Impact of Primary Nursing in a High Dependency Psychiatric Care Unit in Singapore: Patients’, Caregivers’ & Nurses’ Perspectives.
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Team Members

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• Tuan Liang Lua, RN, RMN, Masters in Nursing
• Huiting Xie, RN, RMN, PhD

The team has no conflict of interest to disclose

Background

• Nurses in the High Dependency Psychiatric Care Unit (HDPCU) played key role in managing acutely disturbed patients

• Nursing care is delivered using either
  – Primary Nursing (PN)
  – Functional Nursing (FN)
### Literature Review

<table>
<thead>
<tr>
<th>Primary Nursing</th>
<th>Functional Nursing</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Focus</strong></td>
<td><strong>Tasks or activities driven</strong></td>
</tr>
<tr>
<td>• Patient-driven</td>
<td></td>
</tr>
<tr>
<td>• Relationship building</td>
<td></td>
</tr>
<tr>
<td>• individualized patient’s plan of care</td>
<td></td>
</tr>
<tr>
<td>• communicates that plan to the MDT members</td>
<td></td>
</tr>
</tbody>
</table>

(Manthey et al., 1970 Creative Health Care Management, 2009).

### Literature Review

<table>
<thead>
<tr>
<th>Primary Nursing</th>
<th>Functional Nursing</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outcomes</strong></td>
<td><strong>Gets the job done most of the time</strong></td>
</tr>
<tr>
<td>• patient and staff satisfaction</td>
<td></td>
</tr>
<tr>
<td>• foster closer patient relationships</td>
<td></td>
</tr>
</tbody>
</table>


### Theoretical Perspective

Peplau’s Interpersonal Relationship Theory
Research Gaps

• Studies on Primary Nursing were from general settings.

• Little is known about its impact on the management of acutely disturbed patients in psychiatric settings.

• To authors’ knowledge, no study has evaluated impact of Primary Nursing’s impact in HDPCU.

Aims

• This study aims to evaluate Primary Nursing and its effects on
  – Patients’
  – Caregivers’
  – Nurses
  experience and perception of the delivery of nursing care and communication, and nurses’ satisfaction in HDPCU

Hypotheses

• Postulating from the theoretical perspectives, we hypothesize that as compared to functional nursing,
  – Patients who undergo primary nursing have better experience and perception of nursing care
  – Caregivers and nurses of patients undergoing primary nursing have higher satisfaction
Methods

Setting and Design

- **Setting**
  - Tertiary psychiatric hospital
  - HDPCU

- **Design**
  - Mixed methods
    - Quantitative: Surveys
    - Qualitative: Focus group
  - Comparative study

Design

<table>
<thead>
<tr>
<th>Setting: HDPCU, Institute of Mental Health, Singapore</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test</td>
</tr>
<tr>
<td>Pre-test</td>
</tr>
<tr>
<td>Primary Nursing (1 month)</td>
</tr>
<tr>
<td>Therapeutic relationship is established between a</td>
</tr>
<tr>
<td>registered nurse and the patient and his/her</td>
</tr>
<tr>
<td>family, and is in effect for the length of the</td>
</tr>
<tr>
<td>patient stay in a unit.</td>
</tr>
<tr>
<td>Post-test</td>
</tr>
<tr>
<td>Functional Nursing (1 month)</td>
</tr>
<tr>
<td>Each nurse is assigned specific functions for all</td>
</tr>
<tr>
<td>patients in a unit, and report to the head nurse.</td>
</tr>
<tr>
<td>Post-test</td>
</tr>
</tbody>
</table>
• **Sample size**

<table>
<thead>
<tr>
<th>Patients</th>
<th>Caregivers</th>
<th>Nurses</th>
</tr>
</thead>
<tbody>
<tr>
<td>40</td>
<td>40</td>
<td>28</td>
</tr>
</tbody>
</table>

• **Eligibility criteria**

<table>
<thead>
<tr>
<th>Inclusion</th>
<th>Caregivers</th>
<th>Nurses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Admitted to HDPCU</td>
<td>Primary caregivers of patients who meet the eligibility criteria</td>
<td>RNs and ENs working in HDPCU during study period</td>
</tr>
<tr>
<td>Mentally stable</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Able to speak and read English</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Exclusion</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LOS &lt; 4 days</td>
<td>Pls or Co-Is of study</td>
</tr>
</tbody>
</table>

