

Thesis Title Nosocomial Infections in Cancer Patients
at Udonthani Hospital

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M.N.S. Infection Control Nursing

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Abstract

The purposes of this research were to determine the incidence, distribution length of stay, type and cost of antibiotic drugs for nosocomial infections and mortality rate of nosocomial infected patients, who were admitted in Udonthani Hospital during the period of May 1 to August 31 , 1996.

Data was collected using surveillance form developed by the researcher and definition of nosocomial infections of Centers for Disease Control and Prevention 1988 and 1992 were used to diagnose nosocomial infections.

The study results revealed that :

1. The incidence and distribution of nosocomial infections were found among 323 cancer patients under surveillance. Of these, 31 of them developed nosocomial infections and 37 infections were diagnosed. The incidence of nosocomial infections was 11.46 per 100 patients or 1.31 per 100 patient-days. Male patients had higher incidence of nosocomial infections than female patients with the rate of 13.25 and 9.55 per 100 patients or 1.35 and 1.26 per 100 patient-days respectively. The highest infection rate

was in patients aged between 20-39 years. Which were 21.21 per 100 patients or 2.27 per 100 patient-days.

The gastrointestinal cancer patients had the highest infection rate, which were 15.66 per 100 patients or 1.63 per 100 patient-days. The cancer patients who had acquired immunodeficiency syndromes had the highest infection rate, which were 100 per 100 patients or 33.33 per 100 patient-days. The patients with moderate nutrition insufficiency (albumin between 2.1-2.8 gm/dl) had the highest infection rate, which were 30.19 per 100 patients or 2.13 per 100 patient-days. Nosocomial infection rate was higher in patients admitted with infectious diseases (34.29 per 100 patients) than patients without infectious diseases (5.14 per 100 patients). The medical intensive care unit had the highest infection rate, 66.67 per 100 patients or 8.33 per 100 patient-days. The most common site of infection was gastrointestinal tract infection (27.03 percent), followed by surgical site infection (21.62 percent). Gram negative bacteria was the major causative microorganism (65.79 percent).

2. The mean length of hospitalization in patients with nosocomial infections was 22.35 days. While that of patients without nosocomial infections was 7.27 days.

3. Twenty-nine nosocomial infected patients received antimicrobial drugs. Most of them, 58.06 percent of nosocomial infected patients received one type of antimicrobial drug. The most common antibiotics used was cephalosporins. Total cost of antimicrobial drug used for nosocomial infected patients was 220,790 baht. The average cost of the antimicrobial drug used was 7,122 baht per patient.

4. The fatality rate was higher in nosocomial infected patients (22.58 percent) than patients without nosocomial infections (3.42 percent).

The findings indicate that nosocomial infections and factors related to nosocomial infections are important issues and will have a major impact to cancer patients. Therefore health care personnel should concern and comply with infection control policy.