Empowering Nurses to Activate Rapid Response Teams

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### Background
- Delayed initiation of rapid response teams (RRT) upon signs of patient deterioration results in failure to rescue.
- A barrier related to delayed initiation of RRTs is negative responses from physicians or RRT team members.
- Another barrier is lack of knowledge and/or confidence with initiating an RRT.
- Simulation may potentially help address these barriers.
- Simulation is an effective pedagogical method that promotes learning and retention: event + emotion = cement in memory.
- Scripting helps with effective communication when faced with challenging situations.
- Simulation combined with scripting provides a safe space to practice skills in preparation for the “real” event.

### Purpose
- To examine the impact of In Situ simulation with scripting on nurses’ knowledge and confidence to initiate a rapid response team (RRT) immediately upon identification of patient condition deterioration to prevent failure to rescue.

### Methods
- IRB approved Jan 13, 2020
- Data collection: June 2021 thru September 2021
- Participants: Registered nurses and nursing assistants
- Recruitment: Flyers, email, personal invitation
- In Situ simulation with scripting: Informed consent, pretest and scenario orientation provided prior to each session with immediate post-session debriefing and posttest
- Instrument: Rapid Response Team Survey (RRTS)
  - Part 1: 4 scenario-based items (knowledge)
  - Part 2: 10 Likert-type items (confidence)
  - Includes demographics and 1 open-ended question
- Data analysis:
  - Descriptive statistics to describe the sample
  - Inferential statistics: Dependent t test to examine differences between pre-test & post-test means

### Quantitative Results

**Table:**

<table>
<thead>
<tr>
<th>Variable</th>
<th>t statistic</th>
<th>Mean Pre</th>
<th>Mean Post</th>
<th>Mean Difference</th>
<th>p</th>
<th>Cohen’s d</th>
</tr>
</thead>
<tbody>
<tr>
<td>RRTS Part 1 (Case Scenarios - Knowledge)</td>
<td></td>
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<tr>
<td>Q1</td>
<td>-3.224</td>
<td>&lt; .001*</td>
<td>.503</td>
<td>.55</td>
<td>.82</td>
<td>-.263</td>
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<tr>
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<td>.37</td>
<td>.82</td>
<td>-.447</td>
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<tr>
<td>Q4</td>
<td>-5.529</td>
<td>&lt; .001*</td>
<td>.563</td>
<td>.08</td>
<td>.58</td>
<td>-.500</td>
</tr>
</tbody>
</table>

**RRTS Part 2 (Perceptions - Confidence):**

| Q3 | -2.677 | < .01* | .576 | .548 | .571 | -.238 | .576 |
| Q4 | -3.098 | < .001* | .787 | .533 | .570 | -.372 | .787 |
| Q5 | -2.321 | < .025* | .905 | .489 | .520 | -.318 | .909 |
| Q9 | -2.936 | < .001* | .668 | 5.39 | 5.68 | -.285 | .668 |
| Q10 | -2.606 | < .01* | .694 | 5.41 | 5.68 | -.273 | .694 |

**Overall RRTS Scores:**

- Part 1: -5.509 < .001* 1.472 1.74 3.05 -1.32 1.472
- Part 2: -1.040 < .001* 5.784 50.79 53.88 -3.09 5.784

* p value statistically significant

### Qualitative Responses

**Open-Ended Question:**

“As a result of this training, what changes would you make in your practice?”

- “Call a code rescue if I am concerned about the patient”
- “I will work on my confidence in calling a code rescue when my ‘call’ tells me I should.”
- “I am not to doubt myself and advocate for the patient.”
- “I am more confident and not afraid of calling a code.”
- “Be more empowered to call a code rescue.”
- “Speak up more!”

**Increased awareness and recognition of urgency to take immediate action**

**Increased confidence and empowerment to initiate an immediate Code Rescue**

### Discussion

**Interpretation** – The results suggest:
- Participants’ knowledge and confidence increased after participating in the In Situ simulation with scripting session.
- Participants were more empowered to make decisions and take immediate action in activating RRTs in the future.

**Clinical Implications – The results of this study:**
- Align with other studies showing that simulation and scripting help increase knowledge and confidence related to initiating RRTs.
- Promote decreased incidences of failure to rescue related to increased knowledge and confidence in initiating RRTs.

**Recommendations for Practice:**
- Currently, In Situ simulation with scripting related to RRTs is not part of ongoing education for clinical staff.
- Recommend initiating regularly scheduled RRT-related In Situ simulation with scripting sessions and inclusion in annual clinical staff competencies.

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References available upon request."