Contextual Variables that Impact Registered Nurses’ Patient Safety Outcomes

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ISAPN Conference Presentation
October 5, 2017

Objectives

- Provide the background of patient safety
- Discuss current patient safety issues and its impact
- Discuss the significance of patient safety initiatives for healthcare as a whole and for nursing
- Focus on the contextual variables of emotional intelligence (EI) and substance use that affect patient safety
- Discuss the systematic review findings related to EI and substance use
- Analyze findings
- Propose recommendations

Background

  - Brought patient safety issues to the forefront in the healthcare industry
  - Many isolated impressive efforts have been made over the years to remedy patient safety issues
  - But when compared to the current patient safety-related problems that we face, the overall response is still unacceptably slow (Chassin & Loeb, 2013)
- Estimated 440,000 Americans die from medical errors each year (federal report on healthcare improvement, 2015)
  - Equivalent to two jumbo jets crashing every day for an entire year
  - 11.3% of harm was a result of avoidable patient safety-related events directly caused by healthcare providers - identified in the Medicare population
Current Status of the Problem

- Some of the top reasons identified in the sentinel event statistics report by the Joint Commission (2016b), related to patient safety events, include:
  - Falls
  - Wrong site
  - Wrong procedure
  - Wrong surgeries
  - Unintended retention of a foreign body
  - Delay in treatment
  - Medication errors
  - And the list continues...
- Many are preventable

Patient Safety

- The Joint Commission (2016a) patient safety goals for 2017 include:
  - Identifying patients correctly
  - Improving staff communication
  - Using medications safely
  - Using alarms safely
  - Preventing infections
  - Identifying patient safety risks
  - Preparing mistakes in surgery
- To achieve these goals, the focus needs to be placed on what variables are contributing to these events

Significance to Healthcare

- The potential exists for healthcare
  - Other comparable industries such as wild fire fighting, nuclear power and aviation have been able to achieve and sustain very high levels of safety over many years.
- The variables in the healthcare that contribute to preventable adverse events and death include (Kohn, Corrigan & Donaldson, 2000):
  - Medication errors
  - Impaired providers
  - Stress and fatigue
  - Negligence
  - Errors in the performance of an operation or procedure
  - Failure to act on results of monitoring or testing
  - Inappropriate care
  - Failure of communication, equipment or systems
Significance to Nursing

- Nursing professionals are prone to stress in their work environment (Kadda, 2014).
- Can contribute to negative consequences for patient care outcomes.
  - Main cause:
    - Constant contact with suffering and death
    - Inability to deal with emotional needs of patients, family and friends
  - So how can we help them cope better and constructively deal with the difficult situations that they face?

Systematic Review

- Research Question
  - What are the contextual factors that impact the Registered Nurses' (RNs) patient safety outcomes?

- Sub Questions:
  - In the adult acute care patient population, what is the relationship between the emotional intelligence of the registered nurse and patient safety related events?
  - In the adult acute care patient population, what impact does an impaired registered nurse have on the occurrence of patient safety related events?

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<tr>
<th>Inclusion Criteria</th>
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<tr>
<td>Hospital based acute care</td>
<td>Pediatrics</td>
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<td>Articles published in the English language</td>
<td>Long term care</td>
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<td>Internationally published articles</td>
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<td>Include grey literature (dissertations, etc.)</td>
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<td>In addition to the research question, search for articles to the sub-questions as well</td>
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Critiquing Tools

- **Quantitative studies**

- **Qualitative studies**

Examination of Emotional Intelligence (EI) of Nurse and Patient Safety
Critical Analysis of 8 articles
Sony Mani
The Concept of Emotional Intelligence (EI)

- Definition of emotional intelligence (EI)
  - “The ability to monitor one’s own and others’ feelings, to discriminate among them, and to use this information to guide one’s thinking and action,” (Salovey & Mayer, 1990)

- Four branches of EI abilities (Salovey & Mayer, 1997; Mayer, Caruso & Salovey, 2016)
  1. Perceive emotions accurately
  2. Use emotions to accurately facilitate thought
  3. Understand emotions
  4. Manage emotions in themselves and others

- Developing these abilities will help them to constructively manage the situations they face

