

ISIS Focus

Second East Asia Congress

An East Asian Health Early Warning and Response System

*Outbreaks of disease pose a unique challenge as far as cross-border information-sharing is concerned. The tendency is to “contain” the matter; and yet, providing timely alerts to neighbours is critical. When misjudgement occurs, disease can move swiftly across borders, while information lags far behind. Putting in place an effective regional early warning and response system will cost money, but can we afford not to do it? **Wan Portia Hamzah** reports.*

This session was chaired by Tan Sri Dr Mohamad Taha Arif, Director General of Health, Ministry of Health, Malaysia. The paper presenters were Dr Monir Islam, Director, Family and Community Health, World Health Organisation; Dr H Ali Sulaiman, Chairman, South East Asia Foundation for Outbreak Regional Cooperation, Indonesia; and Dr Ramlee Rahmat, Director of Disease Control, Ministry of Health, Malaysia.

Dr Monir Islam began by briefly explaining what is meant by a disease outbreak. He highlighted the influenza pandemics of the 20th century, and stressed the importance of outbreak management, the objective of early warning/surveillance, and the need to carry out risk assessment. The issues of epidemic preparedness and response plans, confirmation of outbreaks and diagnoses, and post-outbreak tasks were also elaborated on. In his presentation, partnerships among countries to ensure health security and information for prompt action were given special attention. Also mentioned were the “forgotten issues” of population growth and demographic changes and their impact on the health system.

Dr Ali Sulaiman, in his presentation, focused on the Southeast Asia Foundation for Outbreak Regional Cooperation (SEAFORK), a non-profit foundation. The main objective of SEAFORK is to promote outbreak surveillance and response activities. The foundation thus provides consultation, expertise and support for the implementation and maintenance of the Early Warning Outbreak Recognition System (EWORS). Countries currently involved in the implementation of EWORS are Cambodia, Indonesia, Lao PDR and Vietnam. The other main activity of SEAFORK is to promote the exchange of outbreak response information through the ASEAN sponsored web-based initiative: ASEAN-Disease-Surveillance.Net. This aims to facilitate regional cooperation through communications to improve outbreak detection and response capabilities.

Health warning systems: current efforts

Dr Ramlee Rahmat touched on the outbreaks of the Severe Acute Respiratory Syndrome (SARS) and Avian Influenza, and how countries responded. These outbreaks not only threatened the health of the people, they also jeopardised short-term economic growth.

He further noted, with reference to an initial study by the Asian Development Bank, the high cost incurred by countries in the region during the SARS outbreaks.

Dr Ramlee also stressed the need to respond to such outbreaks as well as outbreaks of other infectious diseases, many of which are new, triggered largely by viruses, and not yet fully understood. International coordination through World Health Organisation (WHO) depends on the extent and nature of outbreaks. Countries within the East Asian region have their own initiatives as well as regional meetings to tackle the related issues. Dr Ramlee then provided details on Malaysia's surveillance of infectious diseases and response mechanism.

During discussion, Mr Michael Oh from the MUI group of Malaysia requested the speakers to elaborate further on their respective presentations in relation to the issue of a regional health early warning and response system.

Dr Ali indicated that many countries in the region do have some kind of surveillance system; many of the systems, however, have developed independently and the activities are not coordinated.

Dr Monir stressed the importance of sharing information and alerting other countries of any occurrences of infectious diseases. Diseases do not recognise boundaries and neighbouring countries must be prepared for eventualities. According to Dr Monir, a network or a regional forum is required for effective exchange of information and ideas.

At the ASEAN level, Dr Ramlee explained that ASEAN has taken the initiative to hold ASEAN+3 meetings and ASEAN Health Ministers Meetings, as well as coordinate the ASEAN-Disease-Surveillance.Net. In addition, WHO plays an important role in coordinating the early warning system and investigations of disease outbreaks in the East Asian region.

The session Chair added that there is an understanding within the region that a country will try to contain any outbreak within the affected country. Neighbouring countries, however, must be prepared for possible spread of an outbreak. In general, countries within the region are quite familiar with handling outbreaks of common diseases, but may be unprepared in dealing with the "unknown." It is therefore important that collaborative efforts with other countries and WHO be initiated or enhanced.

