ATTITUDE of NURSES towards the USE of BRADEN SCALE in INTENSIVE CARE UNITS and MEDICAL WARDS

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BACKGROUND

65 Thousand Mortalities out of 1 Million Patients with Pressure Ulcer

United States of America:
✓ 0.4% to 38% in Acute Care
✓ 2.2% to 23.9% in Long Term Care; and
✓ 0% to 17% in Home Care Setting

Asia:
£ 2.1% to 31.3% in ICU

- Islam et al., 2010
- Suriadi et al., 2007

Philippines:
In a tertiary hospital, 20% orthopaedic patients

- Molon & Estrella, 2011

-Agency for Healthcare Research Quality (AHRQ), 2008
BACKGROUND

6th Indicator: Prevalence of Pressure
- Montalvo, 2007

14th National Patient Safely Goal: Reduce the risk of developing bed sores through comprehensive assessment
- The Joint Commission [TJC], 2011

Aside from positioning, skin care, and health education, pressure ulcer risk assessment is also important to prevent the occurrence of pressure ulcer
- Kallman & Suserud, 2009
BACKGROUND

BRADEN SCALE

Risk assessment scales were developed to help healthcare providers ensure correct evaluation of their patients

-Wann-Hansson & William, 2008

33 systematic reviews suggested that this scale has good sensitivity in predicting pressure ulcer risks

-Stotts & Gunningberg, 2007
PROBLEM STATEMENT

Non-compliant with the clinical guidelines for pressure ulcer prevention
- Wann-Hansson & William, 2008

Put low priority on pressure ulcer prevention
- Athlin & Idvall, 2010; Samuriwo, 2010

Applied Braden Scale to 11.26% of total hospital-days considering that Braden Scale was instructed to be employed to all hospital-days
- Cho & Noh, 2010
Pressure ulcer is multi-factoral in nature. -Moore & Price, 2004

**ATTITUDE**

Negative attitude towards pressure ulcer prevention resulted to a higher prevalence of pressure ulcer.

- Islam et. al., 2010

**CLINICAL EXPERIENCE**

In ICUs...

- Usually has higher incidence of pressure
- Most are bed-ridden patients
- Has small nurse-to-patient ratio
Investigating the relationship and difference of attitude with the nurses’ clinical area determines the need for motivational interventions and correcting misconceptions in using the Braden scale.
PURPOSE OF THE STUDY

Explored the relationship between the clinical area of nurses and their attitude towards the use of Braden Scale.
Moreover, this also investigated the:

1. **Attitude** of nurses towards the use of Braden Scale

2. Presence of significant **relationship** between the nurses’ clinical area and their attitude on the use of Braden Scale; and

3. **Difference** between the attitude towards the use of Braden Scale of nurses working in intensive care units and medical wards.
METHODOLOGY

Design

Descriptive Correlational Design

Locale

- 650 Bed-Capacity Hospital in Bonifacio Global City, Taguig (Medical Center A)
- 217 Bed-Capacity Hospital in Alabang, Muntinlupa (Medical Center B)
METHODOLOGY

POPULATION AND SAMPLE

Sampling Method
- Purposive Sampling

Inclusion Criteria
- Full time Staff Nurses
- Experienced using the Braden scale
- Working in Intensive Care Units or Medical Wards
### Sample Characteristics

<table>
<thead>
<tr>
<th>Demographics</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample</td>
<td>71</td>
<td></td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>15</td>
<td>21.13%</td>
</tr>
<tr>
<td>Female</td>
<td>56</td>
<td>78.87%</td>
</tr>
<tr>
<td><strong>Hospital</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medical Center A</td>
<td>37</td>
<td>52.11%</td>
</tr>
<tr>
<td>Medical Center B</td>
<td>34</td>
<td>47.89%</td>
</tr>
<tr>
<td><strong>Clinical Area</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medical Ward</td>
<td>32</td>
<td>45.07%</td>
</tr>
<tr>
<td>Intensive Care Unit</td>
<td>39</td>
<td>54.93%</td>
</tr>
</tbody>
</table>
METHODOLOGY

Ethical Considerations

- Approval of the patient services office and chief nurses of each locale was obtained.

