## RISK FACTORS FOR FATAL CASES WITH HAND-FOOT-MOUTH DISEASE (HFMD) IN GUANGXI, CHINA

## J. Gong

Office for Emergency Response, Guangxi Zhuang Autonomous Region Center for Disease Prevention and Control, Nanning, China

**Background and aims:** A number of deaths occurred during the epidemics of HFMD in 2010 in Guangxi. The study was aimed to determine the risk factors for fatal HFMD.

**Methods:** The epidemiologic, clinical and laboratory data of fatal cases were obtained from the electronic infectious disease reporting system.

**Results:** Of 36 fatal cases, 31 (86.11%) were caused by enterovirus 71(EV71); 15 (41.67%) did not visit doctors in a timely manner; 19 (52.78%) received initial clinical evaluation at village clinics. Among 33 cases who paid  $\geq 2$  visits to doctors, 26 (78.79%) were misdiagnosed upon initial visit; 23 (69.30%) were diagnosed at final visit. By the time of accurate clinical diagnosis, 65.71% (23/35) were classified as severe, 11.43% as dead and 22.86% as mild. The risk factors for the fatal cases who had not been diagnosed until in the period of severe illness and death were misdiagnosis (75.0%, 24/32) and untimely doctor visiting (34.38%, 3/8). The risk factors for the fatal cases who had been diagnosed during mild illness were poor medical care (50%, 4/8), followed by misdiagnosis (37.5%, 3/8) and untimely doctor visiting (37.5%, 3/8). The misdiagnosis upon initial clinical evaluation was attributed to the absence of rash in patient's complaints (66.67%, 24/36), the absence of rash at onset of illness (59.37%, 19/32) and the appearance of only single or two rash foci (75.0%, 24/32).

**Conclusions:** Training on atypical manifestations of HFMD for village doctors and enhanced health education for the public are recommended for the reduction of HFMD-related deaths.