INTERPROFESSIONAL APPROACHES TO SYMPTOMS OF DEMENTIA

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Abstract

Alzheimer's disease, the most common form of dementia, is one of the leading causes of death in the United States. Interdisciplinary teams of professionals are called upon to provide a variety of treatment modalities using evidence-based practice. Nursing and social work team members are frequently called upon as professional team members on the front line of service delivery for persons with dementia. This study uses audio and audiovisual simulation experiences of persons with dementia in the preparation of nursing and social work students. Measures utilized included The Dementia Attitudes Scale (DAS) and the Kiersma-Chen Empathy Scale (KCES). Results demonstrated significant change in attitudes and level of empathy toward persons with dementia.

Keywords: Dementia, nursing, social work, student

Introduction

Evidence shows that the United States (U.S.) population is aging and by 2030, 1 in every 5 U.S. residents will be over the age of 65 or represent 19.3% of the U.S. population (Tabloski, 2014). To place these facts in context, a 1930 statistic showed this age group represented only 5.4% of the population (Tabloski, 2014). As America ages, the prevalence of Alzheimer's disease is expected to also increase because advanced age is the single greatest risk factor and this risk increases every 5 years after the age of 65 (Mauk, 2014). It is estimated that currently 5.4 million people are diagnosed with Alzheimer's disease and this number is predicted to reach 16 million by 2050 (Mauk, 2014). Alzheimer's disease is the most common form of dementia, the 5th leading cause of death in those 65 years of age and older and the 6th leading cause of death for all age groups (Tabloski, 2014; CDC, 2014).

Professions such as nursing and social work are on the front line of

care delivery to persons with Alzheimer's disease and their families. Nurses and social workers will be in high demand to care for the increased numbers of persons with Alzheimer's disease. One objective of *Healthy People 2020* is to increase the number of registered nurses with geriatric certification by 10% (Healthy people, 2014). According to the Council of Social Work Education (CSWE, 2008), it is required that students complete a certain amount of hours in a field education setting where they can apply the theoretical ideology from the classroom to real life experiences. It is imperative that these students receive proper training on how to care for this growing population. As healthcare providers use evidence-based practice, educators are using evidence based learning in the classroom setting. The purpose of this study was to determine if an audio and an audiovisual simulation experience changed nursing and social work student's level of empathy and attitude towards persons with dementia.

For clinical professionals, the educational experience begins in a classroom setting where the exposure to realistic situations in simulation prepares them for real world events. It is imperative for nursing and social work programs to prepare professionals who are equipped to deliver services adequate to this community (Jankoski& Frey, 2012). When working with clients with dementia, practitioners can sometimes be met with frustrations from clients, families and caregivers as the disease progresses and medical solutions become less applicable (Robinson &Cubit, 2007). As dementia progresses, changes in one's personality and behavior can be challenging and this can deter nurses and social workers from continuing to work with this population. Unfortunately, providing care with little to no respect for these clients can result in poor upkeep of their health (Kane, 2006). To help ease this transition for the students, colleges are implementing courses, field education and simulation experiences that prepare and help shift oncoming practitioners to be better prepared (Eack, Newhill, & Watson, 2012).

Some faculty members have created multiple simulation exercises for nursing students to focus on the care management they would be exposed to in an ordinary hospital setting (Sideras, McKenzie, Noone, Markle, Frazier, & Sullivan, 2013). The implementation of simulation for nursing students offered these faculty members and the students a direct interaction between the quality of care a client would be expected to receive. Using standardized patients in four different scenarios, students were responsible for applying their clinical skills in what would be considered a typical hospital environment. Experiences in classroom settings such as these have allowed students to develop stronger clinical skills when working with faculty members thus receiving critical reviews to improve the quality of care they are providing (Baumbusch et al., 2012; Skalvik, Normann&Henriksen, 2010).

Social work students are expected to work with clients, but only after obtaining knowledge and training related to the population they will be working with (Adler, 2006). This step of field education within the curriculum of a degree program in social work helps students learn the realities of whom they will be serving and develop necessary skills through their work. In a survey conducted by Kane (2006) about the beliefs and values of Bachelor of Social Work (BSW) and Master of Social Work (MSW) students attending Florida Atlantic University, findings demonstrated that MSW students were less likely to believe the older population to be less competent. However, when researching information on social work students and their perceptions of adults with dementia, there is a lack of information available. Thus, there is a dire need for more research as it relates to the preparation of students in both social work and nursing as we continue to have an overwhelming increase in the aging population.

