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Journal of Science Foundation, January 2013, Vol. 11, No.1 ISSN 1728-7855

EDITORIAL

Epidemic Treat of Emerging Respiratory Viruses: Bangladesh Perspective

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Bangladesh is a poor, densely populated country with an over more than 168 million people (Bangladesh Bureau of Statistics 2010). Majority of the people are living under poverty with crowded and unhygienic condition. Therefore, the emergence of any infectious agent will cause a great havoc to the community. Regarding this issue, several organizations are working to tackle this. However, it is very small scale steps to combat this. In this context it is very urgent to take necessary actions to fight against this situation.

Infectious agents which are transmitted by respiratory route are most likely to occur in epidemic form (National Institute of Population Research and Training 2005). The reason is overcrowded population as well as poor hygiene leading to spread the infectious agent quickly (Kenny 2002). The infectious agents which are transmitted by ingestion or other parental routes are less likely cause epidemic (Echenique et al., 2013). Proper knowledge and maintaining of appropriate steps can cut the chain of transmission.

Many infectious agents can transmitted through respiratory route (Nasreen et al., 2013). Among these viruses most common threat is the influenza virus, corona virus and many more. Due to nature of antigenic shift influenza virus changes continuous in every 8 to 10 years leading to generate a new strains which causes an epidemic treat (Sazzad et al., 2013). This virus can spread very quickly from one person to another. It has been estimated that more than 7 to 8 persons are living in a small room (Bangladesh Bureau of Statistics 2010) which is the most suitable place for the viruses to spread.

Over the last 40 years, Centers for Disease Control and Prevention (CDC), USA has been collaborating with ICDDR, B (International Centre for Diarrheal Disease Research, Bangladesh) and most recently they have focused to strengthen the country's capacity to detect emerging respiratory as well as other infectious diseases in human as well as animal populations (Centre for Disease Control 2013). In addition to that they provide training and other interventions to host country partners. Furthermore, a strong collaboration between CDC and the Institute of Epidemiology Disease Control and Research (IEDCR) within the Bangladesh Ministry of Health and Family Welfare (MOHFW) has strengthened the country's ability to detect and respond to disease threats (Centre for Disease Control 2013). Since 2002, a CDC medical epidemiologist has led the Centre for Communicable Diseases at ICDDR,B. It is very promising for us that CDC is currently designating Bangladesh as CDC's newest Global Disease Detection Center for enhancing global health security for rapid detection and response to emerging and re-emerging infectious diseases (Centre for Disease Control 2013).

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This is also a very enthusiastic news for us that CDC and ICDDR,B, in partnership with IEDCR, conduct surveillance for emergent and zoonotic strains of influenza and for severe respiratory disease and influenza-like illness in the general population and in hospitals across Bangladesh (Centre for Disease Control 2013). In addition, they participate in outbreak investigations of respiratory illness and conduct research studies on seasonal and avian influenza and other respiratory viruses like estimating disease burden and mortality through enhanced surveillance, assessing pharmacy dispensing practices for respiratory illness, developing and evaluating novel surveillance and diagnostic methods for respiratory diseases, and evaluating the effectiveness of intervention programs, including the use of influenza vaccine in high risk populations (DeBuysscher et al., 2013). Since 2007, CDC has provided resources, training, and technical support to laboratories at IEDCR and ICDDR-B to strengthen diagnostics capacity for influenza and other respiratory pathogens[9]. These entire steps can prevent the country from stopping the epidemic treat of emerging respiratory viruses in Bangladesh (WHO 2008). We hope that this will very effective to tackle the situations. Furthermore massive actions from NGOs as well as from government should take appropriate measures to gear up for prevention of epidemic treat of respiratory infectious disease. *[J Sci Found, 2013;11(1):1-2]*

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