

A literature Review: Towards a Healthy Workplace -- Environmental Factors that Contribute to Medication Errors in the Long Term Care Environment

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Understanding the airline industry quality improvement initiatives and tying these principles into the Long Term Care work environment has been an important precursor to developing strategies that promote patient safety. Working towards a healthy work environment may lead to a reduction in medication errors, promoting patient health and safety, promoting the health of the nursing staff.

Under-reporting of medication errors poses a significant health, and safety problem as it reduces the ability of management to work out preventive mechanisms to reduce the medication incidence. Various factors within a toxic work environment have been identified for this under reporting.

In 1998 the percentage of people in Canada over 85 was 10% and this proportion is expected to reach 16% by 2041. The Ontario government is increasing the number of long-term care beds in the province to meet the increasing demand and in 2004 an additional 20,000 beds were added to the existing 63,000. More long-term care residents and nursing shortages demand innovative medication care delivery models to ensure patient safety. Some say providing safe thereby satisfying working practice environments will increase nurse retention in a time of nursing shortage.

The literature was searched using PubMed. Five articles described analytical studies, including cohort and case-control studies relating to medication errors in the Long Term Care work environment. Two articles were based solely on environmental contributing factors. Six articles mentioned work environmental variables that contribute to medication errors such as nurse satisfaction, and creating a learning organization. Additionally, two articles found that creating a healthy workplace culture and environment free of blame and shame, was found to encourage staff to report and investigate errors, thereby reducing the potential for more errors occurring. One study looked at the safety achievements of the airline industry and related it to the health care environment in regards to medication error reduction.

Medication use is highest among the residents of long-term care facilities. Overall 51% or about 0.96 medication incidents per 100 resident-months were judged as preventable.

In Japan medication incidents occur more frequently in units with high nurse to patient ratio and ill defined drug dispensing procedures. Moreover, three major organizational factors were identified as underlying medication incidents, including: "violation of rules"; "failure of labor management"; and "defects in the standardization of nursing practice".

In the United States, the contributing environmental factors to medication errors included distractions, lack of focus, and failure to follow standard operating procedures. Nursing units are vulnerable to many distractions and interruptions that affect the working

memory and the ability of the nurse to focus. These toxic work environments are contributing to medication errors and compromising the health and safety of the most vulnerable patients.

About a half of medication incidents are not reported through official channels, but relayed through informal communication. These toxic work environments of fear and shame, are becoming a patient and staff safety hazard. Hospitals must make its' work environment one that encourages and rewards staff to report and investigate medication errors.