Incident reporting of safety risks and injuries among health care workers and patients

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Background

- A need to explore reported incidents based on a system approach including perspectives of both patients and health care workers
- Previous research confirms a relationship between working conditions and injuries among healthcare workers
- Poor health care working conditions may also be associated with patient injuries
Aim

- Explore health care workers incidents and injuries, and patient injuries reported over a 4-year period.
- Analyze the risks and causes of health care workers with a particular focus on type of injuries, who get injured and situations they occurred.
- Analyze patient injuries regarding situations and contributory factors, especially those putting patients at risk for fall (since accidental factors are not declining).
Method - PAWSS
Patient and Workers Safety Study

- Retrospective design
- Incident reporting systems
- Data collection 2011-2014
- County Council of Östergötland
- 13 000 employees
Incident reporting and classification

• Synergi

• includes all types of risks and incidents of both patients and workers reported by individual staff members and heads of departments.

• Incidents are defined as undesired events or situations that could lead, or could have led, to health problems, illness or accidents

• Manager also responsible for reporting to Social Insurance Agency and the Swedish Work Environment Authority
Results
Health Care Workers

• 1702 incidents/injuries
• 87% women
• 42 years
• 2436 injuries
• prevalence of reported incident each year: 3.5%
• 85% of incidents happened at work, rest while commuting to and home from work
Who gets injured?

- Nurses: 42%
- Nurse assistants: 22%
- Dental personell: 7%
- Physicians: 6%
- Mental health personell: 6%
- Biomedical scientist: 4%
- Physiotherapists/Occupational therapists: 3%
- Other professions: 10%
Frequently reported injuries

- Pain condition: 643
- Needle stick and sharp injuries: 621
- Overexertion injuries and falls: 354
- Mental illness: 130
- Crush and pinch injuries/fractures: 190
- Human bites and scratches: 65
- Incidents causing low back pain: 109
109 workers with low back pain

“We had to move the patient from the bed to the wheel chair. The patient started to struggle and resisted the movement. I bent forward and felt pain in my lower back”
Risk situations

- Patient handling and movement
- Slip, trip, falls
- Manual lifting and handling incidents
- Patient treatment => needle stick, sharps injuries
- Crush, transporting beds
- Sitution at work with violence
Injury severity levels
1457 health care workers

4 injury severity levels

• 3% required treatment and resulted in permanent harm,
• 13% required treatment but did not result in permanent harm,
• 59% did not require treatment
• 25% had a risk situation, but caused no injury
11 006 patient injuries

- Patients were in mean 65 years
- 55% were women

Incidents categorized in injury severity levels:
- 3% required treatment and resulted in permanent harm
- 12% required treatment but no permanent harm
- 22% did not require treatment
- 61% had a risk situation, but caused no injury
- 2% of the incidents resulted in death
Accidental patient falls

- Patient falls were reported in 17% of all incidents (n=1861)
- Falls most common in care processes
- 78 years old, 52% men
- Patients more likely to fall in un-witnessed situations (92%), primarily when going to the toilet (25%) or they were just found on the floor (16%)
- 15% of the fall incidents resulted in harm requiring treatment
- In 8% of fall incidents, patients were assisted by a HCW, a situation where some HCWs were injured
Workers injuries

- Incident reporting systems provides a learning opportunity, identifies risk factors and injuries for health care workers and patients

- **Reduce the number of injuries to zero**

- Encourage employers to collaborate with workers, the union, HR and the occupational health services, discuss how risks are assessed at the work place using a human factor system approach
Patient injuries

• Patients are more likely to fall when unassisted
• Impaired balance and muscle strength are major contributing factors to patient falls
• However, our results highlight patient falls as harmful for both patients and HCWs
• Provide assessments of functioning, risks assessment and tailored interventions, it may play an important role in safe patient handling for both patients and HCWs
Thank you for your attention!

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Carayon (2006, 2014) Systems Engineering Initiative for Patient Safety (SEIPS) model of work system and patient safety
Majority of patient injuries Were related to:

• Medication errors, 23%
• Incidents occurred in care processes, 22%

Quality assessment of the reports

• Information regarding patient age, a description of the incident was sex reported to a high degree nearly 100%
• Type of injury was described in 7% of the reports