

Determining Best Practice Through Research of the Lived Experience of Intubated/Restrained ICU Patients/Families

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- Community based tertiary care organization
- 136 beds, Level II Trauma, CT Surgery
- Loveland, Colorado



PURPOSE

- A phenomenological, qualitative study
- Research question: How do patients and families feel about soft wrist restraint use when the adult patient is intubated/mechanically ventilated in the ICU?
- The goal was understand the experience of being restrained to clarify the magnitude of the problem for patients/families and to use this information as an incentive to decrease restraint use.



Background/Significance

- Gap in the literature regarding restraint use in ICU.
- The literature offers two alternatives to restraint: chemical restraint and 1:1 nursing care.
- Neither of these options is a viable solution in our organization.
 - Financial
 - Unacceptable complications



Methodology

- IRB approved research study
- Convenience sample from the Cardiovascular Intensive Care Unit
- n=14
- Two groups
 - Planned intubation/mechanical ventilation with heart surgery
 - Unplanned intubation/mechanical ventilation, emergent admission
- Sample size was determined by saturation



Methodology

- Written consent was obtained from the patient and the family member interviewed
- Semi-structured interview tool used
- Audio-taped interviews obtained by one interviewer
- Interviews conducted after the patient was transferred from the ICU, prior to hospital discharge
- Recordings were transcribed verbatim into word documents



Semi-Structured Interview Questions

1. What was it like for you being restrained in the ICU?
2. What do you remember being said to you while you were on the ventilator? Who was talking with you?
3. How do you remember feeling and what did you think? Tell me more about that.
4. What seemed to help you or provide comfort while you were restrained and on the ventilator?
5. What did not help you while you were restrained and on the ventilator?



Methodology

- Transcriptions were reviewed for accuracy
- NVivo 9© computer qualitative software was utilized to facilitate data analysis
- Peer Review
 - Three nurses read through the transcripts, met and discussed the themes each surmised from the readings
 - Data was coded and reduced
 - There were a total of 4 primary themes identified
- Inter-rater Reliability
 - Two researchers independently reviewed the transcripts and concurred on the coding and theme development: a clinical RN and a PhD in Nursing and PsyD in Psychology



Results

- Demographics
 - Age 32-78 years, mean 59
 - Male (11)
 - Female (3)
 - Race
 - Caucasian (12)
 - Hispanic (2)
 - Diagnosis:
 - Heart Surgery (8)
 - Myocardial infarct (2)
 - Respiratory failure (4)
- Family Members
 - Wives (6)
 - Daughters (2)
 - Son (1)
 - Granddaughter (1)
 - Mother (1)
 - Son-in-law (1)



Results

- Primary Themes
 - Lack of memory regarding restraints
 - Intubation as torture
 - Importance of caring behaviors
 - Families were reassured by the restraint



Lack of Memory

- 100% (14/14) of patients had some lack of memory
- 86% (12/14) of patients had NO memory of the restraints
- The patient's feelings and experiences are not about the restraint, many patients have no memory of the restraint



Intubation as "Torture"

- 8/14 (57%) perceived being intubated as a horrible experience
- The interviewer did not ask about the experience of intubation, patients shared those feelings spontaneously during the process
- Adjectives used: "torture", "misery", "choking", "drowning", "horrific", "uncomfortable", "scared", "panic", "ripping", "aggravated", "gagging", "hurt"



Important Finding

- Although we were asking about restraints, the patient's concern had to do with their experience of being intubated and the trauma perceived was paramount.



Importance of Caring Behaviors

- 12/14 (86%) identified nursing behaviors that were deemed helpful and provided reassurance/comfort
- Both patients and families identified these caring behaviors
- Examples:

The nurse had a very pleasant voice, a very calming effect, and was in control.

"When they talked to me and told me what to do I would calm down and do what I needed to do."



Conclusions and Implications for Practice

- The initial intent of this study was to understand the lived experience of being physically restrained, however the patient's focus was not on the restraint.
- Patients were focused on the experience of intubation and the pain and anxiety caused by this procedure.
- Much of the pain the patient feels and remembers is from the endotracheal tube.



Conclusions and Implications for Practice

- Patients and families repeatedly reported the value of nursing caring behaviors. The "calm soothing voice" and "reassuring touch" of the nurse was very important for patients and families during this vulnerable time.



Practice Changes WE MADE

- Patients memory loss was likely due to sedation, which also affected pain management.
 - At the time of this study, the practice in our ICU was to put all mechanically ventilated patients on a Propofol infusion
 - Patients were sedated to a level of Moderate Sedation
 - Patients were able to arouse to voice and tactile stimulation and follow simple commands, but did not have recall
 - The practice was to do wake up assessments every 12 hours at this time.



Practice Changes WE MADE

- PAIN MANAGEMENT FIRST, it is easier to manage pain if the patient is able to respond
 - Implemented Pain/Sedation Protocol with provider support
 - Not just less sedation, but MORE pain medication
 - Standardized practice



Practice Changes WE MADE

- Minimal to NO SEDATION, patient only gets sedation if they prove they need it
 - Continuous sedation in less than 50% of mechanically ventilated patients in our current practice
- More patients are unrestrained and awake while mechanically ventilated
- Increased early mobility now because the patient is awake



Practice Changes WE MADE

- Reinforced the importance of nursing caring behaviors
 - Education provided to the ICU nurses regarding the results of the study
 - Focus on the importance of caring behaviors for patients awakening in the ICU
 - Reframe nursing caring behaviors as “FIRST LINE INTERVENTIONS”



Future Research

- Next research study combined qualitative and quantitative study to explore pain management in the CV Surgery patient population with early extubation and mobilization postoperatively.
- Track restraint utilization in the Cardiac ICU
 - Prevalence data for NDNQI, incidence data would show a more dramatic change



Limitations

- Our study is specific to our patient population in our organization.
- Our small sample size limits generalizability.



Lessons Learned

- Qualitative research provides rich and valuable information about the patient's perspective of the ICU experience
- Research CAN change nursing practice!
- It is best to go to the source, the patients and families to determine how THEY feel!
- Research can be fun!



Research Team

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