Factors associated with the completeness of nursing process documentation in the center surgical units, São Paulo, Brazil

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Introduction

In the surgical center unit:

- documentation of nursing process are used to:
  - identify potential risks to anesthetic-surgical process
  - record care actions by the nursing team.
- until present day, nursing process model has some challenges for its complete implementation in Brazil.
Aim

To identify the variables associated with complete documentation of the nursing process.
Methods

- Descriptive, exploratory, cross-sectional study
- Period: January 2011 - January 2012
- Local: São Paulo State, Brazil
- 40 public health institutions
  - 25 operating room centers
- Data source:
  - Nurses
  - Medical record
Methods

Data

- Completeness of the nursing process documentation (assessment, diagnoses, nursing orders, progress notes, and nursing notes)
- Number of surgeries
- Unit and institution characteristics
- Two questionnaires
  - Revised Nursing Work Index (NWI–R)
  - Maslach Burnout Inventory (MBI)
**Revised Nursing Work Index**

- Measure the practice environment
- 57 items (Likert 1 to 4)
- Low scores – favorable attributes - nursing practice
- Four subscales:
  - Autonomy
  - Control over the practice setting
  - Nurse/physician relations
  - Organizational support

Aiken; Patrician, 2000
Maslach Burnout Inventory

- Measure the physical and emotional exhaustion of workers
- 22 items (Five categories )
- Three subscales:
  - Emotional exhaustion
  - Depersonalization
  - Personal accomplishment

Maslach, Jackson; 1981/1986
Tamayo; 1997
Methods

- **Dependent variable**: Completeness of nursing process (complete, partial, none)
- Significance level ≤ 5%
- Descriptive statistic
- Kruskal-Wallis test to compare means
- Approved by the Research Ethics Committee
Results

Hospital and unit characteristics

- hospitals’ size: 63% (17) large
- one operating room located in an ambulatory.
- median surgeries per day was 10.2 (2.2 to 31.0)
- high frequency of small and medium surgical procedures,
Results

- Completeness of nursing process
  - 22.2% (6) not document the nursing process
  - 48.1% (13) documents partially
  - 2.2% (6) documents completely
Results

Characteristics of nurses (n=745)

- Average age – 43 years (± 9.6)
- Average working time – 14 years (± 8.5)
- Average working time at current institutions – 9 years (± 9.4)
<table>
<thead>
<tr>
<th>Independent variables</th>
<th>p*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nº emergency operative procedure/day</td>
<td>0.099</td>
</tr>
<tr>
<td>Nº elective operative procedure /day</td>
<td>0.787</td>
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<tr>
<td>Nº ambulatory/day clinic surgeries/day</td>
<td>0.348</td>
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<tr>
<td>Duration of the operative procedure classification</td>
<td></td>
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<tr>
<td>Nº operative procedure size I/day</td>
<td>0.104</td>
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<tr>
<td>Nº operative procedure size II/day</td>
<td>0.459</td>
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<tr>
<td>Nº operative procedure size III/day</td>
<td>0.273</td>
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<tr>
<td>Nº operative procedure size IV/day</td>
<td>0.068</td>
</tr>
<tr>
<td>Total nº of surgeries/day</td>
<td>0.585</td>
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<tr>
<td>Nº operating room suite</td>
<td>0.122</td>
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<tr>
<td>Efficiency of the operating room suites</td>
<td>0.642</td>
</tr>
<tr>
<td>Independent variables</td>
<td>( p^* )</td>
</tr>
<tr>
<td>------------------------------------------------------------</td>
<td>------------</td>
</tr>
<tr>
<td>Nursing Work Index - total</td>
<td>0.146</td>
</tr>
<tr>
<td>Autonomy</td>
<td>0.649</td>
</tr>
<tr>
<td>Control over work environment</td>
<td>0.096</td>
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<tr>
<td>Nurse-physician relations</td>
<td>0.309</td>
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<td>Organization support</td>
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<td>Malasch burnout Inventory - Total</td>
<td>0.515</td>
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<tr>
<td>Emotional exaustion</td>
<td>0.019</td>
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<tr>
<td>Depersonalization</td>
<td>0.408</td>
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<tr>
<td>Personal accomplishment</td>
<td>0.014</td>
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</table>
Conclusion

- Emotional exhaustion and personal accomplishment dimensions of Malasch Burnout Inventory showed statistically significant differences in relation to completeness of the nursing process documentation.
Conclusion

- the lowest average in emotional exhaustion and highest average in personal accomplishment dimensions were associated with incomplete documentation of the nursing process, the average observed to complete and no documentation of nursing process was equal.
Conclusion

The documentation of the nursing process is very important to patient safety undergoing surgery, because it identifies potential risks.

Further studies are necessary to understand because nurses that do not document the nursing process completely has average similar to those who do it.
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