Pre-licensure nursing students are often exposed to persons with late stage dementia in nursing home settings early in their clinical rotations to gain the much needed skills of providing Activities of Daily Living (ADL) care. It is plausible that this early exposure to older adults with severe cognitive and physical limitations leaves the nursing student with a negative attitude toward older adults' ability to function. A study performed by Skalvik, et. al. (2010) regarding nursing student's experience with persons with dementia showed students felt more knowledge was needed for the nursing staff in how to properly give individualized person-centered care to persons with dementia.

One tool to help educators become more aware of the attitudes held by students towards clients with dementia is the *The Dementia Attitudes Scale* (DAS). Introduced by O'Connor and McFadden (2010), the DAS was created to analyze the attitudes of college students and care workers towards dementia. The scale was adopted from Krause's (2002) nine-step survey to determine quality of life in the later stages. It combined qualitative and quantitative methods to measure the attitudes from a pool of participants. The DAS differed from the original by limiting the survey to only four sections that include structured interviewing, validity testing, exploratory factor analysis (EFA) and qualitative data mapping. The DAS was intended for only college students and care workers. The DAS consists of 20 Likert questions where participants are asked to rate their attitudes from 1-7 with 1=strongly disagree and 7=strongly agree. The DAS has acceptable Cronbach alphas (0.83-0.85) and support for convergent validity (O'Connor & McFadden, 2010). The DAS was selected for this study because of its acceptable reliability and validity and its purpose of assessing attitudes about dementia held by students and care providers in addition to observing situations wherein attitudes develop more positively.

Kiersma, Chen, Yehle, &Plake (2013) validated a scale (Kiersma-Chen Empathy Scale; KCES) to measure empathy and changes in empathy after participation in an aging simulation among pharmacy and nursing students. The KCES consists of 15 Likert questions where participants are asked to rate their attitudes from 1-7 with 1=strongly disagree and 7=strongly agree. The KCES has acceptable Cronbach alphas of 0.85-0.86 and good internal consistency but has not been used widely. Given a dearth of accessible and valid empathy measures specific to older adults, and the importance in both nursing and social work education for students to learn to work well with a diverse population of older adults, this scale was chosen for this study.

Methods

Institutional Review Board (IRB) approval was given from the author's institution prior to starting this study. Pre-licensure nursing students and social work students were asked to complete the Kiersma-Chen Empathy Scale (KCES) and the Dementia Attitude Scale (DAS) pre and post audio and audiovisual simulation. In the audio simulation students were asked a series of general knowledge questions while hearing auditory hallucinations. This simulation lasted 30 minutes. In the audiovisual simulation students watched a video in which an unidentified person experienced auditory and visual hallucinations, along with paranoia. The students received a debriefing after both simulations from an expert in the field of dementia and treating dementia related behaviors.

Results

Description of Sample

A total of 47 nursing students participated in the simulation experience. Twenty completed the DAS and 8 completed the KCES. A total of 22 social work students participated in the simulation experience and 22 completed the DAS and 21 students completed the KCES. Therefore, the sample consisted of forty-two (N=42) participants completing the DAS and 29 participants completing the KCES. The majority of the students were female and white in undergraduate baccalaureate programs. Both sets of students were provided with this simulation project during their class time. The social work students were in their first semester of their core major coursework and the nursing students were in their 3rd of 5 semesters of major coursework. (See Table 1 demographic characteristics of sample).

For the Dementia Attitude Scale (DAS), independent samples t test results demonstrated significance ($p<.05$) in one question (#7) with significance of $p= .006$. For this question, pretest mean scores were 6.64 (social work) and 6.60 (nursing) and posttest mean scores were 6.82 (social

work) and 6.62 (nursing). (See Table 2 Dementia Attitude Scale Results).

The Kiersma-Chen Empathy Scale (KCES), independent samples t test showed significant results in six items. Table 2 provides the questions, statements and their level of significance for each of the questions with this sample of nursing and social work students. (See Table 3 The Kiersma-Chen Empathy Results).

Discussion

Even though more participants completed the DAS, there was only 1 question that demonstrated significance. Question #7 asks participants to rate from 1-7 how strongly they disagree or agree with the statement, "Every person with Alzheimers disease and related dementias (ADRD) has different needs." The only other question which came close to significance was item (#14) with significance of p=.09. Item #14 measures attitudes of "People with ADRD can enjoy life." Mean comparisons on these two questions of the DAS demonstrate some differences between social work and nursing students. Both groups of students showed change from pre to post in the positive direction but social work students demonstrated slightly more positive perspectives in the post tests in the areas of having different needs and the ability to enjoy life.

