Experiences of Transplant Nurses Caring for Renal Transplant Patients Assigned to Acuity-Adaptable Rooms

by

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Acuity-Adaptable Patient Room Concept

- Emerging care model where patient is cared for from the same room from admission through discharge regardless of the patient level of acuity
- Care is brought to the patient
- Single or private room concept
Wisdom from the Field...

A-A Patient rooms have positive clinical outcomes

- Infection control
- Patient preference and patient satisfaction
- Nurse and physician’s satisfaction
- Patient safety
- Decrease noise levels
- Decrease length of stay

Rationale for the Study

- Care of renal transplant patient is complex

- Large Southwestern Magnet Medical Center was challenged to innovate and create 4 acuity-adaptable patient rooms

- Innovation is aligned with the Accountable Care Act 2010

- No qualitative studies were found that examine the experiences of nurses caring for a patient in the acuity-adaptable patient room
Philosophical Foundation: Husserl

- Phenomenology
- Universal Essences
- Transcendental subjectivity
- Bracketing
What are the experiences of the transplant nurses caring for renal transplant patients assigned to acuity-adaptable rooms?
STUDY DESIGN:
Descriptive Phenomenology

- Setting: 1500-bed Tertiary Hospital
  3-times MAGNET designated
  30-bed multi-organ transplant unit
  16 acuity-adaptable patient rooms

- Participants: n=10
  Purposeful sampling
  “Lived” Experience

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>N=10</th>
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<tbody>
<tr>
<td>Age (years)</td>
<td></td>
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<tr>
<td>Range = 35-55</td>
<td></td>
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<tr>
<td>Race</td>
<td></td>
</tr>
<tr>
<td>Chinese</td>
<td>1</td>
</tr>
<tr>
<td>Indian</td>
<td>2</td>
</tr>
<tr>
<td>Filipinos</td>
<td>5</td>
</tr>
<tr>
<td>Caucasian</td>
<td>3</td>
</tr>
<tr>
<td>Education</td>
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</tr>
<tr>
<td>ADN</td>
<td>1</td>
</tr>
<tr>
<td>BSN</td>
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<tr>
<td>MSN/NP</td>
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<tr>
<td>Certification</td>
<td></td>
</tr>
<tr>
<td>CCTN</td>
<td>9</td>
</tr>
<tr>
<td>No Certification</td>
<td>1</td>
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<tr>
<td>Years in Transplant Nursing</td>
<td></td>
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<tr>
<td>8 years and &gt;</td>
<td>10</td>
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</table>
STUDY DESIGN: Descriptive Phenomenology

Protection of Human Subject

Formal Ethical Approval was provided by two Institutions

- TEXAS WOMAN’S UNIVERSITY IRB
- THE METHODIST HOSPITAL RESEARCH INSTITUTE (TMHRI) IRB
1. Tell me about your experiences in caring for a patient in an acuity-adaptable room.  
- How do you think you care for patients differently in an acuity adaptable room than a traditional room?  
- What do you like about it?  
- What do you not like?  
- Tell me about how you use the technology that is available in acuity adaptable rooms.

2. What would you change about the room design?

3. What do you think the future holds for the acuity-adaptable patient room?

Tell me in as much detail as possible about how you cared for your last renal transplant patient using an acuity-adaptable patient room.
DATA ANALYSIS/PROCEDURE

**INTERVIEWS**

- Significant statements
  - Formulated meanings
    - Formulated meaning grouped, based on interview structure
      - Themes
        - Theme Clusters
          - Exhaustive description of the phenomenon
            - Return to participants to validate description
            - Incorporate new data to the exhaustive description of the phenomenon
• **CREDIBILITY** – PI went back to the study participants and check both data and the interpretation

• **TRANSFERABILITY** – PI collected sufficiently detailed data to report data with accuracy.

Purposive sampling was used so the range of specific information about the experience can be maximized.
• **DEPENDABILITY** – members of the dissertation committee, colleagues expert in qualitative research examined documentation, the data, findings, interpretations, and recommendations--and attests that it is supported by data and is internally coherent.

• **CONFIRMABILITY** – adequate audit trail is preserved to support the conclusions, interpretations, and recommendations and can be traced to their sources.
The FINDINGS:

INTERVIEWS (n=10)

- Significant statements (n=158)
  - Formulated meanings (n=135)
    - Formulated meaning grouped, based on interview structure
      - Themes (n=14)
        - Theme Clusters (n=3)
          - Exhaustive description of the phenomenon

Colaizzi’s method
Findings: 14 Themes

THEME 1: The experience is perceived as positive (16 Coded Formulated meanings)

THEME 2: Patient satisfaction is improved (7 Coded Formulated meanings)

THEME 3: Sense of empowerment (41 Coded Formulated meanings)

THEME 4: Adequate education preparation improve the skills of the nurse (17 Coded Formulated meanings)

THEME 5: Early patient education (7 Coded Formulated meanings)

THEME 6: More privacy to the patient and the family (2 Coded Formulated meanings)

THEME 7: Positive perception of technology in the room (38 Coded Formulated meanings)

THEME 8: Improve patient outcome due to lower nurse to patient ratio (4 Coded Formulated meanings)

THEME 9: Support patient safety (7 Coded Formulated meanings)

THEME 10: Calm environment to heal (4 Coded Formulated meanings)

THEME 11: Insights of nurses to improve room (11 Coded Formulated meanings)

THEME 12: An emerging care model in the future (5 Coded Formulated meanings)

THEME 13: Importance of the family presence in the room (7 Coded Formulated meanings)

THEME 14: Future potential for the room concept. (10 Coded Formulated meanings)
Findings: 3 Theme Clusters

THEME CLUSTERS # 1 -
(47 Formulated Meanings)

• The acuity-adaptable patient room provides comfort to both patient and family.

