

Infection Prevention Reduces Risk of Death, Costs of Care



Elderly patients admitted to intensive care units (ICUs), who contract an infection during their stay, are about 35 percent more likely to die within five years of leaving hospital, according to a study published in the American Journal of Infection Control. Preventing two of the most common health care-acquired infections – bloodstream infections caused by central lines and pneumonia caused by ventilators – can increase the odds that these patients survive and reduce the cost of their care by more than \$150,000.

Senior study author Patricia Stone, director of the Center for Health Policy at Columbia University School of Nursing, noted that what works to prevent infections has been known for decades, and this study shows how much money can be saved by spending on preventive measures.

The study analysed outcomes for 17,537 elderly Medicare patients admitted to 31 hospitals in 2002 in order to assess the cost and effectiveness of infection prevention. Using an additional five years of Medicare claims data the researchers then assessed the long-term outcomes and health costs attributed to health care-acquired infections.

Fifty-seven percent of patients died within five years; however, infections made death more likely. Seventy-five percent of those who developed central line-associated bloodstream infections (CLABSI) died within five years, as did 77 percent of those who developed ventilator-associated pneumonia (VAP).

CLABSI prevention programmes, which included simple measures such as hand washing before handling the catheter and immediately changing the dressing around the central line if it gets wet or dirty, led to an estimated gain of 15.55 years of life on average for all patients treated in the ICU, the study found.

Efforts to prevent VAP resulted in an estimated gain of 10.84 years of life on average for all patients treated in the ICU.

The ongoing cost of running an infection prevention programme in the ICU is on average \$145,000, the study found. Prevention efforts reduced ICU costs by \$174,713 per patient for each instance of CLABSI, and by \$163,090 for VAP.

Source: [Newswise](#)

Image source: Columbia University School of Nursing

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