Critical Response: Elevating Brain Attack Care Through Virtual Escape Room Training

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BACKGROUND

- The North Prep and Recovery Unit (NPRU) is a mixed unit responsible for the pre-procedure preparations and post-procedure recovery for both inpatients and outpatients undergoing procedures in the Endoscopy, Cardiac Catheterization, and Electrophysiology (EP) laboratories.
- Many of these patients have preexisting conditions which place them at a higher risk of stroke in the perioperative setting, especially following general anesthesia .
- Stroke recognition and MRI safety are topics that many staff are aware of but do not use regularly enough to be comfortable with the policies and safety requirements for patients and staff in the area.
- Studies indicate that gamification creates a less stressful learning environment for adult learners.

PURPOSE

- To develop and implement an educational opportunity that will increase nurses' and Patient Care Technicians' (PCTs) knowledge on stroke identification and MRI safety in an engaging and enjoyable manner.

STRATEGY

- A pretest focusing on stroke recognition and MRI safety was administered to staff from the NPRU and Endoscopy laboratory.
- The most missed topics included:
  - MRI checklist "hard stops"
  - MRI zone precautions
  - Brain Attack Team (BAT) phone number
- A virtual escape room was created by the Clinical Education Coordinator (CEC) focusing on these topics.

PRETEST

IMPLEMENTATION

- A station at the mandatory 2024 education marathon was set up to give all staff an opportunity to work on the virtual escape room at their own pace.

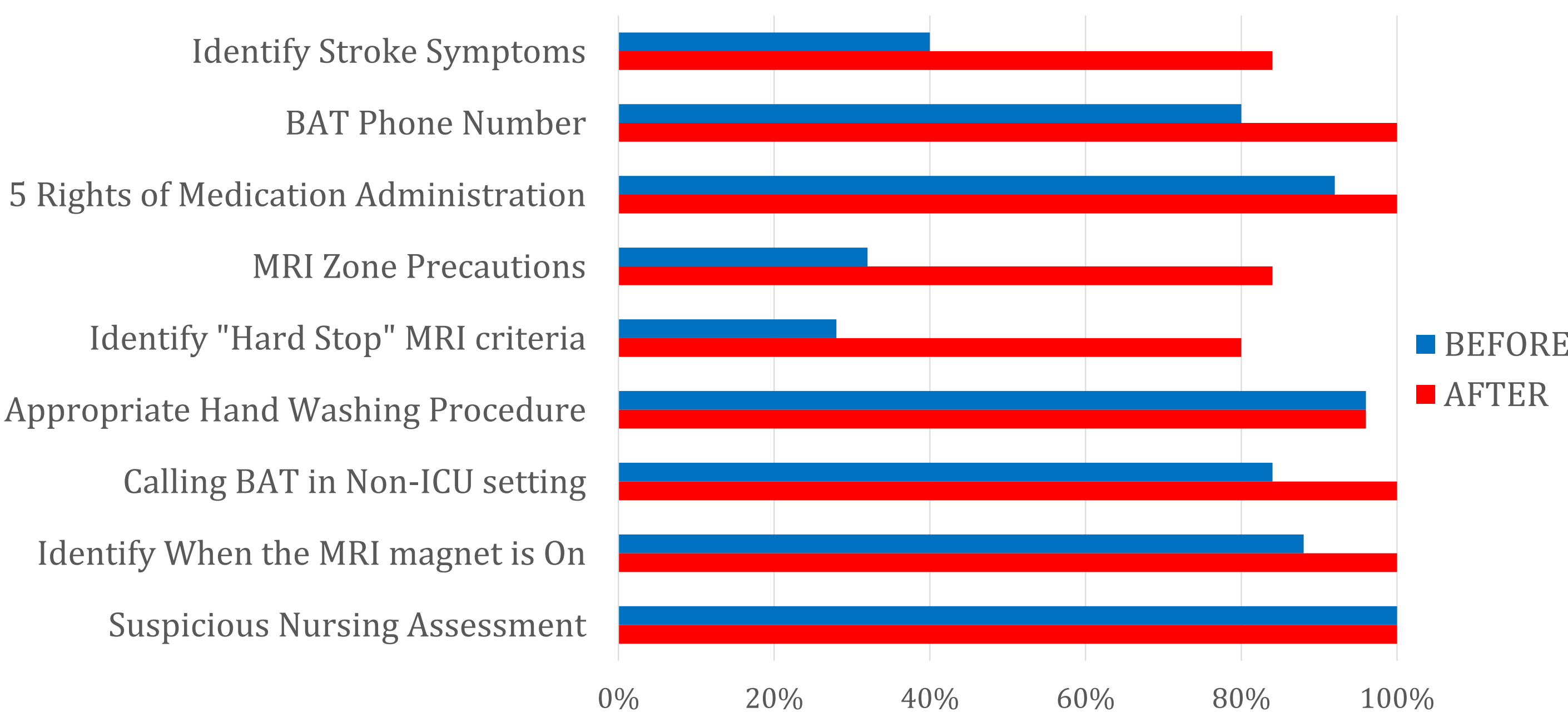Screenshot from virtual escape room

Scan for additional screenshots

EVALUATION & OUTCOMES

- Following participation in the virtual escape room a posttest consisting of the same 9 questions from the pretest was administered.
  - The average score among staff members increased from 71% to 94%
- Stroke symptom identification, MRI zone precautions, and MRI checklist "hard stops" were among the most improved upon topics.
- A Likert Scale to gauge staff satisfaction was also utilized which indicated staff found the use of a virtual escape room enjoyable.

Knowledge Assessment Before and After Virtual Escape Room

Categories (top to bottom): Identify Stroke Symptoms, BAT Phone Number, 5 Rights of Medication Administration, MRI Zone Precautions, Identify "Hard Stop" MRI criteria, Appropriate Hand Washing Procedure, Calling BAT in Non-ICU setting, Identify When the MRI magnet is On, Suspicious Nursing Assessment. Legend: BEFORE, AFTER. X-axis: 0%, 20%, 40%, 60%, 80%, 100%.

IMPLICATIONS FOR PRACTICE

- Stroke is an unexpected yet known risk for patients receiving general anesthesia.
  - Early recognition leads to improved patient outcomes and reduced mortality and disability.
- Knowledge of proper hospital protocol is imperative for providing quality patient care in a safe environment.

NEXT STEPS

- Utilization of virtual escape rooms offers an exciting opportunity to make learning enjoyable and exciting for adult learners.
  - Based upon learner feedback, virtual escape rooms will be utilized to educate staff on additional topics, such as post-procedure massive transfusion events.

REFERENCES

- Available by QR code on final slide.

ACKNOWLEDGEMENTS

MAGNET RECOGNIZED
AMERICAN NURSES CREDENTIALING CENTER