

FOCUS ON RESEARCH

THE PREVALENCE AND NATURE OF ADVERSE EVENTS IN AN ACUTE HOSPITAL IN SCOTLAND

Researchers

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Aim

To design and pilot a method that will allow quantification of the amount and type of adverse events in acute hospitals in Scotland

Project Outline/Methodology

Adverse events are unintended injuries or complications that are caused by health care management, rather than by the patient's underlying disease which lead to death, disability at the time of hospital discharge or prolonged hospital stay. Studies have demonstrated that 3% to 17% of patients suffer an adverse event in acute hospitals in different health care systems. The amount and type of adverse events have not been previously measured in the Scotland. Using an established methodology we determined the adverse event rate among 353 patients admitted for a period of at least 24hrs to the departments of acute medicine, acute surgery and obstetrics at Aberdeen Royal Infirmary (ARI), a 900-bed teaching hospital.

Identification of adverse events- A detailed case note review and analysis using a specially designed form, adapted from a previous UK study of adverse events was performed to identify possible adverse events as documented in the medical or nursing notes.

Analysis of adverse events- An expert group adjudicated on the adverse events that were identified by the research nurses. A comparison of the prevalence of AEs using this case note review method with those identified using a hospital-based reporting system at ARI was made.

Key Results

Nearly 8% of patients suffered an adverse event of which 39% of these were deemed preventable by the group. The amount of adverse events varied markedly between clinical areas ranging from 0% in Obstetrics, 6.5% in Acute Medicine to 13% in acute surgery. In 11% of cases the adverse events was thought to have contributed to the patient's death whilst 7% of events led to permanent disability of the patient. Only 10% of adverse events were identified

by the existing voluntary anonymous reporting system at Aberdeen Royal Infirmary.

Conclusions

This study provides an important starting point for the understanding of adverse events and their consequences in the Scottish Healthcare system. It demonstrates that there is a significant amount of events and that the consequences can include severe permanent disability and death. A larger study is required to provide a more representative picture. Further work is required to explore the types of adverse events and their contributing factors across a variety of clinical areas across Scotland.

What does this study add to the field?

Previous studies have demonstrated that many hospitalised patients suffer an adverse event. This is the first study to measure the prevalence and nature of adverse events in Scotland

Implications for Practice or Policy

NHS Quality Improvement Scotland (QIS) has identified patient safety as a key target area and are putting in place systems to aid the identification and prevention of adverse events in Scottish hospitals. Only 10% of the adverse events identified by case-note review were identified by the established voluntary reporting system. Many of the events may have been viewed by staff as being the result of the patient's clinical condition and not as a result of a specific adverse event. This may not be surprising as the reporting systems employed in hospitals are still in their relative infancy and the definition of adverse events may not be widely known. Further development of these systems is required with further education of staff.

Where to next?

A larger study is required to provide a more representative picture for Scotland. Further work is required to explore the types of adverse events and their contributing factors across a variety of clinical areas across Scotland.

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