Walk in My Shoes: Simulated learning and the care of the person with dementia (2014)

Contributors
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Abstract
This study examines a simulated learning approach to student nurses’ understanding about the lived experience of dementia. Despite current demographic and political drivers, there has been a dearth of research related to simulated learning to increase caregivers’ understanding. The Virtual Dementia Tour®, (VDT) * a simulated experience, provided the nursing students with a view into the world of the person with dementia. Students from Year 1 of the BSc nursing programme at the University of the West of Scotland were invited to participate in the study. A mixed methods evaluation included the Approaches to Dementia (ADQ) questionnaire and focus group interviews with small groups of participants. The results of the quantitative data showed no real change over time. However, the qualitative results from the study group provide a dramatic and mainly positive picture of the impact of the experience. The results raise a number of questions, including whether the VDT® is the most useful dementia simulation for student nurses and the sensitivity and specificity of the ADQ. The immediate impact of the experience may not be sustained over time and further study is needed. Future plans include a development of more sensitive quantitative measures to examine the impact of simulated learning in this area; collaboration with other HEIs, to increase the sample size for future studies and further development of the simulated experience with service users and third sector partners.

Background
In the future all nurses from adult or mental health fields will be likely to provide care for a person with dementia. Key to quality of care, in any setting, is an understanding of what it is like to live with dementia. Despite this, there has been a dearth of research related to simulation in the care of the person with dementia, with only two papers being identified (Belville, 2002; Chan and Chan (2009).

Study aims
To deliver and assess the impact of a simulated learning experience on the attitudes and approaches of nursing students towards the person with dementia

Methods
The research used a mixed method quasi-experimental, longitudinal design using the VDT®, a simulated experience, as a vehicle to provide nursing students with a view into the world of the person with dementia. The VDT® is a dementia simulation toolkit that mimics some of the cognitive, sensory, physical and emotional challenges that could be faced by the person with dementia.

Data collection involved completion of the Approaches to Dementia Questionnaire (ADQ) (Lintern and Woods, 1996). The ADQ is 19 item scale, which provides a Total score (range 19-95), and two sub-scores, Hope which predicts staff behaviour in terms of social interaction with people with dementia, and Person Centred, which is related to Recognition of Personhood; a sub-sample of students took part in focus group interviews. Ethical approval
for the study was granted by the University of the West of Scotland Research Ethics committee (appendix one).

**Participants:** Year 1 BSc Nursing students were provided with written information about the study and invited to take part in either the study or control group. Students who did not wish to take part were given the opportunity to experience a shorter simulation.

**Procedure**
Participants in both the Study Group and Control Group completed the Approaches to Dementia Questionnaire (ADQ) on three occasions:

- **Time 1:** Prior to the intervention, i.e. virtual tour for the Study Group (SG), and normal input for the Control Group (CG)
- **Time 2:** Immediately following the VDT©
- **Time 3:** Six weeks later after they had spent time working with people with dementia

Following the tour participants received a comprehensive debrief. Four focus group interviews were carried out involving 20 participants, interviews were audio recorded, with participants’ permission.

**Results**

**Approaches to Dementia Questionnaire**

Three hundred and eight students initially completed the ADQ, 153 students in the SG and 155 on the CG, however, missing data and drop-out resulted in smaller numbers being included in the analysis. The means and standard deviations are presented in Table 1 below.

<table>
<thead>
<tr>
<th>Time</th>
<th>Frequency</th>
<th>Total</th>
<th>Hope</th>
<th>Person Centred</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SG</td>
<td>CG</td>
<td>SG</td>
<td>CG</td>
</tr>
<tr>
<td></td>
<td>151</td>
<td>146</td>
<td>80.67</td>
<td>79.96</td>
</tr>
<tr>
<td>Time 1</td>
<td>140</td>
<td>147</td>
<td>81.17</td>
<td>81.54</td>
</tr>
<tr>
<td>Time 2</td>
<td>90</td>
<td>99</td>
<td>81.07</td>
<td>80.76</td>
</tr>
</tbody>
</table>

Mixed between-within subjects analysis of variance were conducted to compare the impact of the VDT© on ADQ scores across time.

