The rise and fall of cot sides

Govier I, Kingdom A (2000) The rise and fall of cot sides. *Nursing Standard*. 14, 31, 40-41.
Date of acceptance: December 12 1999.

Ian Govier MSc, BN, DipN, RGN, PGCE, RNT, is Senior Nurse, Professional Development and Training, NHS Direct Wales. Alison Kingdom BN, DipN, RGN, PGDip, is Senior Nurse (Trauma and Orthopaedic Surgery), Morriston Hospital, Swansea NHS Trust.

Summary

Some researchers have questioned the use of cot sides, citing evidence that the incorrect use of them might be considered dangerous and even unethical. This article looks at some of the literature on the subject and discusses the results of an audit which was carried out in a large district general hospital last year.

key words

- Ethics
- Decision making process

These key words are based on the subject headings from the British Nursing Index. This article has been subject to double-blind review.

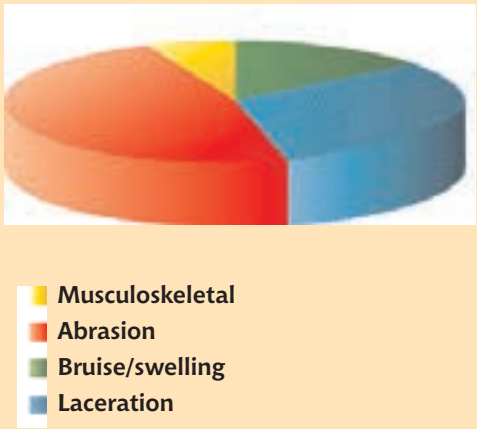
FORTY YEARS ago, Hazell (1960) observed that the more backward a ward appeared, the more cot sides seemed to be in evidence. Tyler (1992) suggested that the indiscriminate use of cot sides reveals a lack of imagination on the part of carers with Watson and Brunton (1990) cogently stating that their inappropriate use constitutes an unacceptable form of restraint. More recently, Jehan (1999) continues to question their use and cites evidence that the improper use of cot sides can be considered dangerous and even unethical.

Literature review and audit results

In a reflective and committed response to Jehan's (1999) article questioning the use of cot sides, the nursing division of a large Welsh district general hospital undertook an audit of their use. The principal aim of the audit was to investigate the general usage of cot sides and discover whether links existed between their usage and patient falls from beds and subsequent injuries. Eight wards, with a total of 206 beds (27 per cent of hospital capacity), were included in the audit. These wards involved areas where patients are considered to be at high risk of falls from beds, such as elderly care, neurology, neurosurgery, and trauma and orthopaedics. Additional data was provided from a hospital database on patient falls from beds between January and June 1999, hospital incident forms, staff questionnaires, review of existing literature and inspection of patient case notes.

Of the eight wards that participated in the audit, 83 patients had use of partial or complete cot sides either for use in the day, at night or both; this number represented 40 per cent of in-patients on these wards. The principal types of cot sides used were the folding and telescopic styles. Sixty sets of cot sides were also left on beds for storage purposes, with staff highlighting and justifying the perennial problem of locating adequate storage space. Only three of the eight wards had space for storage, but on inspection, these areas were quite inadequate and posed a potential threat to staff due to the cluttered environment and the precarious storage practices.

Fig. 1. Nature of injuries involving cot sides



Potential risks of cotsides Gray and Gaskell (1990) emphasise the potential risk of injury to patients when cot sides remain attached to beds. They illustrate this potential hazard by describing the account of an independent and alert patient who sustained extensive bruising over the antero-lateral aspects of both lower limbs from repeated attempts to get out of a bed when cot sides were left in place for storage purposes. When this hazard was identified to nursing staff, some anecdotal responses appeared to support Gray and Gaskell's notable observation, with some nurses citing patient reports of discomfort to the backs of their thighs when getting out of bed with cot sides left in place. Despite these verbal reports, cot sides continue to remain attached to beds, increasing the risk of injury to patients.

Incidents reported in the audit Between January and June 1999, 126 patient falls from beds were recorded on hospital incident forms; 57 of these patients had cot sides in use, with 21 (37 per cent) sustaining injuries such as lacerations, abrasions and contusions (Fig. 1). Only one patient had bumper pads attached to the cot sides, despite them being available on some of the wards. However, during the same period, there were 69 reported falls from beds that did not involve cot sides, with 28 (40 per cent) patients sustaining injuries. The majority of injuries sustained by patients affected the upper body, especially the head, and were of equal distribution between those who had fallen with or without cot sides in place. Of these patients, 80 per cent were aged 65 or over, with three-quarters of all falls occurring between the hours of 10pm and 8am (Table 1).

