Title:
Educating Oncology Nurses With Simulation: A Chemotherapy Spill

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Session Title:
Rising Stars of Research and Scholarship Invited Student Poster Session 2

Keywords:
Nursing continuing education, Simulation in education and chemotherapy spill management

References:

Abstract Summary:
The use of simulation to educate nurses on an inpatient oncology unit revealed a statistically significant increase in participants’ knowledge and comfort in locating current policies, MSDS and dealing with a chemotherapy spill. This QIP also unintentionally revealed omissions and discrepancies in current policy and lead to policy changes.

Learning Activity:

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<tr>
<th>LEARNING OBJECTIVES</th>
<th>EXPANDED CONTENT OUTLINE</th>
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<td>The learner will be able to state at least three statistically significant benefits of educating oncology nurses with a simulation of a chemotherapy spill.</td>
<td>The presenter will accomplish the above objectives in two ways. First, for the visual learner a poster presentation with descriptions, charts and graphs. Secondly, the presenter will discuss why the quality improvement project was needed, how it was carried out and the outcomes of the project.</td>
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<td>The learner will be able to verbalize how the use of simulation lead to policy and practice improvements during this quality improvement project.</td>
<td>The presenter will discuss unanticipated findings during the creation and execution of the simulation process leading to the discovery of discrepancies and omission in the current hospital policy and how these findings may benefit the advanced practice nurse and anyone else involved in research, education and or policy development</td>
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Abstract Text:
The purpose of the quality improvement (QI) project was to determine if the use of a simulated chemotherapy spill increased the competencies and confidence of oncology nurses employed on an
inpatient chemotherapy unit. An educational QI design was utilized including a confidential voluntary pre and post intervention survey. The National League for Nursing / Jeffries Simulation Framework (NLN/JSF) was chosen to be used in conjunction with Kolb’s Experiential Learning Theory in the creation of the QI project. The simulations were held on a 25 bed oncology unit located in Providence Rhode Island.

Twenty-nine oncology nurses participated. The simulation objectives were to locate and follow the current hospital policy, to locate and follow the specific material safety data sheet (MSDS) for the particular drug utilized and to clean up the simulated spill based on the current policy. Twelve simulations were conducted. Only 20.6% of RNs had been previously exposed to a chemotherapy spill. More than half of RNs felt the simulation resembled real life and all felt that the simulation very much or somewhat prepared them to handle a chemotherapy spill. The results of the comparable questions were all statistically significant (P = <0.001) and suggest that the simulation did increase the nurses’ awareness of and comfort in locating the current hospital policy and MSDS. RN’s reported increased knowledge of the contents within a chemotherapy spill kit and an increase in feeling prepared to deal with a spill in the future. Nurses verbalized simulation as a preferred method of learning over, lecture, computerized tests and modules. During the simulation process unintentional finding revealed omissions and discrepancies in the current hospital policy. These finding lead to changes in the current practice and hospital policy. Future research to include larger cohorts in multiple oncology settings is needed to support educating nurses with simulation. Simulation may also be useful in creating, reviewing and revising policies.