

Escape from sepsis:

A game changing approach to pediatric education



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100% of RNs reported the **SEPSIS ESCAPE ROOM** with debriefing improved their sepsis knowledge

Background

- 75,000 children are diagnosed with sepsis annually in the United States of America. ⁵
- Mortality Rates:**10-30% ⁷
- Risk Factors:** Comorbidities, source of infection, delayed recognition and initiation of evidence-based treatment ⁷
- Higher risk of death** attributed to delayed identification of sepsis in the hospital setting. ⁷
- A learning needs assessment showed the RN float team **prioritized sepsis education** over wound prevention and central line associated bloodstream infection.

Objectives and Outcomes

- Design** the "Sepsis Escape Room" (SER) as an innovative and immersive teaching modality that enhances knowledge, skills, and behaviors to promote timely sepsis recognition and interventions
- Evaluate** the efficacy of the SER and debrief within a psychologically safe environment

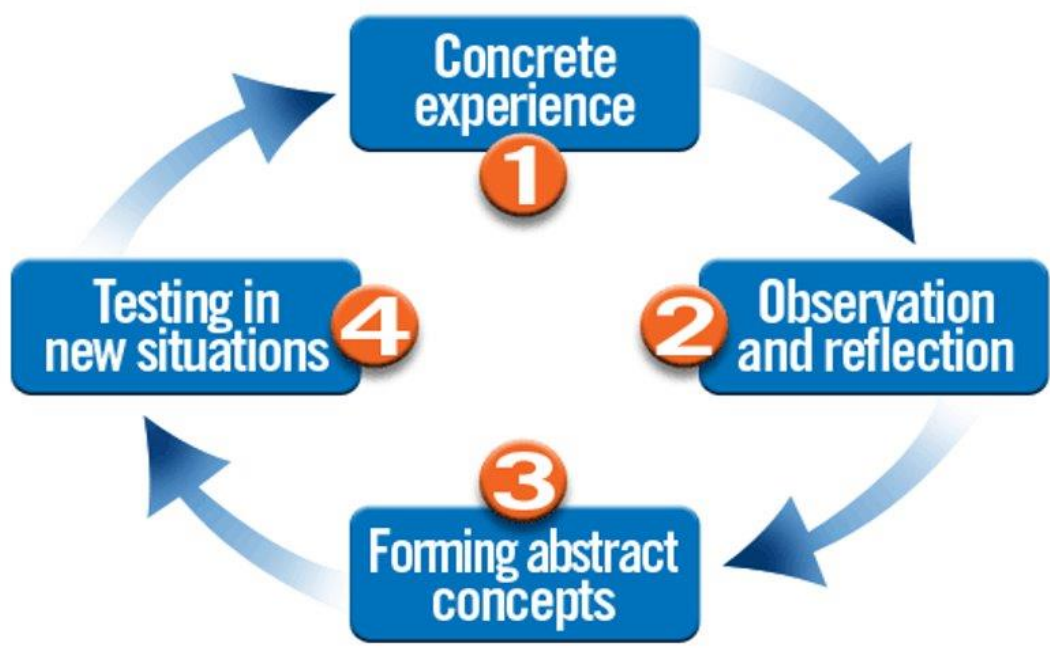
Learner Outcomes:

- Identify signs and symptoms of sepsis
- Implement the sepsis bundle in a timely manner

Methods

Project Development Framework & Theories

- Kolb's Experiential Learning Theory**



- Psychological Safety and Fiction Contract**
- Promoting Excellence and Reflective Learning in Simulation (PEARLS) Debriefing**
- SER case with facilitator-guided debriefing**

Simulation-trained team members facilitated the SER and debrief.

