INTRODUCTION

It is quite apparent that improvements in patient safety are required. Landmark reports form the Institute of Medicine in the US1,2, and the NHS in the UK3, alerted healthcare providers, organizations and consumers to the deficiencies in healthcare practices. Both new Zealand4 and Australia5 followed suit with published reports on adverse events in public hospitals. Research in the field of psychology demonstrates that organizational culture (or the context in which work occurs) has important influences on safety6,7. In health, a growing body of literature lends support to the claims of J. Bryan Sexton, Peter Pronovost and the ‘The Joint Commission’, that ‘Safety culture is important, measurable and improvable’.8

J. Bryan Sexton:9
- Led the creation of the Safety Attitudes Questionnaire (SAQ) which was developed as a method of measuring caregiver attitudes about safety.
- The psychometrics of the SAQ in brief:10
  - Data was obtained from six cross-sectional surveys of 10,843 health care providers in 203 clinical areas (including critical care units, operating rooms, inpatient settings, and ambulatory clinics) in three countries (US, UK, NZ, New Zealand).
  - Scale reliability was strong at 0.9 (assessed via Raykov’s p coefficient).
  - Multilevel factor analysis produced a six factor model (see Table 1).

AIM

- To assess the current status of a tertiary ICU as a first step to improving its safety culture.

METHOD

A convenience sample of ICU staff were invited by 2 senior ICU nurses to anonymously complete a computerised version of the SAQ during a 6-week period. The SAQ collects demographic information (age, sex, experience) and contains 60 items that are answered using a five-point Likert scale ranging from “strongly disagree” to “strongly agree.” Some items are negatively worded. The SAQ has a “Collaboration and Communication” section, where respondents are asked to indicate the quality of collaboration and communication they have experienced with each of the types of providers in their clinical area (e.g., intensivists, Residents, Nurses, Pharmacists, Wardpeople etc.) using a five-point Likert scale ranging from Very Low to Very High. There was an open-ended section for comments. The question was: “What are your top three recommendations for improving patient safety in this ICU.”

RESULTS

Sample size:
- A response rate of 52% was achieved (63 of 122 ICU staff members).
- Job categories: (response rates)
  - 43% (39 of 90) nursing; 52% (12 of 23) medical; 100% (9 of 9) other staff which included allied health and wardpersons; 3 missing.

Demographics:
- Though not statistically significant, on average:
  - medical staff did have slightly more intensive care experience than nursing staff (x=10.94 vs 8.07); and
  - nursing staff had worked longer in this particular ICU than medical staff (x=6.93 vs 4.39).

DISCUSSION

In this ICU overall, staff were positive about the quality of teamwork and the level of satisfaction with their work. Similar to findings from the UK, U.S.A. and New Zealand10 staff were largely dissatisfied with managerial action and negative about their working conditions.

The recommendations staff made for improving patient safety reflected the lower ranked factor scores with the majority suggesting improvements related to working conditions and the safety climate. This finding could have also impacted on staff’s perceptions of management (e.g. insufficient staffing levels and availability of equipment may have been attributed to poor management decisions).

ICU physicians rated the quality of collaboration and communication with colleagues higher than nurses, however, the differences were not statistically significant (Table 2).

In this ICU, satisfaction with teamwork and job satisfaction were higher than perceived work stress.

Table 2. Percent positive scores

<table>
<thead>
<tr>
<th>Factor</th>
<th>Nursing</th>
<th>Medical</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teamwork climate</td>
<td>80.8</td>
<td>81.3</td>
<td>79.4</td>
</tr>
<tr>
<td>Job satisfaction</td>
<td>77.4</td>
<td>63.3</td>
<td>77.1</td>
</tr>
<tr>
<td>Stress recognition</td>
<td>71.2</td>
<td>77.1</td>
<td>69.0</td>
</tr>
<tr>
<td>Safety Climate</td>
<td>68.5</td>
<td>67.9</td>
<td>68.8</td>
</tr>
<tr>
<td>Working Conditions</td>
<td>50.0</td>
<td>58.3</td>
<td>51.2</td>
</tr>
<tr>
<td>Perceptions of Mgmt</td>
<td>44.9</td>
<td>39.6</td>
<td>42.9</td>
</tr>
</tbody>
</table>

Table 1. SAQ factor definitions and example items

<table>
<thead>
<tr>
<th>Factor Definition</th>
<th>Example Items</th>
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<tbody>
<tr>
<td>Disagreements in the ICU are appropriately resolved</td>
<td>I agree with my colleagues (may vary between the ACNC Safety and Quality Committee and the University of Texas Centre of Excellence for Patient Safety Research and Practice)</td>
</tr>
<tr>
<td>Job satisfaction</td>
<td>This hospital is a good place to work</td>
</tr>
<tr>
<td>Perceptions of workplace safety</td>
<td>I feel safe working in my environment</td>
</tr>
<tr>
<td>Stress recognition</td>
<td>I am less effective at work when fatigued</td>
</tr>
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REFERENCE


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