Timah Tassoh Camp fulfilled the case definition of viral fever for investigation during the outbreak. Only 27 cases from Tasik Meranti Camp were put under isolation and only 2 cases were admitted to hospital. No case fatality recorded. The finding from 24 of 30 cases whom nasopharyngeal swab taken was positive for Influenza A. No environmental risk noted except April is a dry season without any rain.

Conclusions: Influenza A virus infection characterized by fever and respiratory symptoms, infected National Service trainee in two camps in Perlis. The infection was mild and causing no case fatality. Early case surveillance, rapid public health intervention and careful risk communication, controlled the outbreak.

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16.037
Multi-country Comparative Assessment of the Surveillance of Avian Influenza (H5N1) Human Cases in Asian Countries
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Background: Although different opinions exist if the H5N1 will be the next human pandemic strain, a future novel influenza pandemic is considered inevitable. Effective surveillance system, especially in countries with confirmed H5N1 human cases, is vital for early detection of the pandemic that may aid either rapid containment or swifter mitigation measures of public health impacts such as preparation of pandemic vaccines. While international surveillance guidelines exist, actual operation of the surveillance of H5N1 human cases in those countries has not been well-documented. For rational policy instructions in strengthening the surveillance with necessary international assistance, a multi-country comparative assessment of the surveillance was conducted.

Methods: The assessment reviewed published protocols, guidelines and policy documents, and conducted key informant interviews on public health officials, both central and local, regarding implementations of surveillance. We compared different aspects of the surveillance, namely the definitions of reportable condition, reporting mechanisms, reporting sensitivities, specimens collection and shipment, laboratory testing, and responses to avian and human cases in Indonesia, Vietnam, Myanmar, Pakistan and Japan.

Results: The routine reporting of suspected human cases from all health facilities was considered essential, whereas community-based cluster reporting or active searches of cases around poultry outbreaks alone did not ensure sufficient reporting sensitivity and area coverage. Population-based reporting sensitivity ranged from 0 to 0.96 per 100,000 population per annum by country. Countries envisaged either small or large numbers of laboratories in their national laboratory network with the latter posing potential problems of quality control and biosafety. In response operations, household isolation of close contacts of confirmed cases was applied in one country but not in others.

Conclusions: The findings indicate a large diversity in surveillance structures, implementations, and performances across different countries. Knowledge sharing and mutual learning as well as multi-country leadership are essential for optimizing the surveillance in each country.

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16.038
Evidence of Person-to-Person Transmission of Nipah Virus Through Casual Contact
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Background: Investigation of Nipah outbreaks in Bangladesh have concluded that more than half of all Nipah cases resulted from close physical interaction with other Nipah patients. In 2007, we investigated an outbreak of fatal febrile illness in Kushtia district.

Method: The investigation team identified suspected case patients with fever and altered mental status or headache and/or cough by collecting information from the local health workers and community residents. We defined a confirmed Nipah case by the presence of IgM antibodies to Nipah virus in serum and a probable case as a patient who concurrently had similar symptoms, resided in the same area, but died before blood was collected. For each case three unmatched controls were enrolled from the same neighborhood.

Results: A total of eight cases (3 confirmed and 5 probable) were identified. The outbreak was confined to one village and lasted <3 weeks. Five patients (63%) died. On the third day of illness, the index case attended a religious congregation in that community; all subsequent cases also attended. Five cases either sang or shared food at the religious congregation with the index case. They also took care of the index case, fed her, slept with her in the same room, cleaned her oral secretions, carried her and massaged her body when she was ill. However, two subsequent cases had no history of such close contact with the index case. The secondary peak of illness occurred 11 days after the initial case. The only exposure significantly associated with illness was touching a Nipah case during illness (50% versus 0%, p < 0.05).

Discussion: Although direct contact or infection from another route cannot be ruled out, this outbreak suggests that Nipah virus may be transmissible from one person to another without close contact.

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