THEME CLUSTERS # 2 -
(62 Formulated Meanings)

• Nurse felt a sense of empowerment in the care of renal transplant patient in the acuity-adaptable patient room.

THEME CLUSTERS # 3 -
(26 Formulated Meanings)

• There is a future potential for the acuity-adaptable patient room.
## Findings: Examples of Statements and Meanings

<table>
<thead>
<tr>
<th>Theme Clusters</th>
<th>Significant Statements</th>
<th>Formulated Meaning</th>
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<tbody>
<tr>
<td>A-A room provides comfort to both patient and family</td>
<td>“We’re able to give our patient’s privacy. They can rest through the night, and we can monitor them with a minimum amount of interruption.”</td>
<td>The nurse viewed that the acuity-adaptable patient room provide a healing environment for the patient and the family by allowing them a place of respite at the same time their recuperation is vigilantly watched.</td>
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<tr>
<td>Nurse Empowerment</td>
<td>“These patients—I can see them, whether they are improving or their status changes as quickly as they change, I don’t have to rely on telemetry to call me. I don’t have to rely on labs. I don’t have to rely on a lot of things, external factors, which warn me. I have the art lines. We’re capable of handling those. I have the CVP. I know exactly when my patient is a little dehydrated or overloaded”.</td>
<td>The nurse felt she has a handle on her patient with the help of the monitoring equipments in the acuity-adaptable patient room. She is able to observe closely the healing process of her patient.</td>
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<tr>
<td>Acuity-Adaptable has future potential</td>
<td>“I think there certain type of patients that the AA room could be very beneficial. Your orthopedic patients, most of the orthopedic patients come in same room and discharge and surgery in-between.”</td>
<td>The nurse acknowledges that the AA room could be use to certain patient population.</td>
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</table>
What are the experiences of the transplant nurses caring for renal transplant patients in acuity-adaptable patient rooms?

Nurses felt empowered in caring for patient in the acuity-adaptable patient room. It is this empowerment that they are able to build partnership with their patient and the family in providing quality care; transforming the environment so the renal transplant patient is put in the best position to heal.

Because a healing environment is created with the acuity adaptable patient room concept, the feasibility of this room in the future is promising.
CONCLUSIONS

• Acuity-adaptable patient room concept shows promise in providing a healing environment for the patient and family.

• Limitation of the study: *purposive sampling*

• Findings will provide a foundation for the design of further studies using either qualitative or quantitative studies.

• Replication of the study is needed to strengthen the support for this kind of patient room in the future
Implications for Nursing

• Affordable Care Act, 2010
• The Future of Nursing, 2010
• NDNQI:
  
  *A pt. room is an emerging unit-type*
• Hybrid Nurse...?
• Efficient utilization of the ICU beds, Patient transfer decrease, bed control minimize
• Acuity-Adaptable room - hot topic in conferences
**Application of Findings to Scholarly Career**

- Result of the study will be shared with the institution’s nursing leadership

- Respond to Call for Abstracts to the International Nursing Research Congress of Sigma Theta Tau International, International Transplant Nursing Society, ANCC National Magnet Conference and Healthcare Design Conference

- Manuscripts for publication sent to *Critical Care Nurse Quarterly*
  - Result of research - under peer review
  - Quantitative Pilot Study - accepted for publication
  - Review of Literature - under peer review

Application of Findings to Scholarly Career

PRESENTATIONS REGARDING ACUITY-ADAPTABLE PATIENT ROOM and ACUITY-ADAPTABLE PATIENT CARE DELIVERY.


• Oral Presentation - ‘Using Technology to support an Acuity-Adaptable Care Delivery in a Renal Transplantation: An Innovative Patient Care Delivery of the Future” at the 20th Sigma Theta Tau International Annual Research Congress, July 13-17, 2009, Vancouver, Canada.

• Invited Speaker- “Acuity-Adaptable: Patient Room of the Future” at the 2nd Planning & Creating the Patient Room of the Future Conference held in Dallas, Texas, March 26-27, 2009.

• Invited Speaker- “Acuity-Adaptable: Patient Room of the Future” at The Quality Celebration 2008 held at the Michael E. DeBakey VA Medical Center, Houston, Texas, October 21, 2008.


Application of Findings to Scholarly Career


- Oral presenter - “Using Technology to Support Acuity-Adaptable Care Delivery of Renal Transplant Patients” speaker at the Go for the Gold-Regional Learning Exchange held in Houston, December 7, 2007 at the Hilton Hotel.

- Oral Presenter in the concurrent session - “An Educational Strategy to Support an Acuity-Adaptable Care Delivery”, at the 16th Annual International Transplant Nursing Society Symposium held at Denver, Colorado, October 3-6, 2007

- Speaker - “Acuity-Adaptable Care Delivery Improves Renal Transplantation Outcomes” speaker at The Methodist Hospital Research Institute Investigator Colloquium held in Houston, Texas, September 24, 2007 at The Trevisio.

- Concurrent speaker - “Acuity-Adaptable: Patient Room of the Future”, 18th International Nursing Research Congress Focusing on Evidence-Based Practice-Collaboration: A Transdisciplinary Roadmap to Discovery held in Austria Center, Vienna, July 11-14, 2007.

- Concurrent session speaker - “Patient Room of the Future” at the National Indian American Conference held in Houston, May 5, 2007.
ACUITY-ADAPTABLE PATIENT ROOM
Thank you!