Relationship between empowerment, work environment, job satisfaction, intent to leave and quality of care of Canadian ICU nurses

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Plan of presentation

- Study Rationale
- Aim of study
- Studies on empowerment, work environment, nurses and patient outcomes
- Conceptual framework
- Methods and instruments
- Data analysis and results
- Discussion
- Limitations
- Recommendations
- Conclusion
Study rationale

▪ Shortage of nurses in Canada
  ▪ Persistent shortage of nurses (60 000 EFT in 2022) \(^1\)
  ▪ Especially in speciality areas, such as ICU \(^2\)

▪ Work environment has effect on nurse and patient outcomes
  ▪ Job satisfaction and turnover intent
  ▪ Quality of care delivered to patients \(^3\)

▪ Many recent threats to nursing work environment:
  ▪ Federal and provincial cuts in health care
  ▪ ↑ nursing staff mix

▪ Few canadian studies on ICU nurses
Aim of study

- The purpose of this study is to examine the relationship between
  - Empowerment
  - Work environment
  - Job satisfaction, intent to quit and
  - Quality care among Canadian intensive care nurses.
Empowerment

3 types of power needed to make optimum contribution:

- Control over the content of nursing practice
  - (Nursing autonomy)
- Control over the context of nursing practice
  - (Nurses’ participation in decision making)
- Control over competence of nursing practice
  - (Knowledge development; education and expertise)

Nurse managers will foster empowerment by providing:

- Opportunities for advancement,
- Access to information,
- Support and
- Resources

Ability to get things done, to mobilize resources to reach one’s goals.

At the organizational level
Dimensions

- Performance, *leadership*, support of the nurse manager
- Participation in hospital affairs
- Adequate nurses and staffing resources
- Nursing model of care
- Collegial RN/MD relations
ICU work environment

Demanding workplace

Rapid pace, noisy environment

Lack of routine in daily care

RN at high risk for emotional and physical injury

\( \downarrow \) RN - patient ratio and \( \uparrow \) mortality rate

Different Structures

Job satisfaction and quality of care is affected
Nurse outcomes

Job satisfaction
- Nurses working in healthy work environments have greater job satisfaction
- Lack of nursing resources will lead to job dissatisfaction

Intent to leave
- Link between work environment, job satisfaction and intent to leave
- Nurses having poor collaboration with MD’s are more dissatisfied and think more about leaving
Patient outcomes

Quality of care

- Mostly subjective data
- Adverse events is common in ICU (infections)
- Link between work environment and quality of care \(^{11}\)
- Few nursing resources lead decrease the ability to provide excellent quality of care
- Direct link between nurses who felt empowered, job satisfaction and perception of overall quality of care \(^{12}\)
Conceptual Framework
Revised Nursing Worklife model (Laschinger and Leiter, 2006 13 )

- Performance, leadership and support of the nurse manager
- RN/MD Collegial relations
- Participation in hospital affairs
- Nursing model of care
- Adequates nurses and staffing resources
- Empowerment

Promote

Job Satisfaction
- Reduce
- Intent to leave
- Improve
- Quality of care

This model describes relations between empowerment, work environment and nurses and patients outcomes.
Methods

Participants (nurses working in ICUs across Canada)

Online survey (SurveyMonkey) sent through CACCN and NANB

Email reminders sent to all members

Approved by ethics committee of Université de Moncton
**Instruments**

**Work Environment**
- Practice Environment Scale of the Nursing Work Index (PES-NWI) 5

**Empowerment**
- Conditions of work effectiveness-2 (CWEQ-2) 13

**Job satisfaction**
- Minnesota Satisfaction Questionnaire 14

**Intent to leave**
- Intent to leave unit and employer 15

**Quality of care**
- Perceived Quality of Care On Unit Instrument 16
- Nurse assessed patient risk 17
- Nurse assessed prevention of adverse events in ICU (created for this study)
Data analysis

Descriptive analysis of the demographic data

Relations analysis between variables by correlation

Prediction analysis performed by regression

SPSS version 20 was used

Sample: 533/1697 nurses from CACCN and NANB (return rate of 31%)
RESULTS

Let's do statistics 😊
### Characteristics

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<thead>
<tr>
<th>Age (years)</th>
<th>Number</th>
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<td>15</td>
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<td>31-40</td>
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<tr>
<td>51-60</td>
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<td>61 and more</td>
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<td>Nurse manager</td>
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<td>10</td>
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<td>Nurse educator</td>
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<td>8</td>
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<tr>
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<td>Diploma</td>
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<td>Degree</td>
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<td>Master</td>
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## Analysis of demographic data

<table>
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<td><strong>Emp - Information</strong></td>
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<tr>
<td>Years in nursing</td>
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<tr>
<td>1 to 10 years</td>
<td>2.45*</td>
<td>0.90</td>
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<td>+ 21 years</td>
<td>2.83*</td>
<td>1.02</td>
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<td><strong>Emp - Support</strong></td>
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<tr>
<td>Years in nursing</td>
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<tr>
<td>1 to 10 years</td>
<td>2.41</td>
<td>0.86</td>
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<td>11 to 20 years</td>
<td>2.24*</td>
<td>0.89</td>
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<tr>
<td>+ 21 years</td>
<td>2.62*</td>
<td>0.81</td>
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Nurses with masters had higher score for resources.

Nurses with ≥ 20 years in nursing had higher score for information and support.
ICU nurses’ work environment

**Work environment is good**
- Good RN/Md relationships 3.05
- Model of nursing care 2.64
- Adequate nursing resources 2.63

**Low career opportunities**
(new scale)
(low education)

**Low participation in hospital affairs**
(Not included in decisions)
(Poorly consulted)

As a nurse educator, I believe that staff nurse feel little opportunities for advancement. I think in my role, I have more options.

