Hospital-acquired pressure injuries: Are they accurately reported?

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A collaboration between the SLHD, and the University of Sydney.

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Declaration of
Financial Interests or Relationships

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We have no financial interest or relationship(s) to disclose
District Hospital-Acquired Pressure Injury (HAPI) rates ALMOST DOUBLE from 2010 to 2014
RPAH Hospital-Acquired Pressure Injury (HAPI) rates
THREE FOLD from 2010 to 2014
How did this happen?
Let’s not jump in and use what we think MIGHT work
Royal Prince Alfred Hospital

- Teaching hospital
- Major trauma centre
- Largest critical care service in Australia
- Largest Melanoma unit in the world
1. Pressure Injury Taskforce

2. District Pressure Injury Lead

3. Sub-committees

The Pressure Injury Prevention and Management Taskforce
Our Study - The HAPI Project

1. Prospective clinical study of HAPI reported on IIMS and real time observation
2. Audit of PIPM Equipment and Resources SLHD
3. Active Powered Mattress and Risk Score: Report on their relationship to HAPI
4. Examination of incontinence, skin conditions and their relationship to HAPI
5. Nursing knowledge and attitudes of Pressure Injury Prevention and Management (PIPM) survey
   Nursing interviews (semi-structured, face-to-face)
6. Patient and Carer interviews (semi-structured, face-to-face)
7. Medical record audit
Aims

• To examine the reasons for the increased incidence of hospital-acquired pressure injuries (HAPIs) reported in the Incident Information Management System (IIMS)

• To gain feedback from nurses regarding HAPI being reported in the IIMS at one tertiary hospital in Australia
Methods

- Prospective descriptive study design with qualitative and quantitative components
- Study approved by HREC
- Consented voluntary inclusion into the study
- July 2015 to June 2016
Procedure

• Audit procedure outlined by Wounds West (Prentice and Stacey)

• To ensure interrater reliability, both CNC’s conducted skin assessments separately on ten patients. The Cohens Kappa coefficient suggested moderately strong concurrence.
Procedure

• Semi-structured interviews with nurses
• Thoughts on the HAPI being reported in the IIMS
• Documentation of the pressure injury prevention plan or strategies
Results

Reported HAPI IN IIMS ($N=417$)

Patients reported with HAPI and reviewed ($N=363$)

Correctly reported HAPI in IIMS (stage, location, true PI, Acquired in Hospital) ($N=106: 29.2\%$)

Patients Confirmed with CAPI ($N=21: 5.8\%$)

Patients confirmed with HAPI ($N=152: 41.9\%$)

Patients unavailable for clinical review ($N=54$)
- Discharged ($N=23$)
- Deceased ($N=11$)
- Too Unwell ($N=8$)
- Not Available ($N=11$)
- Refused ($N=1$)

Patients with Skin Conditions incorrectly reported as HAPI ($N=190: 52.3\%$)
### Results

#### Number of patients with IIMS-reported HAPI per ward/unit in the hospital (N = 363)

<table>
<thead>
<tr>
<th>Clinical Unit</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intensive Care Services</td>
<td>117 (32.2)</td>
</tr>
<tr>
<td>Cardiovascular</td>
<td>38 (10.5)</td>
</tr>
<tr>
<td>Orthopaedics</td>
<td>27 (7.4)</td>
</tr>
<tr>
<td>Acute Aged Care</td>
<td>25 (6.9)</td>
</tr>
<tr>
<td>Colorectal Surgery</td>
<td>24 (6.6)</td>
</tr>
<tr>
<td>Cardiology</td>
<td>20 (5.5)</td>
</tr>
<tr>
<td>Aged Care, Palliative Care, Immunology ID</td>
<td>14 (3.9)</td>
</tr>
<tr>
<td>Respiratory</td>
<td>13 (3.6)</td>
</tr>
<tr>
<td>Neurology</td>
<td>11 (3.0)</td>
</tr>
<tr>
<td>Urology, Gynaecology, Breast and Surgical Oncology, Head and Neck</td>
<td>12 (3.3)</td>
</tr>
<tr>
<td>Transplant</td>
<td>8 (2.2)</td>
</tr>
<tr>
<td>Renal</td>
<td>9 (2.5)</td>
</tr>
<tr>
<td>Emergency</td>
<td>7 (1.9)</td>
</tr>
<tr>
<td>Upper GIT</td>
<td>5 (1.4)</td>
</tr>
<tr>
<td>Gastroenterology, Drug and Alcohol, Dermatology</td>
<td>7 (1.9)</td>
</tr>
<tr>
<td>Haematology/Bone Marrow Transplant</td>
<td>5 (1.4)</td>
</tr>
<tr>
<td>Coronary Care Unit</td>
<td>5 (1.4)</td>
</tr>
<tr>
<td>Medical Admission and Short Stay</td>
<td>3 (0.8)</td>
</tr>
<tr>
<td>Maternity Postnatal</td>
<td>2 (0.6)</td>
</tr>
<tr>
<td>Theatres</td>
<td>2 (0.6)</td>
</tr>
<tr>
<td>Antenatal</td>
<td>1 (0.3)</td>
</tr>
<tr>
<td>Missing</td>
<td>6 (1.7)</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>363 (100.0)</strong></td>
</tr>
</tbody>
</table>
Skin Lesions/Injuries mistaken for Pressure injuries