Night is often a time when some patients become increasingly disorientated, with nurses in

the audit claiming that the use of cot sides at night contributed to patient safety and that leaving them down would seem to be neglectful and might lead to actual harm. This response from nursing staff appears to be false logic, as opinions and studies indicate that cot sides can potentiate, rather than prevent, patient injuries (Jehan 1999, Everitt and Bridel-Nixon 1997, Gaebler 1993, Watson and Brunton 1990, Barbieri 1983). The Royal College of Nursing (1992) document *Focus on Restraint* argues for the alteration of the environment and meeting the comfort needs of patients instead of using cot sides. Suggestions include adjusting the level of lighting, adjusting the bed to its lowest position, ensuring that patients go to the toilet before retiring to bed and during the night, as well as attending to patients' needs regarding hunger, thirst and warmth, which can all contribute to restlessness at night.

Assessing the risk Following a review of literature, Everitt and Bridel-Nixon (1997) identified key factors when assessing the risk of patient falls. These were: history of falls, age of patient, mental status, level of mobility, urinary/gastrointestinal function, medications, disease pathology (for example, postural hypotension) and sensory loss. For audit purposes, a small, random sample of eight case notes was inspected and revealed that five of the patients who had fallen demonstrated at least six of the risk factors identified by Everitt and Bridel-Nixon. Further scrutiny revealed a lack of adequate assessment and, in some cases, poor documentation of the fall incidents from both medical and nursing staff. Inspection of nursing documentation also revealed that where patients had suffered multiple falls, care plans were not evaluated to include nursing interventions to prevent or reduce the further likelihood of accidents involving falls from bed.

Table 1. Patients falling out of bed (January-June 1999)

Age profile	Times of the day
<65 years: 26 65-75 years: 22 76-85 years: 40 >86 years: 38	Between 10pm and 8am: 93 (74 per cent) Between 8am and 10pm: 33 (26 per cent)
Total falls: 126	**Total patients: 126**
Average age:	72 years (mean) 79 years (median)

Conclusion

Much of the literature is unable to identify whether the use of cot sides is the problem, or if nurses fail to assess patients adequately. Although the sample size in the audit limits any firm conclusions, it was apparent that a systematic approach to the use of cot sides was not in evidence. One ward, however (an elderly care setting), which took a more pro-active and systematic approach to the use of cot sides, also experienced the lowest incidence of patient falls from beds. There also appears to be little correlation between cot side use and receiving an injury from falling. The hospital involved in the audit has clear guidelines for cot side use, yet 63 per cent of nurses questioned were unaware of the existence of such a document.

This clearly demonstrates the need for improved communication and dissemination of hospital policies, balanced with a responsibility of nursing staff to avail themselves of such information.

As a result of this audit, recommendations were made and, although limited specifically to the hospital where the audit was undertaken, they can apply to all settings where cot sides are used in patient care:

- Nurses should familiarise themselves with current hospital policy for the use of cot sides and use existing hospital guidelines.
- A more systematic approach to the use of cot sides in patient care – especially assessment of at risk patients should be undertaken.
- Health professionals should become more pro-active in implementing care to reduce the incidence of patient falls from beds.
- A large-scale study should be undertaken to investigate the use of cot sides in relation to falls from beds.

Although there might appear to be some justification for the appropriate employment of cot sides, their indiscriminate use continues to be a feature of patient care. A working group has been established to review all aspects of cot side use. The large-scale study recommended by the audit has been taken on by a senior nurse who will research the use of cot sides in relation to falls from beds as part of a Master's degree. Finally, the audit emphasises the need for evidence-based care in a climate of increasing nurse accountability, especially made manifest through the principles of clinical governance and post-registration education and practice

REFERENCES

Barbieri EB (1983) Patient falls are not patient accidents. *Journal of Gerontological Nursing*. 9, 3, 165-173.

Everitt V, Bridel-Nixon J (1997) The use of bed rails: principles of patient assessment. *Nursing Standard*. 12, 6, 44-47.

Gaebler S (1993) Predicting which patient will fall again… and again. *Journal of Advanced Nursing*. 18, 1985-1902.

Gray CS, Gaskell D (1990) Cot sides: a continuing hazard for the elderly. *Geriatric Medicine*. 20, 21-22.

Hazell K (1960) *Social and Medical Problems of the Elderly*. London, Hutchinson Medical Publications.

Jehan W (1999) Restraint or protection? *Nursing Management*. 6, 2, 9-13.

Royal College of Nursing (1992) *Focus on Restraint: Guidelines on the Use of Restraint in the Care of Older People*. Second edition. Bury St Edmunds, St Edmundsbury Press.

Tyler J (1992) Safety first? *Nursing the Elderly*. 4, 1, 12-13.

Watson R, Brunton M (1990) Restrain yourself. *Nursing the Elderly*. 2, 5, 20-21.