THE RELATIONSHIPS BETWEEN PATIENTS’ PERCEPTIONS OF NURSE CARING BEHAVIORS, NURSES’ PERCEPTIONS OF NURSE CARING BEHAVIORS and PATIENT SATISFACTION IN THE EMERGENCY DEPARTMENT

Theresa Bucco PhD; RN-BC
# Faculty Disclosure

<table>
<thead>
<tr>
<th>Faculty Name</th>
<th>Theresa Bucco  PhD, RN-BC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conflicts of Interest</td>
<td>None</td>
</tr>
<tr>
<td>Employer</td>
<td>Staten Island University Hospital</td>
</tr>
<tr>
<td>Sponsorship/Commercial Support</td>
<td>None</td>
</tr>
</tbody>
</table>
Objectives

- The learner will be able to identify the patients’ and nurses’ perceptions of nurse caring behaviors.
- The learner will be able to discuss the relationship between perceptions of nurse caring behaviors and patient satisfaction in the Emergency Department.
Background

- Approximately 100 million people seek care in Emergency Departments (ED) yearly which can be overwhelming for many Emergency Department nurses (Trzeciak & Rivers, 2003).

- Thus, caring for these patients and meeting their needs is challenging for Emergency Department nurses.

- It is the patients’ perceptions of the first caring encounter in the ED that can have a significant impact on patient satisfaction (Trout, Magnusson, & Hedges, 2000).

- Limited research has been conducted on nurse caring behaviors and patient satisfaction in the Emergency Department.
Purpose

The purpose of the study was to examine the relationships between patients’ perceptions of nurse caring behaviors, nurses’ perceptions of nurse caring behaviors and patient satisfaction in the Emergency Department.
Theoretical Framework

• Jean Watson’s theory (1979, 1985, 2008) addresses caring as an interpersonal process that occurs between two people and involves both the provider of care and the receiver of the care. The process is mutual, inter-subjective, and reciprocal (Watson, 2006).

• Caring can be demonstrated and practiced effectively only through interpersonal relationships (Watson, 2006).
Methodology

- Descriptive cross-sectional study
- Convenience Sample-Eighty-six nurse/patient dyads
- Setting: Mid-Atlantic regional medical center with two ED campuses designated as 911 receiving hospitals
- Background Information Questionnaire
- Patient Satisfaction Instrument (PSI) (Hinshaw & Atwood, 1982)
- Guidelines for ethical research for human subjects were provided by the Institutional Review Board
## Inclusion Criteria

<table>
<thead>
<tr>
<th>Nurses</th>
<th>Patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Registered Nurses</td>
<td>Age: 18 and 69 years</td>
</tr>
<tr>
<td>Working Full or Part Time in the Emergency Department</td>
<td>Emergency Severity Index (ESI) of 3, 4, or 5 as rated by the triage nurse.</td>
</tr>
<tr>
<td></td>
<td>Patients were able to read, speak, and understand English.</td>
</tr>
<tr>
<td></td>
<td>Recruited prior to discharge from the ED</td>
</tr>
<tr>
<td></td>
<td>Cared for by the same Emergency Department nurse from the time of arrival in the ED to discharge from the ED.</td>
</tr>
<tr>
<td>Variables</td>
<td>Conceptual Definition</td>
</tr>
<tr>
<td>------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Patients’ perceptions of nurse caring behaviors</td>
<td>Patients’ perceptions of nurses’ “acts, conduct, and mannerisms that convey concern, safety, and attention to the patient” in the ED. (Greenhalgh, Vanhanen, &amp; Kygas, 1998, p.928)</td>
</tr>
<tr>
<td>Nurses’ perceptions of nurse caring behaviors</td>
<td>Nurses’ perceptions of their “acts, conduct, and mannerisms that convey concern, safety, and attention to the patient” in the ED. (Greenhalgh, Vanhanen, &amp; Kygas, 1998, p.928)</td>
</tr>
<tr>
<td>Patient satisfaction</td>
<td>Patient’s opinion of nursing care received from the nurse who was assigned to him or her in the Emergency Department.</td>
</tr>
</tbody>
</table>
Statistical Design

- SPSS Version 22 software for Windows (IBM, 2013)
- Univariate: Descriptive statistics were computed on the sample characteristics and study variables.
- Bivariate: T-tests, ANOVAs and correlations were conducted to identify the presence of statistically significant relationships between patient satisfaction with patients’ perceptions of nurse caring behaviors and nurses’ perceptions of nurse caring behaviors.
- Multivariate: Multiple Regression
RESEARCH QUESTIONS & FINDINGS
## Descriptive Statistics of Sample

<table>
<thead>
<tr>
<th></th>
<th>Nurse</th>
<th>Patient</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td>Average 36</td>
<td>Average 42</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td>Female 83.7%</td>
<td>Female 76.4%</td>
</tr>
<tr>
<td><strong>Race</strong></td>
<td>White/Caucasian 79.5%</td>
<td>White/ Caucasian 75.3%</td>
</tr>
<tr>
<td><strong>Marital status</strong></td>
<td>Single 44.2%</td>
<td>Married 45.3%</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td>Bachelors Degree 48.8%</td>
<td>High School 66.9%</td>
</tr>
<tr>
<td><strong>Experience</strong></td>
<td>New graduate 57.6%</td>
<td></td>
</tr>
<tr>
<td><strong>Work</strong></td>
<td>Full time 80.2%</td>
<td>Full time 46.5%</td>
</tr>
<tr>
<td><strong>Previous ED visits</strong></td>
<td>At least one visit 68.6%</td>
<td></td>
</tr>
</tbody>
</table>
Major Research Question

