Syndromic Surveillance In Major Sporting Event - Jamaican Experience Dr Maung Aung, M.B.,B.S., M.P.H, Epidemiologist

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OBJECTIVE

This paper evaluates the expended and enhanced surveillance system specifically syndromic surveillance, which was implemented during the International Cricket Council Cricket World Cup West Indies 2007 (ICC CWC WI 2007) in Western Jamaica.

INTRODUCTION

Jamaica has never hosted such a big international sporting event like Cricket World Cup, which is the third largest sporting event in the world and has never been tested for its capacity to handle such an important event in the past. From March 5 to April 28, 2007 ICC CWC WI 2007 was held in the Caribbean and Jamaica proudly co-hosted the event. Four practice matches and opening ceremony were held in Western Jamaica. A total of sixteen (16) nations, respective teams members and their families, diplomats, heads of states and spectators participated in the opening ceremony, which some media dubbed "the most fantastic event ever to have happened in Jamaica and Caribbean by far". The goal of Western Regional Health Authority (WRHA) which is responsible to provide health care services to western Jamaica under the leadership of Ministry of Health (MoH) for this event is to monitor, control locally endemic infectious diseases and prevent imported infectious diseases from countries participating in the game. The focus was on sentinel syndromic surveillance, Port Health Surveillance, and Food safety at the venue.

METHODS

Four new syndromes (fever and respiratory symptoms, fever and haemorrhagic, fever and jaundice, fever with neurological) are added in addition to the current syndromic surveillance. The standardized data collection format is developed and collected data from all sentinel sites daily. The collection period was three weeks prior to the event, during the event and 3 weeks post event (from Feb 18 to May 19 2007). The data collection was done manually paper based and entered into Microsoft excel, analysed and faxed to the Surveillance Unit at MoH daily.

RESULTS

Conditions seen at Venue - Interestingly condition labelled "Others" which ranged from "dismenorrhagia" to "feeling weak" were the most conditions seen by physicians. Accident was the second most condition seen followed by gastroenteritis, fever with respiratory (others three syndromes were not reported) and heat related illness.

Reporting compliance - A total of twenty-two (22) sites were asked to report daily. Of (22) sites only 52% submitted their reports daily on the period.

Patients seen - Majority of patients seen were local people mainly performers who came to perform for the opening ceremony.

Port Health (Airport and Seaport) - A total of 1374 visitors were listed to have come from malarious endemic countries during the month of March 2007. Of 1374 visitors 1124 (82%) were investigated.

Emergency Room (ER) visits - The data revealed that there was no significant increase in ER visits during the period under surveillance.

CONCLUSION

Awareness of health care providers - Despite the series of sensitisation sessions which were done by MoH prior to the event lack of awareness or little knowledge about conditions / syndromes of interest by the health care providers on the ground proved a major issue as this may have impacted early detection of diseases. However there is room for improvement.

Timeliness, completeness of the data - The daily collection of paper based data manually slowed down the cleaning and analysing process. And inconsistency in reporting from some sentinel sites resulting in incompleteness of data was another major issue as we were not quite sure that the data reflected the true nature of what was happening at the time.

Port Health - The strengthening of existing port health surveillance at major international airports and sea ports was of a great success as majority of visitors were screened and interviewed at the point of entry to prevent importation of communicable diseases.

Although we anticipated disease outbreak given that Jamaica has experienced malaria outbreak since December 2006 (malaria has been successfully eliminated from Jamaica since 1965) during this period we did not see (1) major increase in Emergency Room visits (2) major infectious disease outbreaks (3) major food borne outbreak except two minor food borne outbreaks and (4) major road accidents.

REFERENCES

(1) Enhanced Surveillance and Response System Plan for Mass Gathering in Preparation for ICC CWC WI 2007 By Ministry of Health, Jamaica. Unpublished Paper