

# ICU patients risk dying of pneumonia

“Once a patient develops severe hospital-acquired pneumonia requiring ICU care, the mortality is very high.” – The study’s principal investigator Amy Stebbings.

By SALMA KHALIK

Patients admitted to the medical intensive care unit of a hospital may face a greater risk of dying from pneumonia. Of the patients admitted to the National University Hospital’s medical ICU, 17 per cent were stricken with pneumonia while in hospital. Of this 17 per cent, only one in four left the hospital alive. This was what a team of NUH doctors found when they did a six-month study in 1994 of 136 patients admitted to this ICU.

Pneumonia is an infection of the lungs caused by either bacteria or virus. Common symptoms include coughing, chest pains, chills, fever and shortness of breath. Eleven of the patients caught pneumonia while being treated in the unit. Another 13 got pneumonia in the wards and had to be put under intensive care. These patients appear to be at greater risk of dying than those who did not get pneumonia, or who contracted pneumonia outside the hospital. The study’s principal investigator, Dr Amy Stebbings, a chest physician now in private practice, said that the patients could have been further weakened by the pneumonia they came down with while being treated in the hospital.

Of the 24 who got pneumonia while in hospital, seven died of it, and not from the illness for which they were admitted. Another 11 succumbed to their original illnesses. Only 25 per cent, or one in four, from this group left the hospital alive. This compares unfavourably with the 60 per cent survival rate of ICU patients who did not have pneumonia. Of the 15 patients studied who had pneumonia before entering the hospital, 67 per cent survived. Dr Stebbings said the high death rate makes the problem a very serious one. Not all patients who catch pneumonia in hospital end up in intensive care. The vast majority are managed in the general wards. She said: “Once a patient develops severe hospital-acquired pneumonia requiring ICU care, the mortality is very high.”

A paper on the study by a team in the latest Singapore Medical Journal said: “It is an important clinical problem because it is common, causes significant increase in mortality and increases the duration of hospitalisation.” Dr Stebbings said that the strains of pneumonia caught in hospitals tend to be more dangerous than the ones contracted outside hospital. There is no vaccine yet to protect patients against getting the strains of pneumonia found in hospitals.

The Health Ministry, responding to questions from The Straits Times, said: “All hospitals are required and have implemented infection control programmes to prevent and minimise the development and spread of infections among patients and health-care workers.” It said it has issued to all hospitals an infection control manual prepared by its advisory committee on infection control, and that this was reviewed regularly. All acute care hospitals, it said, monitor the rate of infections that originate in hospitals. Data from the Singapore General Hospital on respiratory-associated pneumonia in the surgical ICU in the last two years, it said, showed that the rates are comparable with those in data from the Centers for Disease Control and Prevention in the United States.

The ministry said that if a patient is in a “reduced conscious state”, is not mobile, or has uncontrolled diabetes mellitus, he is more likely to get pneumonia in hospital, “which may not be preventable even with stringent infection control procedures.”