

Impact of an Outbreak of the Severe Acute Respiratory Syndrome on a Hospital in Taiwan*M.C. Tsai*

National Cheng Kung University Medical Center, Taiwan

Objective: To estimate the impact of the severe acute respiratory syndrome (SARS) outbreak on a tertiary-care hospital in Taiwan, ROC in early 2003.

Methods: The study estimated the utilization of resources related to infection control, SARS-related medical services, routine medical services, and SARS-related medical outcomes at the National Cheng Kung University Hospital (NCKUH) from 25 March–16 June 2003 through a cross-sectional survey of hospital records.

Results: An average of 5,100 persons per day (4,580–5,610 = 95% Confidence Interval (CI)) underwent fever screening at the outpatient and emergency department (ED) entrances to the hospital, of which 35 per day (30–40 = 95% CI) were referred for further evaluation for suspected or probable SARS. Emergency department isolation surge capacity was created with 12 new beds outside of the ED:

eight for SARS assessment, three for patients awaiting in-hospital bed assignment, and one for resuscitation. A total of 382 patients were fully evaluated for suspected or probable SARS outside of the ED, of which 27 were admitted.

The average of the numbers of outpatient clinic visits, ED visits, ED trauma patient visits, ED admissions, hospital admissions, and operative procedures all decreased during the outbreak. A total of 38 patients were hospitalized with suspected SARS, of which three received the final diagnosis of “probable SARS”. Two patients with probable SARS died. No cases of nosocomial SARS transmission occurred.

Conclusion: This SARS outbreak was associated with a substantial use of hospital and ED resources aimed at infection control, a comparatively less use of resources related to the medical care of patients with suspected or probable SARS, and a decreased use of routine medical services.

Keywords: emergency department (ED); impact; management; outbreak; severe acute respiratory syndrome (SARS); surge capacity; Taiwan

Prehosp Disast Med 2005;20(2):s105