Education is not valued, only a small number have their certification in ICU.

We never see our senior manager.
Empowerment levels of ICU nurses

ICU nurses perceived their work environment to be somewhat empowering ($\sum = 11/20$)

- Opportunity ($\bar{X} = 3.57/5$) (use and learn new skills)
- Support ($\bar{X} = 2.44/5$) (no feedback on practice)
## Job satisfaction

ICU nurses are neither satisfied nor dissatisfied with their job

\( \bar{X} = 3.38/5 \)

<table>
<thead>
<tr>
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<th>Description</th>
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<td>satisfaction is good</td>
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<tr>
<td>Intrinsic</td>
<td>3.00</td>
<td>satisfaction is neutral</td>
</tr>
<tr>
<td>Extrinsic</td>
<td>3.68</td>
<td>satisfaction is neutral</td>
</tr>
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</table>
Intent to leave

- 3% intended to leave unit or employer
- 69% had no intention of leaving unit or employer

Reasons most cited for leaving:
- Career Advance
- Pay and benefits
- Personal reasons
Nurses rated their quality of care to be good

\[ \bar{X} = 3.38/4 \]

- Rarely had adverse events
  - Wrong Rx
  - Nosocomial infections
  - Falls
  - Complaints

- 86%-95% affirmed the existence of guidelines
  - VAP
  - CCI
  - Falls
  - Wounds

- Only 57% confirmed the existence of guidelines on prevention for vesical catheter infections
### Relationship between major variables

<table>
<thead>
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<tr>
<td><strong>1 Work Environment</strong></td>
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<td></td>
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<tr>
<td><strong>2 Empowerment</strong></td>
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<td><strong>3 Job Satisfaction</strong></td>
<td>.80**</td>
<td>.79**</td>
<td>–</td>
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<td><strong>4 Intent to leave</strong></td>
<td>.32**</td>
<td>.36**</td>
<td>.45**</td>
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<tr>
<td><strong>5 Quality of care</strong></td>
<td>.52**</td>
<td>.42**</td>
<td>.51**</td>
<td>.24**</td>
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</tbody>
</table>

- Confirm findings of various studies on the positive relationship between empowerment and work environment. 

References: [18, 19, 20, 21]
Influence of empowerment on work environment

Empowerment → Work environment

Predict 63 %
Influence of empowerment and work environment on job satisfaction

Predict 69%

Empowerment (Opportunity, Resources, formal power)

Work environment (Leadership)

Job Satisfaction
Influence of empowerment, work environment and job satisfaction on intent to leave

Empowerment (information, Support, Resources) 17%
Work environment (leadership) 20%
Job satisfaction 27%

Predict 27%
Intent to leave
Influence of empowerment, work environment, job satisfaction, intent to leave on quality of care

Empowerment (opportunity, Ressources) 21%

Work environment (nursing resources, career opportunities, nursing model of care) 34%

Job satisfaction 36%

Intent to leave

Predict 37%

Quality of care
Discussion

- In this study, ICU nurses practices in good work environment
- This supports previous findings regarding ICU work environments
- MD-nurse collaboration in ICUs is usually higher than other units
- However:
  - Low participation in hospital affairs
    - Barriers include lack of leadership from nurse manager, inconsistent communication
  - Low career opportunities
    - Barriers include financial, family, lack of staffing, lack of organizational support and lack of time off
Both nurse empowerment and work environment influence job satisfaction

- Other studies also show that empowerment and nurse manager leadership influence job satisfaction \(^{25, 26, 27}\)

- We need to understand job satisfaction predictors to reverse turnover intent \(^{28}\)
What makes ICU nurses want to leave

- 7 out of 10 RNs did not intend to leave their unit or their employer
- In our study, 70% of intent to leave is still unexplained
- Coworkers and team cohesion cited as two reasons cited by nurses to stay \(^{29,30}\)
Quality of care

• Nurses rated their quality of care to be good

• Similarly, the majority of nurses in Canada claimed to offer good or excellent quality of care \(^{31}\)

• Numerous recent studies show relationship between work environment and the perception of the quality of nursing care \(^{13} 19\) \(^{32} 33 34 35\)

• We were not able to find many predictors of quality of care
Limitations

▪ This study is conducted in a very different context

▪ Caution with generalization of the results to other types of units

▪ At the national level:
  ▪ Only 30% of participants responded
  ▪ 29% are from NB and 27% in ON
  ▪ Other provinces are poorly represented
Recommendations for nursing practice

- Nurses need a manager who has strong leadership skills and supports them

  - 1st line managers should provide
    - Support
    - Access to information
    - Regular feedback on performance of staff nurses

  - 2nd line managers should
    - Offer leadership course to nurse managers, give them leadership tools
    - Be visible and transparent
    - Provide enough nursing resources
    - Invite staff nurse to participate in hospital committees about nursing practice
    - Address their needs for education and training
Recommendations for future research

- Should attempt to predict patient safety
  - More objective data
  - Such as rate of infections acquired among patients in ICU

- Future research should look more closely at factors that affect intent to leave
  - Nearly 70% of the intention to leave is still unexplained
  - Including all factors might add to the prediction of other variables
  - Should identify some strategies that would contribute to intent to stay.
Conclusion

▪ This model is relevant to understanding the complexity of the work environment of ICU nurses

▪ Our results highlight the importance of empowerment strategies to improve nurses’ work environment

➢ The work environment can be improved by focusing on modifiable factors:
   ➢ performance, leadership and support of the nurse manager
   ➢ fostering collaborative relationships between doctors and nurses
   ➢ staffing and adequate resources
Questions

- Thank you!
- myriambreau@rogers.com
REFERENCES