EI and Nursing

- Direct correlation exists between EI and harm to patients (Park & Kim, 2013)
- Result of cognitive failure and impairment
- Nurses with higher EI cope better with the environmental conflicts than those without (Park, 2011)
- Emotional and situational awareness can also lead to better stress management and performance of healthcare providers
- When faced with numerous occupational job stressors of shift variability, high workloads, frequent contacts with patients suffering and dying
- Nurses prone to being impaired and emotionally fatigued that may ultimately contribute to patient safety events

EI Related Findings

- Significant positive correlation between performance and EI (Fujino, Tanaka, Yonemitsu & Kawamoto, 2014)
  - Nurses with high-emotional intelligence
  - Sought out various learning opportunities to further their practices
  - Involved in professional development activities
  - The results also showed that the EI of these high functioning nurses increased with their years of experience
  - Whereas the EI of low functioning nurses did not improve with increased years of experience

- KEY POINT TO NOTE:
  - EI is something that can be learned, with the appropriate training
  - It is possible to increase the EI level of nurses with various levels of experience
El Related Findings Cont.

- Study by Zhu, Liu, Guo, Zhao & Lou (2015):
  - Major determinants of work engagement:
    - EI
    - Organizational justice at the place of employment
  - Nurses with high EI had a better perception of organizational justice
  - Further recommendations included:
    - Hiring managers should take the EI of candidates into consideration when making hiring decisions
    - Foster the development of a culture of highly emotionally intelligent nurses

Safety Culture and Patient Experience

- Abrahamson, Hass and Morgan (2016) examined nurse reported safety culture and patient experience:
  - Data analyzed from the Agency of Healthcare Research and Quality (AHRQ) staff safety culture surveys, and Hospital Consumer Assessment of Healthcare Providers (HCAPPS) patient satisfaction surveys
  - The safety of patients and their experiences were found to be directly related to the work of the nurse taking care of them
  - The higher the level of emotional intelligence the nurse has, the better quality care they will be able to provide
  - Nurses also need to be provided with a work environment in which they feel safe
  - Some of the factors that promote a safe work environment include strong teamwork, adequate staffing and various organizational learning

Additional Findings

- If nurses are not provided with an environment in which they feel safe to practice
  - This can lead to rapid occupational burnout and negatively impact the quality of care
  - Burnout among nurses will result in
    - High turnover of staff
    - Which may lead to an unhealthy proportion of experienced and inexperienced nurses on the units
  - Organizations need to keep nurses engaged and motivated
    - Providing work life balance
      - Found to keep the retention of a sustainable nursing workforce
  - Good work life balance allows them to
    - Process their emotionally taxing work experiences in a constructive manner
    - Not allow it to negatively affect their personal lives
    - Nurses with high EI have been found to do it better than those with lower EI

(Chao, Shih & Hsu, 2015)
Human Factors Component

- Four human factors related themes that made a nurse more error prone (Roth, Wieck, Fountain & Haas, 2015):
  - Loss of focus
  - Being overwhelmed
  - Unhealthy environment
  - Interpersonal deficits
- These multifactorial variables may put some nurses prone to substance use related issues as well.

Recurring EI Related Themes

- Emotional intelligence can be used to improve practice and outcomes
- In a profession, such as nursing, where the providers are emotionally taxed on a regular basis, it is important to arm them with healthy and constructive coping/ self-reflective strategies
- A positive finding from the data analysis of these articles was that emotional intelligence is something that can be learned

Examining the Relationship of Substance Use Among Nurses and Patient Safety

Critically Analysis of 5 Articles
Deborah Morris
Substance Use Disorder & Patient Safety

- Substance use disorder (SUD) defined - a term used to describe professional nurses who are under the influence of psychoactive drugs and/or alcohol when working
- SUD is also defined as the inability to carry out essential functions to practice with reasonable skill or safety because of dependency on drugs & alcohol
- The studies examined indicated that substance related impairment among nurses and healthcare professionals represent a significant risk to patient safety and public health

McHugh, Papastrat, & Ashton, (2011)

Signs & Symptoms of Substance Use

- Personality changes
- Mood swings
- Poor judgment
- Smell of alcohol
- Pupils dilated or pinpoint
- Subtle changes in appearance that may escalate over time
- Inappropriate verbal or emotional responses
- Changes or shifts in job performance
- Absences from the unit for extended periods
- Making an excessive number of mistakes, including medication errors
- Increasing isolation from colleagues
- Arriving late or leaving early

New, 2014

Substance Use Disorder Findings

- Patterns of substance use by nurses, physicians, pharmacists, and other allied health professionals create a significant public safety risk
  - 90-94% of healthcare professionals used alcohol
  - 1:10 health care professionals will become addicts or alcoholics
  - 44-48% used other drugs before they entered school for their profession
  - 15% of clinicians misuse substances in their lifetime and will continue using drugs, placing patients in jeopardy

Merlo, Tracy-Lopez, Conwell, & Rivenbark, (2013)
Substance Use Disorder Findings Cont.

