Deliberate Practice Simulation: Striving for Skills Mastery and Clinical Reasoning

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Disclosures

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Learning Objectives:
- The learner will be able to define deliberate practice and explain its role in skill acquisition.
- The learner will be able to describe methods to integrate deliberate practice into simulation scenarios.
- The learner will be able to expand on further opportunities for deliberate practice.

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Gaining Expertise
Background

- Gap exists between didactic knowledge and clinical application in nursing students
- Deliberate Practice (DP) proposed to allow integration of thinking and skills in a controlled environment
- DP conceptualized as repeated opportunities to improve skill performance
- 4 Tenets:
  - Motivation to attend to task and exert effort
  - Tasks outside of a student’s comfort zone, taking into account pre-existing knowledge
  - Immediate feedback
  - Opportunity for repeat performance
Purpose

- Improve clinical reasoning and skills mastery in undergraduate nursing students through opportunities for practice
- Evaluate feasibility and effectiveness of deliberate practice in a medical-surgical nursing course
Methods

- Descriptive Study Design
- 99 2nd and 3rd semester students participated in two 1-hour sessions during the semester
- Opportunities for clinical decision making, prioritization, and technical skills
- Immediate debriefing and feedback with instructor
- Second session graded
- 13 item Likert scale survey completed post-simulation
Sessions

- Patient-based scenario
- Prior to session, students received patient report, medications and skills to review
- Independent completion with prompts as needed
## Overview of tasks

<table>
<thead>
<tr>
<th>Opportunity</th>
<th>Tasks</th>
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<tbody>
<tr>
<td>Clinical Reasoning</td>
<td>MAR Interpretation</td>
</tr>
<tr>
<td></td>
<td>Medication Administration</td>
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<tr>
<td>Prioritization</td>
<td>Medication Administration</td>
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<td>Respiratory Assessment</td>
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<td>Provider Orders</td>
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<tr>
<td>Skills</td>
<td>Communication</td>
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<tr>
<td></td>
<td>Medication Administration</td>
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<td></td>
<td>Nasogastric Tube Placement</td>
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<td></td>
<td>Tracheostomy Suctioning</td>
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<td></td>
<td>Straight Catheterization</td>
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</tbody>
</table>
Survey Results (Session 2): 77 students
Percent of students selecting “agree” or “strongly agree”

<table>
<thead>
<tr>
<th>Question</th>
<th>Semester 1</th>
<th>Semester 2</th>
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</thead>
<tbody>
<tr>
<td>The DP exercise was worth the time involved</td>
<td>96%</td>
<td>100%</td>
</tr>
<tr>
<td>I am more confident in my nursing skills</td>
<td>92%</td>
<td>100%</td>
</tr>
<tr>
<td>I would like to see more DP in other courses</td>
<td>82%</td>
<td>87%</td>
</tr>
<tr>
<td>The session helped me think critically about patient care</td>
<td>92%</td>
<td>87%</td>
</tr>
<tr>
<td>Overall this was a valuable experience</td>
<td>94%</td>
<td>100%</td>
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Results

Additional Student Feedback:
• Appreciated additional skills practice
• Appreciated opportunity to make mistakes in “safe’ environment
• Did not like being graded
• Did not like coming to school on day off
Discussion

- Positive response from students
- Feasible for incorporation
- Modifications
  - Skills blitz prior to 1st session
  - EHR incorporation
  - Interrater reliability
Next Steps

- Objective Structured Clinical Examination (OSCE)
- Research Implications
  - Pre and Post Test assessments
  - Standardized measures of confidence
References