- Broken Skin
- IAD
- White tail spider bite
- Abrasion from cast
- Skin tear
- Head skin lesion
- Broken skin
- Friction from pad
- Abrasion
- Skin lesion
- Dressing irritation
- A reddened area that blanches

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Moisture Associated Skin Damage
Results

- Twenty eight nurses were interviewed
- Majority RNs, some CNS, CNE and EEN
- Three main themes
  1. Meeting mandated requirements
  2. Miscommunication between reporting and clinical documentation
  3. Difficulty in reporting other aetiologies.
Discussion

Key Issues:

• Sacrum and buttocks account for the highest incidence of HAPI’s
• There is a culture of reporting everything
• There is a disconnect between reporting systems and medical records
• Nurses struggle to determine the difference b/w Stage1+2 PI’s to MASD
Discussion

Key Issues:

• Has led to a whole range of other opportunities
• Review of our equipment including mattresses (standard and powered)
• Development of a MASD package
• Review nurses knowledge and attitudes to PI prevention and management
• Audit of our medical records and discussions with coders for improved documentation
Limitations

- Time between incident reported and review by project team
- Data were not collected on staff knowledge of reporting or diagnosing
- We did not review other patients on the ward who did not have a PI reported
• Point prevalence includes moisture-associated conditions
• Pressure injury monitoring validation of PI and review of strategies
• Monthly report tabled at executive meetings
• Moisture conditions in the reporting system
• Interactive education sessions on differentiating PI from moisture conditions
Incontinence, Incontinence-Associated Dermatitis, and Pressure Injuries in a Health District in Australia

A Mixed-Methods Study

Michelle Barakat-Johnson, Catherine Barnett, Michelle Lai, Timothy Ward, Kathryn White

ABSTRACT

PURPOSE: The purpose of this study was to measure the prevalence of incontinence, incontinence-associated dermatitis (IAD), and pressure injuries (PI) on a local health district in Australia. We also aimed to determine associated evidence-informed practices.

METHODS: A mixed-methods study design was used. A total of 250 adult inpatients were recruited by convenience sampling methodology. Incontinence was measured using the Incontinence Association of Australia Frequency/Severity scale. Pressure injuries were measured using the Pressure Injury Scale for Incontinence. All participants also completed a questionnaire to identify evidence-informed practices.

RESULTS: Almost half of the participants had incontinence (n = 111/250, 44.4%), 42.4% had IAD (n = 105/250), and 3.6% (n = 9/250) had PI. There was a significant association between incontinence and mobility, and between IAD and PI. In total, 22.3% of patients who were continent (n = 58/250) were wearing an incontinence product. Analysis of qualitative data found that both incontinence management and language used to refer to incontinence pads were inconsistent across the health district.

CONCLUSION: The prevalence of incontinence among participants observed in this study was similar to that reported internationally, but the prevalence of IAD was slightly lower. This issue along with the prevalence of IAD and PI may be amenable to improvement. The results of this study advocate for the need for improved education on the evidence-informed practice for incontinence and related pressure injuries.

KEYWORDS: Incontinence, Incontinence-Associated dermatitis, Nursing practice, Pressure Injury, Pressure Ulcer, Prevalence.

INTRODUCTION

This study is a follow-up to our prior research that identified errors in incident reporting, such as misdiagnosis of incontinence-associated dermatitis (IAD) as a hospital-acquired pressure injury (HAPI), as a large tertiary hospital in Sydney, Australia.1 Misdiagnosis of skin conditions results in negative patient outcomes including incorrect treatment and secondary skin complications.1 Recent HAPI best practice guidelines highlight high prevalence and disease and prevent HAPI and improve awareness of incontinence and associated skin conditions.2

5. Introduction

Reporting and monitoring of incidents enable health service to identify trends in patient safety and quality, which is an important component of clinical governance. Hospital-acquired pressure injuries (HAPI) are one of the leading inpatient complications in Australia and have been recently ranked as one of the top 14 hospital-acquired complications (HACs) to drive improvements in patient safety and quality of care.1 In response to a substantial increase in the reported incidence of HAPI in the Incident Information System (IIS) in a large tertiary hospital in Sydney, Australia, a project team consisting of senior wound nurses, a research nurse, a quality safety manager and an occupational therapist was convened to investigate the reasons for the increase. This paper presents the findings from an analysis of all HAPI reported in the IIS at one tertiary hospital.

HAPI is a commonly reported condition that impact on length of stay and the cost of care.1 For the patient, the impact on quality of life can only be estimated.1 A recent review suggested the financial impact of HAPI in Australia to be at least one billion dollars across all public hospitals.3 Effective prevention of pressure injuries (PI) in adults contributes to the health and well-being of the individual and the health care system.4,5 A knowledge gap among nurses in both identification and management of incontinence-associated skin conditions has been described in the literature.2 The implications of this knowledge gap are significant, as an increase risk of PI and perpetuates mismanagement of a particular skin condition. An important outcome of this study is the potential for clinical leadership to work with the project team to develop comprehensive and evidence-based care plans for incontinence and associated skin conditions.

Keywords: incontinence, incontinence-associated dermatitis, nursing practice, Pressure Injury, Pressure Ulcer, Prevalence.

REFERENCES


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Peoples Choice Award 2017
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Questions?

“...I believe there’s a question in the back.”