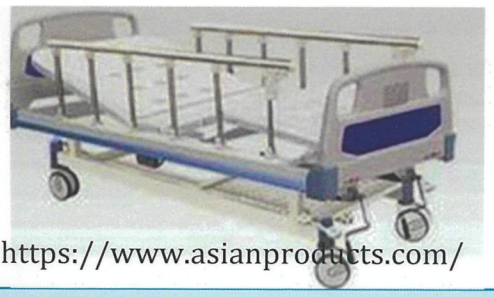


https://www.asianproducts.com/

Bed Rails

Does the use of bedrails reduce the risk of falls and bed-related injuries in nursing home resident's aged 65 and over?

By Laura Hazlett

INTRODUCTION

The population of New Zealand is ageing and in the 2006 census 30% of New Zealand's total population were aged 65 years and over with 10% of this population living in residential care (Statistics New Zealand, 2007). Internationally, around 50% of nursing home residents fall at least once a year with about one-fourth of these being falls from bed (Healey, et al, 2008). Bedrails are commonly used as a safety device to reduce the risk of patients falling from their bed in most settings where older people receive care (Rollins, 2006), however, the role of bedrails in falls prevention and the occurrence of bed-related injuries is controversial with the view that they are harmful and ineffective and at times, can be viewed as a form of inappropriate restraint. The lack of adequate research impacts on nursing practice, as nurses can become unaware of what is considered 'best practice' surrounding the use of bedrails.

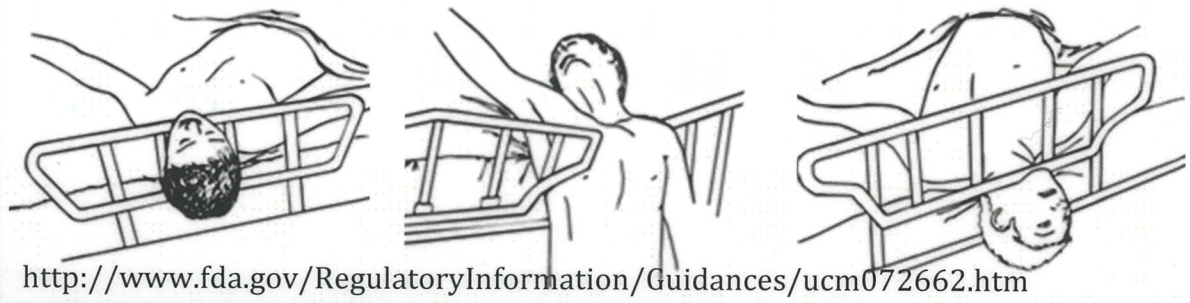
PRACTICE ISSUES

- *Routine use:*

Bed rails are more commonly used with elder patients as a falls risk intervention, however in a study on reducing bedrail use in nursing homes it was found that a lot of residents lacked the cognitive ability to use a call bell when in need of assistance and would see the bedrail as a barrier to climb over, causing more harm than if the bedrail was not there.

- *Inappropriate use:*

Bedrails are not usually appropriate for patients who would be able to mobilise independently, or who do not have the cognitive ability to ask for assistance when needed. Use of bedrails with patients such as this can be seen as a form of physical restraint ("a mechanical appliance that inhibits and individuals freedom of movement" (Fonad, et al, 2008)), which can raise ethical issues. Other interventions such as a falls alarm, crash mat or ultra-low bed would be more suitable alternatives.



http://www.fda.gov/RegulatoryInformation/Guidances/ucm072662.htm

LITERATURE REVIEW

When reading the literature that is published on bedrails there is generally a very negative emphasis on them with views that they are 'ineffective in preventing falls or injuries and are dangerous to patients, either through direct injury or increasing risk of falls and injury' (Healey & Oliver, 2009). An article by Rollins, (2006) discussed the safety issues surrounding the use of bedrails and outlined that in a study conducted to investigate the links between the use of bedrails and patient falls, 125 falls from bed occurred over a six month period with 56 being falls from beds with bedrails in use. However, Risk of injury related to bedrail use is not confined to falls; entrapment, entanglement and asphyxiation are also recognised as a risk (Shanahan, 2012). In the USA 70% of bed related deaths were due to entrapment between the mattress and rails, 18% were due to entrapment of the neck between rails and 12% were due to falls (Ng, et al, 2008). Some articles expressed that bedrails can cause patients to develop indirect conditions such as constipation, pressure ulcers, DVT, incontinence, confusion and reduced mobility (Healey & Oliver, 2009). However it is more likely for older patients who as a population, have a higher chance of developing problems such as these to be given bedrails than younger, fitter patients, therefore the development of these conditions should be considered correlating issues, not caused by the use of bedrails. Most articles concluded that healthcare organisations should not aim to completely reduce the use of bedrails, but instead focus on reducing inappropriate use of bedrails on a case-by-case basis (Healey, et al, 2008), and implementing the use of other interventions such as falls alarms, crash mats and ultra-low beds, which can be done by individualised assessment.

RECOMMENDATIONS

- *Individualised assessment*

From a patient safety and ethical point of view, an individualised approach to falls prevention is the best strategy. The assessment should take into consideration the patients age, falls history, mental status, cognitive ability, level of mobility, urinary or gastrointestinal function, medication and disease pathology. This approach will reduce the occurrences of inappropriate and routine use of bedrails by identifying which patient's it would be suitable to use bedrails for and which patient's are not.

- *Develop a checklist or criteria*

A checklist, criteria or flow chart for Nurses to use while individually assessing the patient will help to cut down the time used to do this. Implementing interventions accordingly will help nurses to see all options available and what intervention would be best suited to the patient e.g. falls alarm, crash mat, ultra-low bed or bedrails.

CONCLUSION

The use of bedrails in falls prevention should not be totally eliminated, as they do not appear to increase the risk of falls from bed, injury from falls or bed-related injuries. However, bedrails should never be used routinely as this could cause them to be classed as a restraint. The use of individualised assessment to determine the best intervention for the patient will result in the safe and ethical use of bedrails.

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