A Study of the Over-Representation of Males in the Population of Disciplined Nurses

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Background

• Criminal Convictions Study (2016): Among the 3,360 study subjects who had been licensed, 23% (n=759) were male, which is more than twice their proportion (8%) in the nursing workforce.

• TERCAP (2015): Among the 2,696 nurses board actions for committing a practice breakdown, 85% of them were female and 15% were male.

• A review of ten years (2003-2013) of NCSBN disciplinary data indicated that 17% of discipline involved male nurses.
Why are men over-represented in studies of nursing discipline?
Literature Review

• Men commit more crimes than women (Surowiec, 2011)
• Evidence of bias, discrimination, and inequalities faced by male nurses in comparison to female nurses (Anthony, 2004; Armstrong, 2002; Burtt, 1998; Evans, 2002; Nilsson, 2005).
• Men in professions traditionally seen as “women’s” are not perceived as competent as women. (Gordon and Draper, 2010)
Evangelista and Sims-Giddens (2014): Gender Differences in the Discipline of Nursing in Missouri

When compared with female respondents...
- Males had higher rates of discipline
- Males were disciplined more severely
- Males surrendered their license more frequently
Expert Panel: Background and Objectives

• In February 2015 a panel of researchers with expertise in the areas of forensic psychology, sociology, discipline, and gender differences in nursing convened.

• The general goal was to understand the contributing factors which result in a violation of the nurse practice act for male nurses.

• The specific purposes were to help guide NCSBN staff towards:
  - revealing causes of over-representation of males in disciplined
  - identifying best ways to formulate research questions
  - determining how the conclusions may apply to regulation.
Expert Panel: Recommendations

• The panel recommended that vignettes be composed and incorporated into survey questionnaires that could be administered to nurse managers, administrators, nursing board members, the public (patients), nurses, investigators, and attorneys.
• Random assignment of nurse gender in vignettes write-ups would be used to ascertain whether gender bias is present in the administration of discipline
• The vignettes would be developed to link to specific violations of the Nurse Practice Act in order to identify which violations are more likely to exhibit bias
Research Question 1

Are there differences in the way nurses and nurse managers/executives perceive the actions of male vs. female nurses?
Methods

• This question was studied by the administration of surveys containing hypothetical vignettes involving possible violations of the Nurse Practice Act (NPA)

• A short vignette was constructed that described a situation in which a nurse’s action (or non-action) could be considered a violation of the NPA

• A sentence followed the vignette and stated whether or not the nurse in the vignette was reported to the BON
Methods (cont.)

• Respondents indicated on a five point Likert-type scale whether they agreed or disagreed with the decision to report (or not report) the nurse.

• Three variations of each vignette were prepared: gender not stated, nurse identified as a female, and nurse identified as a male.
Survey Instrument

- A total of ten vignettes were composed which addressed the following circumstances under which the Nurse Practice Act could be violated:
  - Medication Administration
  - Patient Neglect/Abandonment
  - Scope of Practice
  - Substance Abuse
  - Unprofessional Conduct
Vignette Example

• The “Leaves Room” Vignette: A nurse is assisting a doctor with a procedure and makes a mistake (dropping something on the floor, handing the doctor the wrong item, etc.). The doctor verbally abuses the nurse and the nurse storms out of the room in the middle of the procedure.

• After reading this vignette respondents were asked their level of agreement with the decision to not report the nurse
Survey Implementation

- A random sample of 6,000 nurses was drawn from a national marketing list.
- Every nurse in the sample was mailed a survey randomly selected from one of thirty variations of the survey.
- Each questionnaire included five vignettes.
- Each questionnaire consisted of standard demographic questions about the respondents.
- 543 responses were received for an overall response rate of 9.9%.
### "Should Be Reported" Mean Scores for Nurses (Part 1)

<table>
<thead>
<tr>
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<th>Male</th>
<th>Neutral</th>
<th>Female</th>
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“Should Be Reported” Mean Scores for Nurses (Part 2)

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“Should Be Reported” Mean Scores for Nurses (Part 3)

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"Should Be Reported" Scores for Managers and Nurse Executives (Part 1)

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- Wrong Drug
- Wrong Dosage
- Cigarette Break
- Leaves Room
“Should Be Reported” Scores for Managers and Nurse Executives (Part 2)

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<td>Can't Read Telemetry</td>
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<td>CNA Takes Charge</td>
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<tr>
<td>Alcohol On Breath</td>
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<tr>
<td>Switches Urine Sample</td>
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“Should Be Reported” Scores for Managers and Nurse Executives (Part 3)

<table>
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<tr>
<td>Neutral (n=6) Female (n=6) Male (n=16) Massages Patient</td>
<td></td>
</tr>
<tr>
<td>Neutral (n=4) Female (n=14) Male (n=16) Asks For Loan</td>
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Research Question 2.

