Workers and patient safety I

A physiotherapy perspective on patient injuries. Learning from incident reporting

Nilsing Strid E[1], Öhrn A[2], Kvarnström S[2], Wåhlin C[3]

[1] University Health Care Research Center, Faculty of Medicine and Health, Örebro University, [2]Center for Healthcare Development, County council of Östergötland, [3]Department of Occupational and Environmental Medicine, Linköping University Hospital and Unit of Intervention and Implementation Research, Institute for Environmental Medicine, Karolinska Institutet, Stockholm. Sweden

Background
Patient adverse events such as accidental falls are still common in healthcare, putting not only patients but also healthcare workers **(HCWs)** at risk for injuries. The causes are often multifactorial and many can be predicted and prevented. However, the effectiveness of preventive programs varies, which emphasizes the need to better understand the factors that increase the risk of falls to inform intervention strategies. Learning from incident reports is one core strategy to develop a culture of safety for both patients and HCWs, but research from a physiotherapy perspective is scarce.

Purpose
The aim of this retrospective study was to examine patient injuries reported over a 4-year period, and to further explore patient falls regarding situations and contributory factors putting patients at risk for fall.

Methods
The Patient and Workers Safety Study (PAWSS) was conducted in a County Council of eastern Sweden, focusing on patients and HCWs injuries over a 4-year period. Data was retrieved from the Incident reporting systems during 2011-2014. This part of the study included 11006 incident reports of risks and patient injuries.

Results

The majority of the 11006 reported incidents were related to medication errors, 23%, followed by incidents occurred in care processes, 22%. Patients were in mean 65 years old, 55% were women and 45% men. There was a decline in frequency of reported incidents during the four years, from 3010 incidents in 2011 to 2201 in 2014. Patient falls were reported in 17% of all incidents (n=1861), most common in care processes. These patients were in mean 78 years old, and the majority male (52%). Patients were more likely to fall in un-witnessed situations (92%), primarily when going to the toilet (25%) or just found on the floor (16%). In 8% of the fall incidents, patients were assisted by a HCW, a situation where some HCWs were injured. Contributing factors to the fall were reported in approximately 40% of the incidents. Impaired balance or muscle strength were most common (42%) followed by cognitive impairments (21%). In a few incidents, factors related to the organization, technology/tools or environment were reported as contributing to the fall. Fifteen percent of the fall incidents required treatment, and 1% resulted in death.

Conclusions

Patient falls are common adverse events. Patients are more likely to fall when unassisted, and impaired balance and muscle strength are major contributing factors to patient falls. These are known risk factors which can be assessed and targeted in a fall prevention program of which physiotherapists can play an important role. Whether a fall prevention program incorporating physiotherapists in a human factor system approach increases patient and workers safety needs to be further investigated.

Implications

Incident reports capture information that provides a learning opportunity by identifying injury risk factors. The results from this study highlight patient falls as harmful for both patients and HCWs. By providing assessments of functioning, risks and tailored interventions, physiotherapists at different healthcare settings, wards and teams may play an important role in safe patient handling for both patients and HCWs.

Key words: patient safety, incident reporting, accidental falls

Funding/acknowledgements

This work was funded by the County Council of Östergötland and by the Department of Medical and Health Sciences, Linköping University, Sweden.

Ethical approval

The study was approved by the Regional Ethical Board at Linköping University, Sweden (Dnr: 2015/330-31).