Project Title: Implementing effects of the Populous Institutions Surveillance System
Project Number: DOH96-DC-2033
Executing Institute: Centers for Disease Control Department of Health Taiwan
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Abstract:

OBJECTIVE：The study was to evaluate the surveillance system of populous institutions in Taiwan.

BACKGROUND：This system was established in September 2004 after the Severe Acute Respiratory Syndrome (SARS) epidemic. The purpose of this system is to facilitate early detection of outbreaks of respiratory infectious diseases and intestinal infectious diseases in populous institutions, allowing epidemic-prevention personnel to react promptly and implement necessary measures for epidemic control. Diseases including respiratory infectious diseases, intestinal infectious diseases and those clusters are needed to report to this surveillance system.

METHODS：Confirmative rate, confirmative duration, reported timing and descriptive epidemiology from 2005 to August 2007 were analyzed and we also examined cluster events in symptom surveillance system. Furthermore, international experience in journals and internet were reviewed as well.

RESULTS：From year of 2005 to August 2007, the confirmation rate and duration of populous institutions gradually increased each year, of which qualified rate rose by 6.9% and 5.7%. The reported timing decreased each year, and average timing was 1.6 day (standard deviation, 3.4). During this period, a total of 220 clusters were detected and 189 (85.9%) events were reported to surveillance system of populous institutions. The notification rate increase gradually each year, which was 82.3%, 85.4%, and 93.3%. Taipei city reported most cluster events in both respiratory infectious diseases and intestinal infectious diseases, followed by Taipei county. In total of 128 clusters were examined by laboratory, 94 clusters were positive. Only one institution reported twice respiratory infectious clusters in 2005, others were detected once.

Moreover, the results from satisfaction questionnaires indicated that staffs in populous institutions were satisfied with system convenience, personnel interaction, and information sharing. Though poor satisfaction rate in welfare institutions for the young was 64.7%, other satisfaction rates in institutions were within 78.6% to 94.4%. Also, staffs suggested that difficultly of comprehending of influenza-like-illness definition was the most, and therefore, Taiwan CDC should improve cognition and

modify notification definitions.

DISCUSSION：Due to inhabitants in populous institutions were eligible for disease outbreaks, appropriate educational training, accessible report system and professional consulting were necessary in disease control program. Furthermore, surveillance indicators and international experience sharing from abroad were essential as well.

Key word: Populous Institution, Communicable disease, Surveillance, Cluster