

A Vaccination Program to Control an Outbreak of Acute Hepatitis A among MSM in Taiwan, 2016

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Abstract : Background and Objectives: Hepatitis A is primarily acquired by the fecal-oral route through person-to-person contact or ingestion of contaminated food or water. During 2010 to 2014, an average of 83 cases of locally-acquired disease was reported to Taiwan's notifiable disease system. Taiwan Centers for Disease Control (TCDC) identified an outbreak of acute hepatitis A which began in June 2015. Of the 126 cases reported in 2015, 103 (82%) cases were reported during June–December and 95 cases (92%) of them were male. The average age of all male cases was 31 years (median, 29 years; range, 15–76 years). Among the 95 male cases, 49 (52%) were also infected with HIV, and all reported to have had sex with other men. To control this outbreak, TCDC launched a free hepatitis A vaccination program in January 2016 for close contacts of confirmed hepatitis A cases, including family members, sexual partners, and household contacts. Effect of the vaccination program was evaluated. Methods: All cases of hepatitis A reported to the National Notifiable Disease Surveillance System were included. A case of hepatitis A was defined as a locally-acquired disease in a person who had acute clinical symptoms include fever, malaise, loss of appetite, nausea or abdominal discomfort compatible with hepatitis, and tested positive for anti-HAV IgM during June 2015 to June 2016 in Taiwan. The rate of case accumulation was calculated using a simple regression model. Results: During January–June 2016, there were 466 cases of hepatitis A reported; of the 243 (52%) who were also infected with HIV, 232 (95%) had a history of having sex with men. Of the 346 cases that were followed up, 259 (75%) provided information on contacts but only 14 (5%) of them provided the name of their sexual partners. Among the 602 contacts reported, 349 (58%) were family members, 14 (2%) were sexual partners, and 239 (40%) were other household contacts. Among the 602 contacts eligible for free hepatitis A vaccination, 440 (73%) received the vaccine. There were 87 (25%) cases that refused to disclose their close contacts. The average case accumulation rate during January–June 2016 was 21.7 cases per month, which was 6.8 times compared to the average case accumulation rate during June–December 2015 of 3.2 cases per month. Conclusions: Despite vaccination program aimed to provide free hepatitis A vaccine to close contacts of hepatitis A patients, the outbreak continued and even gained momentum in transmission. Refusal by hepatitis A patients to provide names of their close contacts and rejection of contacts to take the hepatitis A vaccine may have contributed to the poor effect of the program. Targeted vaccination efforts of all MSM may be needed to control the outbreak among this population in the short term. In the long term, universal vaccination program is needed to prevent the infection of hepatitis A.

Keywords : hepatitis A, HIV, men who have sex with men, vaccination

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