Participants: Fifteen float team nurses with medical surgical and critical care experience

What:

- Evidenced-Based Gamification**
An escape room where learners solve tasks and puzzles in a "locked" room and "escape" within a time frame. ¹
- Prebrief:** Emphasize psychological safety, fiction contract, learner expectations and orient learners to the simulation environment, equipment and supplies

- Structured Debrief:** Utilize PEARLS framework to promote self-reflection and knowledge sharing

Why: Enhance learner's knowledge of sepsis through an engaging and collaborative experience

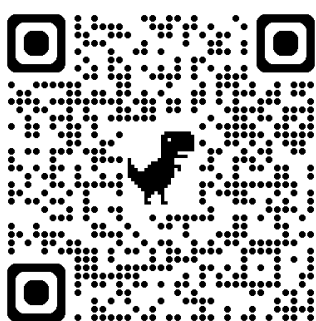
Implementation

- Facilitators facilitated the SER and led the debrief post-SER.

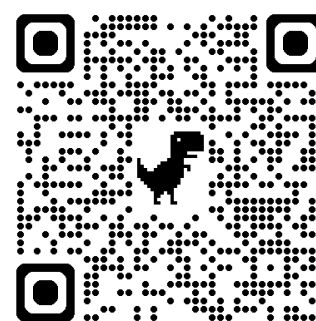


- Learners solved sequential clues as a group to complete the SER within 20 minutes.
- Facilitators guided learners by providing hints when learners required additional support during the SER.

Sepsis Escape Room Video



Prop Video & Photos



Results & Analysis

The debriefing session enhanced my knowledge.

- Strongly Agree 86%
- Agree 14%

Sepsis Escape Room: Facilitators allowed me to feel comfortable.

- Strongly Agree 100%

Participants gained knowledge of:



Comments and Feedback

I enjoyed this activity as a different way to learn.

Maybe have a separate noise for when the clue is completed and the next one is up on the board.

I loved this activity. Really puts the information in a new, more memorable way.

Fun learning activity and would enjoy various topics for future skills days!

Conclusions

Data/Evaluation

- SER is an effective teaching modality.

- Learners self-reported knowledge and skills gained.

Recommendations

- Consider age groups in the learning needs assessment to meet different learning styles
- Give clear directions when clues are solved or when facilitator support is needed
- Assess the impact of SER education on sepsis response time

Implications

- A positive and safe learning experience
- The emergency department and transport team modified and implemented the SER to meet their learner needs and patient population.
- Discussions
 - Learners felt safe and reported that debriefing was an effective way to learn.
 - An escape room with debriefing in a psychologically safe environment was a successful way to deliver sepsis education.
- Learners described as fun, enjoyable and memorable.

Barriers & Limitations

Challenges with clue development

- Develop objectives and content before creating physical clues and props

Learner support during the simulation

- Provide verbal hints to guide learners when they are unable to progress in the SER

Education limitations

- Ideal for teaching and evaluating established workflow and policies/ procedures
- Not beneficial for testing new workflow, policies/procedures or skills (education)

Large Class sizes (8+ learners)

- Facilitate 2 rooms simultaneously
- Facilitate 1 room & have additional learners observe

Diverse Learning Styles

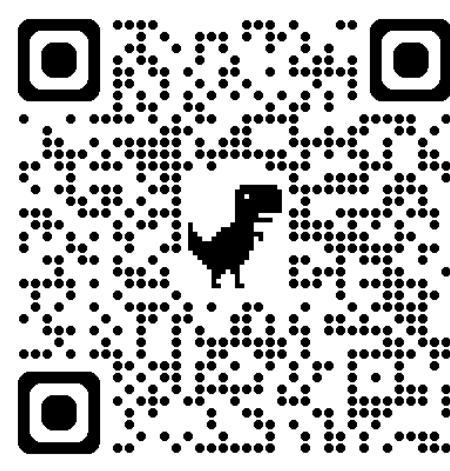
- May be more beneficial for kinesthetic, auditory or visual learners
- May be less beneficial for verbal-linguistic learners

References

Reference Page



Contact Cards



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