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Pandemic influenza A (H1N1) 2009: considerations for tuberculosis care services

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More than 482,000 cases of infection with pandemic influenza A (H1N1) virus have now been confirmed from all over the world and more than 6000 deaths have been reported to WHO.[i,ii] A substantial number of deaths have occurred in patients with chronic respiratory conditions, raising concern about the possible impact of influenza on patients with active tuberculosis. This note is intended to sensitize tuberculosis programme managers to possible challenges and synergies in the efforts to control the two conditions.

1) Coordinate with country preparedness plans

A health emergency, such as an influenza pandemic, may necessitate the mobilization of resources from the rest of the health services. Tuberculosis programmes may be required to provide their share. However, a breakdown in tuberculosis service delivery should be averted, as it can have disastrous consequences for many years afterwards. On the other hand, tuberculosis programmes have extensive experience in delivering treatment in decentralized settings, including patient homes. These setups may be useful in the provision of influenza services during severe epidemics.

2) Health-care services should prepare for the added challenge of influenza

Respiratory physicians and tuberculosis specialists may be points of reference for patients with pulmonary complications of pandemic (H1N1) 2009 influenza. They should familiarize themselves with WHO recommendations for the use of anti-influenza medication.[iii] Effective medication may reduce morbidity and mortality from both influenza and most forms of tuberculosis. Health-care services, however, must be well prepared to provide for the two diseases.

3) Tuberculosis care should be ensured, even if influenza overwhelms health-care services

Anti-tuberculosis medications must continue during an influenza pandemic. The supply of drugs must not be interrupted. Special care should be given to vulnerable patients, among whom poorer outcomes are likely. Influenza in patients with HIV-associated tuberculosis, for example, may be more severe than in uncomplicated tuberculosis.[iv] Patients with multidrug resistant tuberculosis (MDR-TB) are generally more likely to die or suffer from advanced lung disease, so their prognosis after influenza also may be poorer.

4) Measures to prevent complications and transmission should be put in place

Vaccines. Regulatory authorities have now licensed pandemic (H1N1) 2009 influenza vaccines in a number of countries.[v] WHO experts recommend that health-care workers should be prioritized for vaccination. Given that susceptibility to the new virus is expected to be widespread, persons with underlying medical conditions

(including tuberculosis), as well as healthy children and adults, should be considered for vaccination subject to vaccine availability and to country-defined priorities. For patients with HIV-associated tuberculosis, the standard recommendations for seasonal influenza immunization apply depending on vaccine availability.

Antivirals. WHO does not recommend prophylaxis with antiviral medications.

Infection control. Sanatoria, tuberculosis hospitals and clinics, as well as general hospitals and outpatient departments, are all sites of possible transmission of influenza to tuberculosis patients. Measures must be put in place to limit transmission in these facilities. WHO recommendations for preventing infection from tuberculosis[vi] and of confirmed or suspected infection with pandemic (H1N1) 2009 virus[vii] should be implemented. Although the modes of transmission of the two diseases are slightly different, source control measures (e.g. cough etiquette, separation of coughers) and prevention of crowding are important to reduce transmission of both tuberculosis and influenza.

5) Use tuberculosis resources developed by WHO to increase laboratory support to influenza

WHO has built a large network of international technical and funding agencies to improve access to new tuberculosis diagnostics within appropriate laboratory services. By virtue of a number of components, these laboratories can also be useful for pandemic (H1N1) 2009 diagnostics and surveillance, including specimen transport mechanisms, molecular detection of drug resistance, training on good laboratory practice, microbiological technique, and biosafety. The laboratories are supported by an excellent supranational network of reference laboratories located throughout the world.

References

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