

BUILDING SAFER SYSTEMS: THE DEVELOPMENT OF A MEDICATION SAFETY CHECKLIST
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Background and Objective

Nurses, other health professionals, health care leaders and citizens are all concerned about medication safety. The most common, most preventable category of adverse events in Canadian hospitalized patients is that of adverse drug events, which occur at least once in 2 - 3 % of all hospitalizations. Yet, we are still trying to develop better scientific approaches to improving medication safety in today's complex health care environments. In the field of ecological restoration, researchers work with local communities to repair damaged environments. We decided to adapt the techniques of restoration science to the study and repair of medication safety issues in one medical ward at the Royal Alexandra Hospital, a 700 bed teaching hospital in the Capital Health Region of Edmonton, Alberta.

Methods

Our team included nurse researchers, managers, clinical nurse leaders, a clinical pharmacist, and a physician leader. Using techniques from restoration science, we worked with 26 practicing nurses on a busy, acute medical ward to design a novel approach to medication safety. In group meetings with ward nurses, we first listed and then photographed medication safety issues on the ward, such as an overcrowded narcotics cupboard and a poorly organized medication room. We then reviewed the photographs with ward nurses and collaboratively developed a research-based Medication Safety Inventory (MSI). We distributed the MSI to all ward nurses to anonymously collect their views of medication safety and safety culture on their ward and in the hospital.

Results

Research participants used the MSI results and the photographs to identify staff education and the physical environment as their top priorities for improving medication safety. They formed a "Coaching and Clean-Up Crew" of ward practitioners and leaders to strengthen the ward culture and environment for medication administration. They altered the pharmacy delivery schedule, introduced new documentation practices, improved the nursing orientation for new staff, and began talking about medication safety problems when they occur. They also took repeat photographs to document their improvements so that they can keep track of medication safety regularly on their ward through periodic collection of repeat photographs and MSI surveys.

Conclusions

Our research team and participating nurses learned that we can adapt knowledge and methods from restoration science to increase our awareness and understanding of nursing-sensitive and other environmental factors associated with medication safety. We also showed that by involving leaders and practitioners in our research, practicing nurses willingly participated in the study, redesign and strengthening of medication safety practices and safety culture within the program's existing resources. In addition, our work has now been presented in six peer-reviewed and 15 invited presentations across Canada as well as in Japan, Brazil, and Mexico.