**Hope:** There was a significant effect for Group \([F_{(2,181)}=4.400, p=.024]\), but no difference associated with time, and no interaction between time and intervention. T-tests involving scores derived from students in both groups at Time 1 revealed that there was a significant difference between students in the SG and students in the CG \([t_{(300)}=-3.5, p=.001]\); there were no differences between the two groups at Time 2 or 3 \([t_{(292)}=1.797, p=.073 & t_{(192)}=1.791, p=.075\) respectively].
Person Centred: There was a significant effect for Time [$F_{(2,183)} = 4.255, p=.016$]. There was no difference between scores derived from students in the SG and CG, and no interaction between time and intervention. Further analysis revealed that scores derived from students at Time 2 were significantly higher than those derived at Time 1; however, the difference between scores collected at Time 3 were not significantly different from those collected at either Time 1 or Time 2.

The findings indicate that students in the SG, i.e. those who volunteered to take part in the VDT© had higher Hope scores prior to joining the study; however, there was no evidence that the Dementia Tour increased, or maintained this difference. Analysis of the Person Centred scores also failed to support the use of the Dementia Tour as it indicated that the scores of all students increased following input relating to dementia, whether it was the VDT© or ‘normal’ input. The following chart illustrates the Total scores at Times 1 and 2 for both groups.

Focus group results

Topics followed a narrative sequence of 1) examining the experience of the VDT, 2) the students’ learning from the experience, 3) the impact on their practice and 4) their suggestions about future approaches to simulation related to dementia. Quotations are included to illustrate issues raised.

1) The VDT Experience: “fear of the unknown”

Most commented that they did not expect such simple garb to have such an impact on their senses, cognition and mobility:

\[
\text{It was a fear of the unknown, that you were frightened to take a step}.
\]

Some students did not like the experience and found it difficult to manage. The emotional responses were powerful and varied, using words like “frustrated” “anxious” “vulnerable”;
however, others responded pragmatically. While some methodically carried out tasks, others started to complete tasks aimlessly, or were frozen into immobility until escorted from the room.

Responses to the debrief were mixed; some students reported finding it valuable in terms of supporting how they felt, others saw this as an opportunity to carry out more in-depth learning:

“I was so agitated and when the lecturer came back to take me out and she was so nice and calm and comforting to me. I found that really useful cause it shows that I did feel calmer even with all the equipment still on….if someone else if nicer to you when you’ve got dementia it does help to calm you down”

2) Students’ learning: “before you wouldn’t think about it”.

The impact on learning was both positive and negative. Positive results related to an increased understanding of their previous understanding of the impact of the environment on the person and helped them see what else they needed to learn, e.g. the need to be prepared before approaching the person and giving them time and space.

3) Impact on practice: “You are mindful now”

Students identified greater awareness of the emotional response of the person with dementia. They also appreciated that they had a different view of the behaviour they saw exhibited by the person with dementia.

“I was thinking it’s no wonder that they hit sometimes. You must, they must get so frustrated”

Some students were concerned that, having had this experience, they would find it difficult to share their knowledge, particularly with experienced staff.

4) Future approaches: “not enough”

Students made a number of suggestions, students wanted to:

- Experience the simulation in different settings
- Experience different stages in the dementia journey
- Have their experience filmed to enable them to watch their own reactions
- The experience to be more interactive and scenario driven

Discussion

The quantitative results did not support the use of the VDT©. However, the focus group data indicated that the VDT© was a powerful experience engendering an emotional response which some students found upsetting and/or frightening. Students were able to make links to their previous learning, reframing the way they saw the person with dementia, e.g. demonstrating a greater understanding and empathy for the person with dementia and appreciating that it is not the same for everyone, they also recognised the need for an appropriate built environment and clear communication. The course does include a variety of learning approaches which students referred to during the discussions.

Future plans
The VDT© is now patented and will no longer be available here at UWS. In response lecturing staff with specialised knowledge and skills in dementia and simulation will join with people who have dementia from the Scottish Dementia Working Group and Alzheimer Scotland to integrate a variety of simulation experiences that will be developed to meet the students’ needs.

References


*The Virtual Dementia Tour© at the time of the study was going through a copyright process. In the UK it now carries a patent and cannot be used without facilitator training. More details at http://www.training2care.co.uk/virtual-dementia-tour.htm

The Virtual Dementia Tour© was developed by P.K. Belville; further information is available at: http://www.secondwind.org/virtual-dementia-tour/