Are there differences in the way that BON staff/members (primarily investigators and attorneys) perceive the actions of male vs. female nurses?
Methods

• The methods and survey instrument were the same as what was used to survey nurses and nurse managers
• The survey was sent to the NCSBN Disciplinary Knowledge Network
• Every member of the DKN received a Qualtrics survey using the same five vignettes with variations of nurse gender
• Each questionnaire consisted of standard demographic questions about the respondents
• 122 responses were received for an overall response rate of 23.6%.
"Should Be Reported" Mean Scores for Disciplinary Knowledge Network

<table>
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<tr>
<th>Scenario</th>
<th>Female (n=84)</th>
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<th>Female (n=38)</th>
<th>Male (n=84)</th>
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<tr>
<td>Leaves Room</td>
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<tr>
<td>CNA Takes Charge</td>
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<tr>
<td>Switches Urine Sample</td>
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<td>Asks For Loan</td>
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</table>
Summary – Research Questions 1 and 2

• For the most part, the data from the survey of nurses did not uncover systematic gender differences in the reporting of nurses to the BONs.
• The only statistically significant difference -- the “leaves room” vignette -- suggested that a slight bias *in favor of males* might occur in a similar situation.
• The survey of members of the Disciplinary Knowledge Network also uncovered no systematic gender differences.
Research Question 3

3. Are there differences in the disciplinary/board actions, administered by the BONs, to Male and Female nurses who have committed comparable practice violations?
ANALYSIS OF BOARD ACTIONS IN THE TERCAP DATABASE
Distribution of BON Outcomes By Gender

Source: NCSBN TERCAP Database
Distribution of BON Outcomes by Gender and Level of Patient Harm (Part 1)

Source: NCSBN TERCAP Database

<table>
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<tr>
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<td>Male</td>
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</table>

Source: NCSBN TERCAP Database
Distribution of BON Outcomes by Gender and Level of Patient Harm (Part 2)

Source: NCSBN TERCAP Database
Research Question 4

4. Are there differences in the disciplinary/board actions, administered by the BONs, to male and female nurses who have committed a comparable crime?
CRIMINAL CONVICTION CASE REVIEW
Methods – Direct Comparison

• Sample: Nurses who received a disciplinary action or were denied a license by a BON for a criminal conviction in 2012 or 2013.
  – Cases in which a BON action was taken in response to an action by a BON in another state were excluded from the analysis.
  – Cases missing data on gender and/or age were dropped from the analysis.

• To start with, we did an overall comparison of the actions taken by the Boards against male and female nurses.
Distribution of Disciplinary Actions by Gender

Source: NCSBN 2012-13 Criminal Conviction Case Review

- Probation of license
- Revocation of license
- Unspecified licensure action
- Fine/monetary penalty
- Suspension of license
- Reprimand or censure
- Other

Female (n=2,601)  Male (n=759)

Distribution of Disciplinary Actions by Gender

- Probation of license: 0.0%
- Revocation of license: 0.0%
- Unspecified licensure action: 0.0%
- Fine/monetary penalty: 0.0%
- Suspension of license: 0.0%
- Reprimand or censure: 0.0%
- Other: 0.0%

Source: NCSBN 2012-13 Criminal Conviction Case Review
Distribution of Denial of Initial License Action for Crimes, by Gender

Source: NCSBN 2012-13 Criminal Conviction Case Review

- Theft (Female: 26.8%, Male: 18.8%)
- Driving Under The Influence (Female: 30.9%, Male: 23.8%)
- Fraud (Female: 16.7%, Male: 12.5%)
- Violation of Controlled Substances Act (Female: 14.3%, Male: 12.5%)
- Domestic violence/assault (Female: 5.7%, Male: 4.4%)
- Other (Female: 5.7%, Male: 4.4%)

Note: Numbers in parentheses indicate the number of cases for each gender.
Methods – In-depth Analysis

• Same sample as prior analysis
• Four sub-files were created based on the most common crimes: Driving Under the Influence (DUI), Substance Abuse, Fraud and Theft
• Each of the four sub-files were analyzed in the following manner:
  – The population of male nurses was used to form the study group.
  – A comparison group of the exact same size was chosen from the population of female nurses based on propensity score matching techniques.
  – The disciplinary actions taken on the study group were compared to the disciplinary actions taken on the comparison group to see if any differences could be found.
Comparison of Disciplinary Actions by Gender for DUI

(n=646)
Comparison of Disciplinary Actions by Gender for Substance Abuse
(n=318)

- Revocation
- Probation
- Suspension
- Restriction
- Reprimand
- Surrender
- Denial
- Fine
- Other
Comparison of Disciplinary Actions by Gender for Fraud (n=154)

- Revocation
- Probation
- Suspension
- Restriction
- Reprimand
- Surrender
- Denial
- Fine
- Other
Comparison of Disciplinary Actions by Gender for Theft
(n= 200)
Summary – Research Questions 3 and 4

- The frequency of disciplinary actions assigned to male and female nurses who had criminal convictions for driving under the influence, fraud, and theft were quite similar.

- For substance abuse convictions, a distinct difference in discipline patterns by gender in favor of male nurses was observed:
  - Male nurses received probation, reprimand, fines, and licensure denial more often than female nurses.
  - Female nurses had their licenses revoked more often than male nurses.
  - Among the differences, only being fined was statistically significant.
Conclusion

• The study did not uncover any evidence of gender bias against male nurses in the reporting of nurses to the Boards of Nursing.
• The study did not uncover any evidence of gender bias against male nurses in the approach to the reporting of nurses by members of the Disciplinary Knowledge Network.
• The study did not uncover any evidence of gender differences against male nurses in the disciplinary actions by Boards of Nursing.