Interventions to Improve the Nursing Care of People with Dementia in Canadian Hospitals: An Environmental Scan

Executive Summary

Background: Worldwide, hospital admissions among people with dementia are on the rise,\textsuperscript{1,2} with estimates that, in some settings, 25-30\% of acute care patients have dementia.\textsuperscript{3} While in hospital, people with dementia are more likely to experience complications such as urinary tract infections, pneumonia, falls, longer hospital stays, and increased admission to long-term care.\textsuperscript{3} National and provincial dementia strategies have recognized the need to improve the care of people with dementia while in hospital.\textsuperscript{4,5} Nursing care is being targeted as an area of focus due to the central role nurses play in shaping the experience of hospitalization for people with dementia.\textsuperscript{6,7} To support future efforts to improve nursing care of people with dementia in hospital, there is a need to better understand nursing innovations currently being developed, implemented, and evaluated in Canadian hospitals. Exploration of how enablers and barriers affect successful innovation implementation is also required.

Objectives:
1. To identify nursing interventions being used in Canadian hospitals to improve the nursing care of people with dementia.
2. To describe how nursing interventions to improve care of people with dementia in hospital are evaluated, including identification of outcome and sustainability measures.
3. To categorize factors affecting successful implementation of interventions to improve care of people with dementia in hospital.

Methods: An environmental scan including a search of published and unpublished literature and stakeholder interviews (N=20) was conducted. The Consolidated Framework for Implementation Research (CFIR) was used to categorize barriers and enablers to intervention implementation success.

Findings:

Interventions Many interventions were identified through stakeholder interviews not represented in the published literature. Interventions were categorized into dementia education for nurses, methods to promote individualized care, activities and sensory stimulation, and changing team dynamics. Most of the interventions focused on addressing the cause of responsive behaviors and facilitating increased staff knowledge and confidence in caring for patients with dementia. Both P.I.E.C.E.S and GPA were being used in several healthcare organizations. Other approaches to improving the experience of people with dementia in hospital included family video recordings played on an iPad\textsuperscript{8}, robot animals (PARO)\textsuperscript{9}, and a sensory lounge for sensory stimulation and engagement of people with dementia\textsuperscript{9}. 
**Effectiveness and Sustainability** Outcomes measured, to evaluate the effectiveness of interventions, included the reduction of responsive behaviors and increased staff self-efficacy in providing dementia care.\(^7,8,10-15\) There was very little measurement of the sustainability of interventions in the literature. Implementation of GPA was found to be effective for improving staff confidence in caring for people with dementia,\(^7,13\) reducing the need for restraints and antipsychotics,\(^7\) and increasing measures of patient-centered care.\(^16\) Although P.I.E.C.E.S was noted to be effective in improving staff recognition and treatment of responsive behaviors in dementia care, it’s sustainability and suitability for the acute care context requires further investigation.\(^15\)

**Factors Affecting Successful Implementation** Barriers and enablers to the implementation of interventions were categorized into the 5 domains of CFIR: inner setting, outer setting, intervention characteristics, process, and characteristics of individuals, and are summarized in Table 1. Contextual elements, such as adequate staffing, leadership involvement, interprofessional collaboration, and the hospital environment, were most commonly noted as affecting the success of intervention implementation.

**Table 1: Examples of Factors Affecting Intervention Implementation.**

<table>
<thead>
<tr>
<th>Domain</th>
<th>Constructs</th>
<th>Examples</th>
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</thead>
<tbody>
<tr>
<td>Inner Setting</td>
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<td>Policies</td>
<td>Policies (infection control, visitor)</td>
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<td></td>
<td>Patient Needs and Resources</td>
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<td>Characteristics of Individuals</td>
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<td></td>
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<td></td>
<td>Individual stage of change</td>
<td>Motivation</td>
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<td>Process</td>
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<td>Ability to hold education session</td>
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<tr>
<td></td>
<td>Reflecting and Evaluating</td>
<td>Intervention follow-up</td>
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<td></td>
<td>Champions</td>
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<tr>
<td>Intervention Characteristics</td>
<td>Cost</td>
<td>Implementation Cost</td>
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<tr>
<td></td>
<td>Complexity</td>
<td>Intervention Complexity</td>
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<tr>
<td></td>
<td>Adaptability</td>
<td>Intervention Adaptability</td>
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**Conclusions:**

- There are very few interventions that have shown consistent effectiveness in improving nursing care of people with dementia in hospital and been found to be sustainable over time. GPA shows potential for creating sustainable change.
- There are opportunities to use implementation science to support the success of interventions to improve the care of people with dementia in hospital.
• There is a need for research to support development of interventions to improve dementia care, and to understand the barriers and enablers to supporting meaningful improvements.

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Bibliography