SYNOPSIS

KEY POINT SUMMARY

OBJECTIVES

The objective of this study was to evaluate the effectiveness of replacing floor lifts with mechanical ceiling lifts in an extended care unit.

DESIGN IMPLICATIONS

When installing ceiling lifts for both lifting and repositioning, ensure that all of the lifting and repositioning slings are compatible with the ceiling lift model specified. Ceiling lifts can be incompatible with pre-existing structures; therefore, design the structure of a building to support the installation of ceiling lifts at a later date.

Effectiveness of Installing Overhead Ceiling Lifts: Reducing Musculoskeletal Injuries in an Extended Care Hospital Unit

Ronald, L. A., Yassi, A., Spiegel, J., Tate, R. B., Tait, D., Mozel, M. R.
2002 | American Association of Occupational Health Nurses Journal
Volume 50, Issue 3, Pages 120-127

Key Concepts/Context

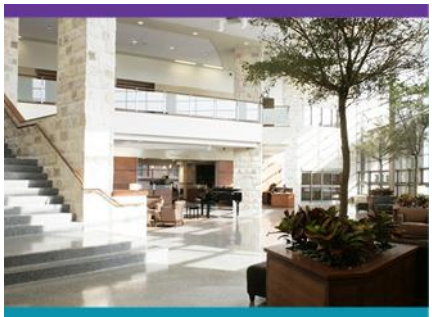
High rate of musculoskeletal injuries (MSI) among healthcare workers is well documented. Lifetime prevalence rates of back pain greater than 70 percent have been reported and higher incidence rates of MSI have been observed in healthcare workers compared to the general population and two other occupation groups. Mechanical lifting equipment has been recommended as an effective tool for decreasing the rate and severity of MSI in healthcare workers.

Methods

This study used a pre-post comparison of musculoskeletal injuries abstracted from injury reports for all staff occurring in the unit during a three-year period prior to the installation of 65 ceiling lifts between April and August 1998 and a 1.5-year follow-up period in the extended care unit of a British Columbia hospital.

Findings

The results of this evaluation suggested that while resistive behaviors by patients represented the major patient-related injury causal factor, the installation of ceiling lifts in combination with a training program is effective in reducing the number of musculoskeletal injuries of nurses and long-term care aides during lifting and transferring patients in an ECU.



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Limitations

Although the ceiling lifts were designed for both lifting and repositioning residents, the ceiling lifts were not used for repositioning residents in this unit because of problems with the repositioning slings. This study lacked a control group, which made it impossible to rule out the effect of external confounders. It was also not possible to separate an effect of ceiling lifts alone as opposed to an effect of implementing the training program. The decreased rate of MS eyes could have also been attributed to the Hawthorne effect associated with implementing the ceiling lifts.