range of response activities such as:

- (i) rapid deployment of a trained and ready health care work force;
- (ii) medical equipment, pharmaceuticals and diagnostic supplies;
- (iii) logistics and food supplies; and
- (iv) coordination and communication.

Conclusion

It is well known in management circles that 'if one fails to plan then one should plan to fail'.

With regard to pandemic planning, if we fail to build national epidemic capacities in LMICs then we should plan to deal with a global pandemic in the not too distant future.

However, in order to build such national capacity it will take considerable international political will that at the moment seems to be lacking. Instead of allocating huge resources that 'react' to pandemics, funds must be earmarked to 'prevent' pandemics.

Conclusion ...

This would include building national capacities of LMICs and smart surveillance of EIDs in identified hotspots in the tropical and subtropical world.

What are the likely organisms to cause a future pandemic and where will they originate from?

Therefore, the recommendation here is that the global health community needs to unite to urgently address these issues in order to avoid the next humanitarian crisis.