Nurses' Decision-Making Process in Cases of Physical Restraint in Intensive Care Units

Yi-Hung Yang. RN, MSN, PhD student
National Yang-Ming University
Taipei Veterans General Hospital,
Department of Nursing
Outlines

Introduction

Purpose

Method

Results

Conclusion
INTRODUCTION
ICUs had the highest frequency of using physical restraint in hospitals. (De Jonghe et al., 2013)

The timing of the use of physical restraint is most likely to be determined by the nursing staffs in ICUs.

Up to 80% of patients in ICU may experience some degree of agitation, confusion, or delirium during their stay. (Jacob et al., 2002)

Caused by pain, underlying illness, sleep deprivation, hypoxia, mechanical ventilation, myocardial ischemia, alcohol and substance withdrawal, and altered cell metabolism.
• Patients may attempt to remove invasive devices thus jeopardizing their progress or even resulting in death.
  Inability to communicate, unfamiliar surroundings, loss of self-control, fear of real or imagined danger, noise and irregular sleep patterns.

• Physical restraints require the balancing of risks and benefits as it may increase the complications. (Evans et al., 2003; Perkins, Prosser, Riley, & Whittington, 2012)
  Likelihood of skin trauma, pressure sores, muscular atrophy, nosocomial infection, constipation, incontinence, limb injury, contractures, depression, decline in functional and cognitive states, increasing agitation, even increased length of hospitalization.

• The decision to use physical restraint in the care of critically ill patients can be complex and is influenced by characteristics of the patients. (Mion, 2008; Goethals, Dierckx de Casterlé, & Gastmans, 2012)
• Most health care professionals and administrators in the acute care setting have mistakenly overestimated the therapeutic and prophylactic value of physical restraints for patients and underestimated the dangers of such devices in terms of patient injuries. (Kapp, 1996)

- Reduction in the use of restraints in the ICU is vital to protect patients’ rights, and it reduces the risk of patient harm due to restraints.
Categories

physical restraint, chemical restraint, and seclusion

Definition

- Restraint - keep control
- Physical restraint – a specific intervention or device that prevents the patient from moving freely or restricts normal access to the patient's own body.
• The South African Medical Association (SAMA) states:
  • every person has a right to refuse treatment and to be free from the use of unauthorized force to restrain their movements.
  • patients have the right to freedom and security of the person, including freedom from inhuman, degrading treatment and violence. (SAMA, 2008).

• The South African Nursing Council (SANC)
  • nurses must ensure the physical and mental health, comfort and reassurance of the patient, maintain sensory functions and promote communication (SANC, 1984).
- Keep the patient from pulling at tubes, drains, and lines or to prevent the patient from ambulating when it’s unsafe to do so—in other words, to enhance patient care.

- Physical restraints do not ensure safety. (Chang, Yu, Loh, & Chang, 2016).

- More than 60% of patients in their study extubated themselves whilst restrained and some reports suggest that restraints may increase patient agitation and result in significant side effects including serious injury and even death. (Evans et al., 2003; Maccioli et al., 2003; Martin, 2002; Martin and Mathisen, 2005; Patterson and Duxbury, 2007; Yönt, Korhan, Dizer, Gümüs, & Koyuncu, 2014).
▪ Restraints were used in 14.5-34% of patients in the surgical ICUs and between 12.6 and 50.1% in medical ICUs in the 1990s.

▪ Tanios et al. (2010) revealed that the absence of physical restraints was perceived to be a risk factor for unplanned extubation by 72% of 1,976 physicians, ICU nurses, and respiratory therapist respondents.

▪ Clinical practice guidelines have been recommended for the use of restraining therapies by the American College of Critical Care Medicine which advocate for careful deliberation before applying restraints. (Maccioli et al., 2003)
78% of patients in the beginning of the ICU stay were restrained, 10% of patients after the first 9-16 hours stay were constrained.