Greater participation, investment and research

On the issue of an East Asian health early warning and response system, Dr Monir indicated that investment is required in health and the health system; unfortunately, however, the health sector, over the years, has been receiving reduced financial contributions. The Health Ministry in general is overburdened and is made to cope with many new challenges. The problem of malnutrition alone is a challenge in many countries, and non-communicable diseases such as diabetes and heart problems are already a burden on the economy. Dr Ali noted that although EWORS is a surveillance

system already operating in the four ASEAN countries, it is unfortunately not working in the way that it was intended.

Dr Ramlee emphasised that investment is required for an early warning system. In terms of a surveillance system, as mentioned by Dr Ali, he explained that different countries have different levels of surveillance systems. A surveillance system is the ability to notify on time. But this requires infrastructure as well as manpower. In addition, laboratory capability for identification purposes is essential. This is where investment is required and unless the surveillance system is upgraded and capability developed, real time notification is not possible. At the moment, contact points within the region have been identified and communications through contact points regarding outbreaks have been recommended.

The involvement of only four countries, namely Cambodia, Lao PDR, Indonesia and Vietnam in EWORS, as well as the effectiveness of the system itself, were questioned. The small number of participating countries, according to Dr Ali, was largely due to the historical development of SEAFORK. SEAFORK was initiated by NAMRU (United States Naval Medical Research Unit) to collaborate on emerging and re-emerging diseases. NAMRU at the time was already carrying out its activities in the four countries; hence the involvement of these four countries. EWORS, however, is open to participation by other countries in the region. Dr Simanjuntak of NAMRU2 later added that EWORS is a system that is indeed functioning, and operational in 11 hospitals in eight provinces. Data is analysed on a daily basis and the lead agency in Jakarta gets the relevant data, analyses as well as information of possible outbreaks.

Tan Sri Dato' Michael Chen of Malaysia inquired whether research is being conducted to control SARS, and whether the East Asian countries are willing to start a fund to investigate possible cures for SARS. According to Dr Monir, WHO is coordinating investigations to look out for vaccines against SARS. Research activities, he pointed out, are mainly conducted by the West. Except for Japan, research is minimal in the East Asian region.

Dr Nirwan Idrus of Indonesia asked whether new technological developments and maintenance engineering might help to prevent possible outbreaks. It was pointed out that maintenance engineering can help technically in terms of prevention, such as in the maintenance of potable water supply and for refrigeration purposes in order to avoid contamination.

The session Chair reiterated that in the case of prevention and an early warning system, the region is in a far better position to deal with the more common disease outbreaks. WHO at the moment is revising the International Health Regulation whereby countries will be required to make notification of syndromic manifestation of diseases (i.e. how a disease manifests in affected people) and health authorities will be alerted of the manifestation in case a new disease has emerged.

Communicate information, not disease

The Chair also called for nations to be transparent, to alert other nations so that precautionary measures can be initiated, and to cooperate in seeking for possible solutions and alternatives. In addition to efforts relating to communicable diseases, the Chair also called for some kind of a system to be established to alert people of the non-communicable diseases, such diabetes and cancer, which can be very expensive in terms of treatment.

ISIS Malaysia Chairman and Chief Executive Officer Tan Sri Dr Noordin Sopiee noted that there is a need to make a distinction between disease and people. Tan Sri Noordin also highlighted the immense difficulty in working outside the framework of the nation state. Disease has “no passport” and has no recognition of the limitations of state sovereignty. Disease can spread at the rate of “Formula 1” but the response system, unfortunately, is locked in “slower traffic.” Communicable and non-communicable diseases, AIDS and other threats are looming in the region. In cases of outbreaks, countries are urged to contact one another, but in reality, if there is an outbreak, the first reaction is to contain and prevent others from knowing. The medical personnel may wish to alert others but politicians and economists will resist such information being made known. This phenomenon is not unique to East Asia. Acknowledging this drawback, Tan Sri Noordin called for an organisation that will be in a position to “ring the bell.”

It was pointed out that WHO is in a position to do so – as long as the member countries agree. However, the issue of sovereignty is still problematic and sensitive. In conclusion, the Chair reiterated that countries are urged to come together and to cooperate in allowing investigations to be conducted for the sake of health security. Different sectors must also be willing to work together; the Health Early Warning and Response System should not only be confined to the health sector.