- Autonomy and anonymity of the respondents were observed.

Research Instrument

Modified 11-item Survey Tool
developed by Moore and Price (2004)

Reliability Coefficient = 0.84
# Attitude of Nurses towards the Use of Braden Scale

<table>
<thead>
<tr>
<th>Item</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Uncertain</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
<th>Weighted Mean</th>
<th>Verbal Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. All patients are at potential risk of developing pressure ulcers.</td>
<td>26</td>
<td>24</td>
<td>0</td>
<td>15</td>
<td>6</td>
<td>3.7</td>
<td>PA</td>
</tr>
<tr>
<td></td>
<td>37%</td>
<td>34%</td>
<td>0%</td>
<td>21%</td>
<td>8%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. For me, Braden Scale is time consuming.</td>
<td>1</td>
<td>12</td>
<td>14</td>
<td>33</td>
<td>11</td>
<td>3.6</td>
<td>PA</td>
</tr>
<tr>
<td></td>
<td>1%</td>
<td>17%</td>
<td>20%</td>
<td>46%</td>
<td>15%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. In my opinion, several patients tend not to get pressure ulcers nowadays.</td>
<td>2</td>
<td>16</td>
<td>12</td>
<td>33</td>
<td>8</td>
<td>3.4</td>
<td>NPNA</td>
</tr>
<tr>
<td></td>
<td>3%</td>
<td>23%</td>
<td>17%</td>
<td>46%</td>
<td>11%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. I do not need to concern myself with Braden Scale in my practice.</td>
<td>0</td>
<td>5</td>
<td>6</td>
<td>40</td>
<td>20</td>
<td>4.1</td>
<td>PA</td>
</tr>
<tr>
<td></td>
<td>0%</td>
<td>7%</td>
<td>8%</td>
<td>56%</td>
<td>28%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Pressure ulcer treatment is of greater priority than pressure ulcer prevention.</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>14</td>
<td>53</td>
<td>4.6</td>
<td>VPA</td>
</tr>
<tr>
<td></td>
<td>3%</td>
<td>3%</td>
<td>0%</td>
<td>20%</td>
<td>75%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Continuous assessment of patients will give accurate account of their pressure ulcer risk.</td>
<td>54</td>
<td>13</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>4.7</td>
<td>VPA</td>
</tr>
<tr>
<td></td>
<td>76%</td>
<td>18%</td>
<td>4%</td>
<td>1%</td>
<td>0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Most pressure ulcers can be avoided.</td>
<td>38</td>
<td>23</td>
<td>4</td>
<td>6</td>
<td>0</td>
<td>4.3</td>
<td>PA</td>
</tr>
<tr>
<td></td>
<td>54%</td>
<td>32%</td>
<td>6%</td>
<td>8%</td>
<td>0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. I am less interested in pressure ulcer prevention than other aspects of nursing care.</td>
<td>4</td>
<td>9</td>
<td>6</td>
<td>39</td>
<td>13</td>
<td>3.7</td>
<td>PA</td>
</tr>
<tr>
<td></td>
<td>6%</td>
<td>13%</td>
<td>8%</td>
<td>55%</td>
<td>18%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. My clinical judgment is better than Braden scale scoring.</td>
<td>0</td>
<td>14</td>
<td>26</td>
<td>23</td>
<td>8</td>
<td>3.1</td>
<td>NPNA</td>
</tr>
<tr>
<td></td>
<td>0%</td>
<td>20%</td>
<td>36%</td>
<td>23%</td>
<td>8%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. In comparison with other areas of care, pressure ulcer prevention is a low priority for me.</td>
<td>2</td>
<td>4</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td>PA</td>
</tr>
<tr>
<td></td>
<td>3%</td>
<td>6%</td>
<td>7%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Braden Scale scoring should be regularly carried out on all patients during their stay in hospital.</td>
<td>24</td>
<td>33</td>
<td>10</td>
<td>4</td>
<td>0</td>
<td></td>
<td>PA</td>
</tr>
<tr>
<td></td>
<td>34%</td>
<td>47%</td>
<td>14%</td>
<td>6%</td>
<td>0%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Legend: 4.6 – 5.0: Very Positive Attitude (VPA); 3.6 – 4.5: Positive Attitude (PA); 2.6 – 3.5: Neither Positive nor Negative Attitude (NPNA); 1.6 – 2.5: Negative Attitude (NA); 1.0 – 1.5: Very Negative Attitude (NA)*