What are the relationships between patients’ perceptions of nurse caring behaviors, nurses’ perceptions of nurse caring behaviors and patient satisfaction in the Emergency Department?
5 Research Sub-Questions

1. What are patients’ perceptions of nurse caring behaviors in the Emergency Department?
2. What are nurses’ perceptions of nurse caring behaviors in the Emergency Department?
3. What is the difference between nurses’ perceptions of nurse caring behaviors and patients’ perceptions of nurse caring behaviors in the Emergency Department?
4. What is the relationship between patients’ perceptions of nurse caring behaviors and patient satisfaction in the Emergency Department?
5. What is the relationship between nurses’ perceptions of nurse caring behaviors and patient satisfaction in the Emergency Department?
1. What are patients’ perceptions of nurse caring behaviors in the Emergency Department?

- Measured with CBI-24 (Patient Version)
  - 1-6 point Likert type scale
  - never to always
- CBI Scores Mean 5.58 (SD= .76)
- Cronbach’s alpha= .94
- Range 2.83- 6.00
2. What are nurses’ perceptions of nurse caring behaviors in the Emergency Department?

- Measured with CBI-24 (Nurse Version)
  - 1 to 6 point Likert scale
  - never to always
- CBI Scores Mean 5.26 (SD= .48)
- Cronbach’s alpha= .94
- Range 4.04-6.00
3. What is the difference between nurses’ perceptions of nurse caring behaviors and patients’ perceptions of nurse caring behaviors in the Emergency Department?

- Dyad Difference Scores
- Calculated by subtracting total CBI- 24 nurse scores from total CBI – 24 patient scores.

- Three categories
  - Category 1: patients rated nurse caring behaviors > than nurses
  - Category 2: patients & nurses scores were comparable
  - Category 3: Nurses rated nurse caring behaviors > than patients
CBI Dyad Difference Scores Categorized into 3 Categories

Category 1
$n=36$

Category 2
$n=40$

Category 3
$n=10$

Mean = 1.70
Std. Dev. = .67
$N = 86$
4. What are the relationships between patients’ perceptions of nurse caring behaviors, nurses’ perceptions of nurse caring behaviors and patient satisfaction in the Emergency Department?

### Pearson’s r Correlation of Mean Patient Satisfaction Scores and Study Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Patient Satisfaction</td>
<td>--</td>
<td>.24*</td>
<td>.11</td>
<td>.01</td>
<td>-.06</td>
</tr>
<tr>
<td>2. Nurse Age</td>
<td>--</td>
<td>.01</td>
<td>-.03</td>
<td>-.06</td>
<td></td>
</tr>
<tr>
<td>3. Patient Age</td>
<td>--</td>
<td>--</td>
<td>-.17</td>
<td>-.10</td>
<td></td>
</tr>
<tr>
<td>4. Time Spent with Patient</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>.11</td>
<td></td>
</tr>
<tr>
<td>5. Time Spent in Waiting Room</td>
<td>--</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p< .05*
5. What is the relationship between nurses’ perceptions of nurse caring behaviors and patient satisfaction in the Emergency Department?

- PSI scores were statistically significant and had a small to moderate correlation with nurse age, \( r (84) = .24, p<.05 \).
- PSI scores were inversely related to categories of dyad difference CBI scores at a statistically significant level, \( F (2, 83) = 13.29, p<.001 \).
## Multiple Regression Explaining Patient Satisfaction Scores ($n=86$)

<table>
<thead>
<tr>
<th>Variable</th>
<th>B(SE)</th>
<th>β</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nurse Age</td>
<td>.01 (.01)</td>
<td>.16</td>
<td>.11</td>
</tr>
<tr>
<td>Comparable Group Difference</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Scores (Reference)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Higher Nurse</td>
<td>-.74 (.18)</td>
<td>-.41</td>
<td>.001</td>
</tr>
<tr>
<td>Higher Patient</td>
<td>.41(12)</td>
<td>.12</td>
<td>.24</td>
</tr>
</tbody>
</table>

Model: $F (84) = 9.80, p < .001$. $R^2 = .27$. 
What are the relationships between patients’ perceptions of nurse caring behaviors, nurses’ perceptions of nurse caring behaviors and patient satisfaction in the Emergency Department?

• With reference to comparable dyad difference scores, the group with higher nurse CBI scores was negatively associated with PSI scores ($B=-.74; \ SE=.18; \ β=-.41; \ p<.001$).

• With reference to comparable dyad group difference scores, the group with higher patient CBI scores was no longer associated with PSI scores ($B=.41; \ SE=.12; \ β=.12; \ p=.12$).

• Therefore, the patients in the group with higher nurse rated caring behaviors reported less satisfaction than the groups with comparable and higher rated patient caring behaviors.
Hypothesis

The hypothesis of the study was that there would be a positive relationship between patients’ perceptions of nurse caring behaviors and patient satisfaction in the Emergency Department.

- Data from this study supported the hypothesis that there was a positive relationship between patient’s perceptions of nurse caring behaviors and patient satisfaction.
Implications

• Clinical Nursing Practice: Patient Satisfaction
• Nursing Education: Nursing Curriculum
• Nursing Administration: Financial resources
• Recommendations: Further studies
Thank-you.
References


