

Evidence Based Practice Recommendation for Management of ED Through Simulation to Improve Nurses' Confidence in Caring for Patients with Emergence Delirium

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BACKGROUND

- Emergence Delirium(ED) occurs in Post anesthesia Care Units
 - Requires rapid and skilled interventions support patients.
- Emergence Delirium has been described as a patient who is confused, agitated, hallucinating, restless, pulling at lines and combative after receiving anesthesia
 - Characterized by a short-term cognitive impairment and hyperactive motor behavior occurring in the post anesthesia care unit after receiving general anesthesia

BACKGROUND

- The Incidence of ED is reported from 2.1-22.2% with a mean of 11.6%
- 18% of adults who experience ED had a diagnosis of PTSD
- The incidence of PTSD in the Veteran Population is 20.4%

BACKGROUND

- The mission of the VA of providing the best care and services to this Country's Veterans
 - Although volumes of literature describe ED and report data on risk factors and prevalence of occurrence the first standardized guidelines were published in 2017, and there is wide range of practice

Evidence Summary

- The incidence of emergence delirium is 2.1-22.2% with a mean of 11.6%
- With a rate of 20% in Military members
 - 50% of patients had a diagnoses of anxiety, depression, and or PTSD
 - 18% had a diagnosis of PTSD
- Leads to physical harm, increased the need or staff and cost
- No standard definition
- Common risk factors associated
- An agreement for Differential diagnosis

PICO(T) QUESTION

- Does simulation training on emergence delirium improve the RN's perception of competency and comfort in handling a patient experiencing emergence delirium in the PACU after general anesthesia
 - P (population) – PACU RN
 - I (intervention) – Education and Simulation training on emergence delirium
 - C (Comparison) – Questionnaire: results comparing “pre” and “post” education and simulation training
 - O (Outcomes) – An increase in comfort level and perception of a patient experiencing emergence delirium
 - T (Timeframe) – 30 days (from taking the pre-questionnaire then doing the education and simulation session and then a post-questionnaire after the session)

ACTION PLAN

- Staff Identified current practice varied, request training for consistent care
 - Collaborate with subject matter experts
- Design learning experience to include
 - Educational materials on ED
 - Design simulation with multidiscipline team
- Provide hands on ED training through simulation
- Evaluate before simulation, immediately after, and 1 month later

Objectives of Simulation Training

- Identify the patient population at risk for emergence delirium during the preoperative interview process,
- Formulate a structured care plan both pharmacologic and non-pharmacologic for patients at risk for ED.
- Develop a method of hand-off communication regarding patient's risk for ED in collaboration with the interdisciplinary team.
- Plan for follow-up care
- Relate the value of the multi-disciplinary approach in the care of patients with a diagnosis of PTSD who exhibits ED.

Evaluation tool

Did you do the Pre-reading?	yes	no			
	(1) Strongly disagree	(1) disagree	(3) neutral	(4) agree	(5) strongly agree
Have you experienced a patient with Emergence Delirium in the PACU?					
How comfortable are you with your current knowledge of Emergence Delirium?					
What is your comfort level with being the primary nurse for a patient in PACU with Emergence Delirium?					
Did you find the Reading material/Simulation beneficial?					

PROJECT METRICS

	Metric	Operational Definition	Source of Data	Data Collection Frequency	Data Aggregation (frequency & level of analysis – unit, pt. pop)	Feedback Plan (to what stakeholders, & when)
PROCESS	Education	Inservice presentation live	Examination	Pre and post Tests	PACU Nurses	compare pre/post
	hands on skill	Simulation experience	Group Report	Self evaluation	PACU Nurses	Debrief
OUTCOME	comfort level	Self evaluation	Questionnaire	Pre, Post, 30days post	PACU Nurses	Likert scale evaluation

Simulation Design

- Educational module
 - Required reading
 - Pre/Post test
- 3 Act Design
 - Preoperative assessment
 - Intraoperative
 - Post Anesthesia Care Unit
- Self report survey evaluation
 - Pre
 - Post
 - 30 days

RESULTS

- **Goal:** Staff will demonstrate improved interventions in the care of the patient with emergence delirium and PTSD as evidenced by successful scenario completion and pre and post test scores.
- **Goal:** Pilot sample size of 5 with a 100% response rate of questioners sent out with the intent to include all 17 PACU RNs after initial evaluation of pilot

VA commitment to caring for veterans with PTSD and ED

Mission Statement

To fulfill President Lincoln's promise "To care for him who shall have borne the battle, and for his widow, and his orphan" by serving and honoring the men and women who are America's Veterans.

Core Values

Integrity

Commitment

Advocacy

Respect

Excellence

CHALLENGES

- Simulation planned for May 5
 - COVID-19
 - Social distancing requirements
 - Staff deployed through medical center to support COVID-19 efforts
 - Simulation delayed until assembling in a simulation is deemed safe
- Describe limitations of project
 - Difficult to evaluate long term effects of training for both staff and patient outcomes

IMPLICATIONS FOR PRACTICE

- Identification
- Education
- Simulation
- Evaluation
- Staff training at other Institutions or VAs

CONCLUSION

The mission of the VA of providing the best care and services to this Country's Veterans is upheld by educating staff, through simulation, on evidence based practice recommendations for management of ED in our high-risk patient population. In doing so, staff may take steps in preventing or minimizing the experience of ED. These steps may reduce the risk of harm to self and staff, confusion, agitation, disorientation, cost, length of stay, and the need for additional staff.



QUESTIONS & DISCUSSION

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