Overall Mean = 3.97; Positive Attitude
Attitude of Nurses towards the Use of Braden Scale

Studies from other countries showed same findings (Moore & Price, 2004; Islam et. al., 2010; Kallman & Suserud, 2009; and Beckman et. al., 2011)

Thinking that the clinical judgment is better than Braden scale leads nurses to seldom use Braden scale in their practice.

Kallman & Suserud (2009)…

- This impression may be related to their lack of knowledge and ‘insecurity’ to use the scale.

- Infrequent use of Braden scale leads to this misconception
Attitude of Nurses towards the Use of Braden Scale

No sufficient evidence was produced to show that clinical judgement can predict the risk of patient of developing pressure ulcer (Pancorbo-Hidalgo, et al., 2006).

Braden scale assessment is immediately necessary to be able apply appropriate preventive interventions especially to stage 1 pressure ulcer.
Clinical Area and Attitude towards the Use of Braden Scale

<table>
<thead>
<tr>
<th>Pearson Chi-Square ($X^2$) Value</th>
<th>Degree of Freedom (df)</th>
<th>Critical Value (CV)</th>
<th>p-value</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.1268</td>
<td>2</td>
<td>5.9915</td>
<td>0.010</td>
<td>Reject $H_0$</td>
</tr>
</tbody>
</table>

The clinical area of nurses is **significantly related** to their attitude towards the use of Braden scale.
Attitude of Nurses towards the Use of Braden Scale in ICU and Medical Wards

<table>
<thead>
<tr>
<th>Clinical Area</th>
<th>Mean</th>
<th>SD</th>
<th>z</th>
<th>P value</th>
<th>CV</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intensive Care Units</td>
<td>4.03</td>
<td>0.52</td>
<td>1.669</td>
<td><strong>0.0475</strong></td>
<td>1.645</td>
<td>Reject the $H_0$</td>
</tr>
<tr>
<td>Medical Wards</td>
<td>3.88</td>
<td>0.38</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Attitude of nurses towards the use of Braden scale in Intensive Care Units is **significantly higher** than those in Medical Wards.
Attitude of Nurses towards the Use of Braden Scale in ICU and Medical Wards

Nurses in ICU and medical wards may demonstrate different levels of attitude (Islam et al., 2010).

Variation in compliance, strategies, and practice allows patients to develop pressure ulcers (Lewin et al., 2003).

Risk assessment through Braden scale shall be performed regularly to all areas of a hospital not only to bed-ridden patients but also to newly admitted patients and those with low to moderate mobility problems.
CONCLUSIONS

✓ Nurses’ work area **depicts their attitude** in carrying out Braden Scale as a risk assessment tool to prevent their patients from developing pressure ulcer.

✓ While nurses from both clinical areas have **positive attitude**, this tends to be **greater in ICUs** than in medical wards.
RECOMMENDATIONS

NURSING PRACTICE

- Motivational strategies to balance the quality and type of patient care in intensive care units and medical wards.

- Encouraging frequent and regular use of Braden scale to all clinical areas increases their compliance to practice.
RECOMMENDATIONS

NURSING EDUCATION

- Integration of risk assessment to the core competencies of nursing students promotes positive attitude towards their practice.
RECOMMENDATIONS

NURSING RESEARCH

- Parallel surveys and interviews are encouraged to produce an in-depth information about their attitude and behavior.

- Analysis of the relationship between nurses’ attitude, barriers, and experience towards Braden scale assessment is also suggested.
RECOMMENDATIONS

NURSING RESEARCH

- Random sampling, increasing the sample size and multi-locality may improve the generalizability of study.


References


Thank you very much!
Maraming Salamat!
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