ICU had the highest proportion of patients being restrained due to agitation, GCS average of 11 points, and insertion of endotracheal tube. (Ke, Chou, Shiung, Lin, Chen, 2010)

Nurses are the key decision makers in the application of physical restraints to patients (Chang, Yang, Chang, Lee, & Li, 2006; Choi & Song, 2003).

It is necessary to understand the motives and ideas behind the use of physical restraints in the ICUs.
PURPOSE
The purpose of this study was to explore and understand the factors influencing the concept, attitude, and decision-making of the nursing staff, and analyze the conflict between the influencing factors and the nursing ethics of the behavior decision.
METHOD
Study Design

- In-depth interviews and observations were used to collect data in medical center in northern Taiwan.

- The data collection period was from September 2016 to March 2017.

- Purposive sampling was applied, and 4 intensive care unit nurses.

- Interviewed using semi-structured questionnaires.

- Content analysis was used to analyze and categorize the data.
Qualitative - Participants

• The inclusion criteria
  • Worked full-time at MICU & SICU.
  • Whom had experienced physical restraints during the patients’ hospitalization.
  • Agreement to participate in the study

• Ethical considerations
  • is expected to be approved by the Institutional Review Board of the TVGH.
  • After the researcher answers any questions, the participants will sign the consent document.
Interview Guidelines

- When nurses are in face of an ICU patient, what dangerous situations may occur, and what are their choices?
- During what situations will nurses consider to use physical restraints?
- When nurses are making these choices, what conditions or information needs to be considered?
- When deciding to use physical restraints, will nurses discuss with other members of the medical team?
- When will nurses decide to release physical restraints? What principles do you need to make these decisions?
Reliability & Validity

Qualitative study

- Credibility
- Applicability
- Consistency
- Confirmability
RESULTS
Thematic categories-1

- **Safety factors**: risk prevention strategies/tools for patient safety.

Nurse A: The primary purpose of performing physical restraint is of course to prevent the patient from doing something that hurts himself. It is usually more prone to prevent them from unplugging themselves, such as other relatively important maintenance lines such as endo or CVP.

Nurse B: We must stand in a position that protects their life and safety…
Thematic categories-2

- **Environmental factors**: The culture of using restraints in the ICUs and quality of control.

Nurse B: It’s already a habit to use physical restraints in the ICU…, usually most nurses use it, because if patients self-extubate or unplug themselves, we have to fill out a report.

Nurse C: When admitting new patients who have an endotracheal tube, we will immediately apply physical restraints before performing any assessment....
Thematic categories-3

- **Ethical impact**: Patient rights, autonomy, dignity, and conflicts between caregivers when applying physical restraints.

  Nurse B: Even though physical restraints abide human rights, what if patients have difficulty re-intubation? Won’t there be legal issues?

  Nurse C: I believe that I can’t handle the consequences of patients who self-extubate.
Thematic categories-4

**Cognitive factors:** Primary nurses use subjective cognition when deciding to apply physical restraints

Nurse A: If I assess that the patient needs to be restrained, I will apply restraints.

Nurse B: The primary nurse decides to use restraints, … I will still use them according to my assessment.

Nurse D: Patients, who are plugged on life support system, such as respiratory ventilation or ECMO, will be the first to be restrained. Patients with arterial catheters are half-half.
Most families do not want their love ones to be in danger, so they have more respect for the nursing staffs when it comes to the evaluation and decision making of applying physical restraints.

Nursing staffs also don't want to have their patients extricating invasive lines or tubes from themselves.

Therefore this situation is not only a medical dispute, but also causes emotional stress for nurses, including helplessness, fear, anger, and guilt.
CONCLUSION
This study not only understands the views and decision-making process of nursing staffs in ICUs on the implementation of physical restraints, but also how to assist the proper assessment to carry out the appropriate physical restraints, and even the timely release from them.

In conclusion, in order to achieve a restraint-free environment, we still need to have a proper policy formulation and the development of appropriate ancillary assessment tools.


Thank you for your attention