Study reveals true picture of preventable deaths in hospitals

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(Medical Xpress) -- There are almost 12,000 preventable deaths in hospital every year due to problems with care but this is less than a third of the number previously thought, according to new research.

The study, published in *BMJ Quality and Safety*, found the majority of poor care associated with preventable deaths was the result of poor monitoring of the patient's condition, wrong diagnosis or errors in medication or fluid replacement.

Something went wrong - described as an adverse event - in about 13% of adult patients who died in acute hospitals in England. However, the researchers concluded that their subsequent death was due to the adverse event, and therefore preventable, in less than half of these patients (5.2% of all deaths) - equivalent to 11,859 adult preventable deaths in hospitals in England.

Current Department of Health and the National Audit Office estimates suggest there are 40,000 preventable deaths each year in England.

The new findings, funded by the National Institute for Health Research, are based on the most detailed study of hospital deaths ever conducted in England. Researchers from Newcastle University, the London School of Hygiene & Tropical Medicine, Imperial College London and the National Patient Safety Agency studied 1,000 randomly selected patients who died in 10 hospitals during 2009.

Their medical records were intensively reviewed by highly experienced doctors who looked not only for any clinical errors committed but also for any failures to investigate or treat patients correctly. Doctors reviewing the medical records also assessed each patient's likely survival on admission to hospital. This showed that most preventable deaths occurred in those who were severely ill with multiple conditions and would have had less than a year to live.

The authors concluded: "The incidence of preventable hospital deaths is much lower than previous estimates based on studies that did not assess the causal relationship between problems in care identified and subsequent death. The burden of harm from preventable problems in care is still substantial. A focus on deaths may not be the most efficient approach to detecting healthcare-related harm and identifying opportunities for improvement given the low proportion of deaths due to problems with healthcare."

"Although the quality of care that three-quarters of patients received was judged to be good or excellent, there is clearly plenty of scope for improvement in clinical practice," they added. "The principal area of concern is clinical monitoring on the ward."

The lead researcher, Dr Helen Hogan of the London School of Hygiene & Tropical Medicine, said: "While any patient dying from an adverse event is a tragedy and any deaths in hospital due to poor care are of considerable concern, it is important that our estimate of the size and impact of the problem is accurate and we understand what we can do to prevent such incidents. Hospitals can and must learn from careful analysis of individual preventable deaths and make every effort to avoid any preventable deaths.

"Currently, there is considerable emphasis on hospitals reviewing their mortality rates. However, if 95% of deaths in hospital are not due to

preventable poor care, not only is the scope for hospitals to demonstrate reduction in their mortality rate limited, but also the overall mortality rate is not a meaningful indicator of the quality of a hospital."

More information: Preventable deaths due to problems in care in English acute hospitals: a retrospective case record review study. *BMJ Quality and Safety.*

Provided by Newcastle University