• **Instruments**

- **Customer Satisfaction Questionnaires**
  (Sellick et al., 2003)

  - 5 points likert scale
  - Higher scores, better outcomes
  - For patients:
    - It measures experience and perception of care
      - Focusing on care delivery and nurses’ communication
  - For caregivers and nurses:
    - It measures satisfaction
Instruments

• For nurses
  – A 23-item questionnaire measuring satisfaction
    • Scale A consists of 17 items measuring with satisfaction with
      – work situation, personal development, interpersonal relationship, supervision and pay.
    • Scale B consists of 6 items eliciting staff responses to task factors.
  – Scores on both scales were summed to obtain total score

Data Collection

IRB
• Ethical approval sought
• Stakeholders buy-in

Training
• Current practice was Functional Nursing
• Staff were trained in Primary Nursing for study

FN
• Data collected from all participants who had undertaken before and after 1 month of Functional Nursing (FN)

Data Collection

PN
• Data collected from all participants who had undertaken before and after 1 month of Functional Nursing (FN)

• Patients and caregivers: Data collected on admission and discharge
• Nurses: Data collected from nurses at beginning and end of study

Interview
• Semi-structured focus group interviews were conducted by an independent party, who was not working in the HDPCU and did not have any form of supervisory relationship with the nurses involved in the interview
Data Analysis

Quantitative:
- SPSS 20.0
- Mean differences compared using t-test

Qualitative:
- Thematic analysis performed on transcribed verbatim from nurses

Results

Demographic Profile

- Patients:
  - Majority were
    - males,
    - aged between 26 to 40 years
  - No significant differences in patients' demographic characteristics between the Functional Nursing (FN) group and Primary Nursing (PN) group.
**Demographic Profile**

- **Caregivers:**
  - Majority of caregivers were parents of patients

- **Nurses:**
  - 16 RNs
  - 12

**Results**

- **Patients:**

<table>
<thead>
<tr>
<th>Perception</th>
<th>Experience</th>
<th>Mean Difference</th>
<th>t-test</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Functional</td>
<td>12.55</td>
<td>15.87</td>
<td>4.77</td>
<td>&lt;0.001</td>
</tr>
<tr>
<td>Primary</td>
<td>23.33</td>
<td>23.33</td>
<td>4.18</td>
<td>&lt;0.001</td>
</tr>
</tbody>
</table>

- **Caregivers:**

<table>
<thead>
<tr>
<th>Satisfaction</th>
<th>Mean difference</th>
<th>t-test</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Functional</td>
<td>18.86</td>
<td>7.73</td>
<td>0.001</td>
</tr>
<tr>
<td>Primary</td>
<td>26.60</td>
<td>7.49</td>
<td>&lt;0.001</td>
</tr>
</tbody>
</table>
Results

• **Nurses:**

![Bar Chart]

<table>
<thead>
<tr>
<th>Satisfaction</th>
<th>Functional</th>
<th>Primary</th>
<th>Mean difference</th>
<th>t-test</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean (sd)</td>
<td>34.38 (0.89)</td>
<td>44.00 (6.20)</td>
<td>9.02</td>
<td>4.33</td>
<td>0.001</td>
</tr>
</tbody>
</table>

Discussion
Discussion

• This study offered the unique opportunity to triangulate data from patients’, caregivers’ and nurses’ perspectives.

Implications

Implications for psychiatric-mental health nursing:

➢ Findings had contributed to the knowledge base about nursing care delivery in psychiatry.

➢ Valuable evidence supporting the utilization of PN in delivering intensive nursing care for acutely disturbed patients in HDPCU was gained.

Strengths of the study

• Realistic study in clinical study

• Comparison of functional nursing with primary nursing

• Data from all parties

• Findings translatable to clinical settings
Limitations/ difficulties

- Limited research literature on Primary Nursing in a psychiatric setting
- Encouragement of patients and caregivers to complete the questionnaire
- Knowledge and skill deficits of nursing staff on Primary Nursing.
- Resistance towards embracing the concept of Primary Nursing during implementation
- Small sample size

Recommendations

- Future research evaluating outcomes through randomized controlled trials or longitudinal studies with large sample sizes could facilitate further understanding of the effectiveness of primary nursing in various psychiatric settings and populations.

Conclusion

- Better outcomes with primary nursing for all parties
  - Patients
  - Caregivers
  - Nurses
- Helpful data in the development and improvement of psychiatric nursing care in HDPCU
References


Thank You