- When under the influence of alcohol and drugs
  - Patient safety and job performance of health professionals were affected
  - A total of 916 health professionals from hospitals and pharmacies participated in the study
  - The study found poor attendance patterns in clinicians with acute intoxication or illicit drug use
  - The occurrence of accidents, medication errors and patient safety related events increased when health professionals used drugs and alcohol in their workplace

Edvardsen, Karinen, Moan, Øiestad, Christophersen & Gjerde, 2014

Substance Use Disorder Findings Cont.

- One study examined the prevalence of substance use among nurses in the workplace and found that:
  - 48% reported drug or alcohol use while at work
  - 40% felt that their competency level was affected by their use
  - 27% of nurses acknowledged that patients were put at risk on one or more occasions

Cares, Pace, Denious and Crane, 2015

Substance Use Disorder Findings Cont.

- The study highlighted that nurses with active and hidden drug use is a threat to patient safety
  - Nurses were working without their employer's knowledge even though they were sanctioned previously for impaired practice
  - The safety of patients was at greater risk when nurses practiced under the influence and had associated behaviors of intoxication, hangover, withdrawal, impaired motor coordination and faulty judgment

(Kunyk, 2015)
Substance Use Disorder Findings Cont.

- Clinicians with drug dependence face unique challenges in recovery programs
  - Requires a multidisciplinary team with experience because of the unpredictable degrees of resistance to treatment.
- 50 states currently have diversion programs for physicians
  - Only 43 states have formal diversion programs for nurses (Valdes, 2014)
  - In order to help nurses who have substance use disorders
    - Formal diversion programs need to be established in all 50 states
      - Which will provide them with the support and guidance that they need

(Engers, Beilinger, & Giono, 2013; Valdes, 2014)

Recurring Substance Use Themes

- The occurrence of accidents, medication errors and patient safety related events increased when health professionals used drugs and alcohol in the workplace
- Safety of patients were at greater risk when nurses practiced under the influence and had associated behaviors
- Regardless of the educational and experience level, nurses are more vulnerable to substance use disorders due to emotionally taxing nature of their work

(Mark, Trujillo Lamas, Carwell, & Richmond, 2013; Suraj, 2015)

Proposed Recommendations

Sony Mani & Deborah Morris
Proposed Recommendations

1. Survey the perception of patient safety of front line staff
2. Increase awareness of the organization’s justice system among associates
3. Introduce mini educational workshops to bedside nurses during daily huddle
   - To improve their emotional intelligence awareness and/or incorporate emotional intelligence education into clinical rounds
4. Establish a non-punitive culture where associates feel safe to report near misses, good catches and errors
   - Helps to identify trends and system process issues
5. Provide feedback via daily safety huddle report or weekly safety updates on the most commonly identified safety issues
6. Screen for EI levels when making hiring decisions
7. Educate staff on signs and symptoms of substance use disorders and the importance of reporting when they suspect impairment of a fellow professional
8. Provide formal diversion programs for impaired professionals with drug or alcohol addiction

Evaluate Effectiveness of the Proposed Recommendations

- By analyzing the data collected through the annual AHRQ staff safety culture surveys
- This survey assesses the staff’s perception related to patient safety and the culture of their work environment
- By comparing the pre- and post-intervention survey results, the investigator will be able to see if the implementation of one or more of the above recommendations made an impact

Mini Exercise

- Emotional Intelligence Quiz
  - EI ability being assessed
  - Ability to perceive emotions accurately
  - https://greatergood.berkeley.edu/quizzes/take_quiz/ei_quiz
Conclusion

- SR findings indicate:
  - EI can be learned
  - It is possible to improve patient safety by empowering professionals at the grass root level
  - Ultimately, what needs to happen is to ensure a safe place for patients to seek treatment, and for associates to work, is to make certain the organization empowers people to do the right thing, and have a culture that promotes transparency

References

- Images retrieved from Google Images at https://www.google.com/imghp?hl=en