As can be seen in table 2, there are some differences between the results of social work vs. nursing students on each of these KCES items that demonstrated significance. One important difference is that there were more than double the numbers of social work students in the sample to complete the Empathy scale. Mean scores were higher for nursing students on items 2, 5, 6, and 12. These results indicate that nursing students may view a necessity for healthcare practitioners to understand someone else's feelings and value someone's point of view. In addition, results from question #12 demonstrate that nursing students indicate more difficulty identifying with someone's feelings as compared to social work students. For questions 1 and 9, mean scores indicate that social work students see the necessity for a healthcare practitioner to be able to comprehend someone else's experiences as slightly higher than nursing students while nursing students view the importance of considering someone else's feelings necessary to provide patient-centered care slightly higher than social work students.

Limitations

A small sample size is a limiting factor of this study and the fact that this was conducted at one point in time at one institution of higher learning. The social work and nursing students participated in the simulation on different days. Even though the debriefing was conducted by the same expert in the field, the fact that it was conducted on two separate occasions may

have led to different influences on the students. The nursing students participated in the simulation on a Friday afternoon and fatigue at the end of the work week may have influenced participation.

Conclusion

Simulated experiences are a way to provide students with real world experience in a safe environment. This simulated experience revealed positive changes in nursing and social work student's attitudes and empathy towards persons with dementia. Nursing student's perceptions of older adults are heavily influenced by their clinical rotations and early exposure to persons with end stage dementia to learn ADL care may be negatively influencing their perceptions of older adults and especially persons with dementia (Baumbusch, et al., 2012). Social work students do not have this exposure and this may have influenced the results of this study. Nurses and social workers will continue to be in high demand and called to care for persons with dementia. Exposing students to the realities of this care, processing appropriate care strategies and debriefing with critical and reflective thinking may be beneficial.

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Table 1 Demographic characteristics of sample

Variable	N	%
Degree		
Social work	21*	50
Nursing	20	47.6
Sex		
Female	39	92.8
Male	2	4.7
Race		
White	30	71.4
African American	3	7.1
Hispanic	3	7.1
Asian	2	4.7
Native American	1	2.3
Other	2	4.7
ADRD Background		
Social work		
Yes	9	21.4
No	12	28.5
Nursing		
Yes	14	33.3
No	6	14.2

* One social work student did not complete demographic information

Table 2 Dementia Attitude Scale Results

		Mean scores: Pre	Mean scores: Post	Level of Significance
Question 1: *It is rewarding to work with people who have ADRD*	NSG: (n=20) SW: (n=22)	5.30 (SD 1.1) 4.82 (SD 1.3)	6.00 (SD 1.0) 6.18 (SD .9)	.922
Question 2: *I am afraid of people with ADRD*	NSG: (n=20) SW: (n=22)	2.50 (SD 1.3) 3.45 (SD 1.6)	2.67 (SD 1.4) 2.36 (SD 1.1)	.100
Question 3: *People with ADRD can be creative*	NSG: (n=20) SW: (n=22)	5.65 (SD 1.2) 5.86 (SD 0.9)	6.19 (SD .8) 6.41 (SD .7)	.704
Question 4: *I feel confident around people with ADRD*	NSG: (n=20) SW: (n=22)	4.40 (SD 1.2) 4.09 (SD 1.4)	4.62 (SD 1.1) 5.00 (SD 1.1)	.956
Question 5: *I am comfortable touching people with ADRD*	NSG: (n=20) SW: (n=22)	5.05 (SD 1.3) 4.64 (SD 1.5)	4.81 (SD 1.4) 5.32 (SD 1.5)	.808
Question 6: *I feel uncomfortable being around people with ADRD*	NSG: (n=20) SW: (n=22)	2.80 (SD 1.1) 3.45 (SD 1.6)	2.95 (SD 1.6) 2.95 (SD 1.4)	.107
Question 7: *Every person with ADRD has different needs*	NSG: (n=20) SW: (n=22)	6.60 (SD .5) 6.64 (SD .4)	6.62 (SD .4) 6.82 (SD .3)	* .006
Question 8: *I am not very familiar with ADRD*	NSG: (n=20) SW: (n=22)	3.65 (SD 1.7) 5.00 (SD 2.2)	3.38 (SD 1.6) 3.77 (SD 2.0)	.161
Question 9: *I would avoid an agitated person with ADRD*	NSG: (n=20) SW: (n=22)	4.20 (SD 1.3) 3.68 (SD 1.8)	3.67 (SD 1.8) 3.00 (SD 1.5)	.424
Question 10:	NSG: (n=20)	6.05 (SD .6)	6.29 (SD .9)	.820

People with ADRD like having familiar things nearby	SW: (n=22)	5.36 (SD 1.0)	6.27 (SD 1.0)	
Question 11: *It is important to know the past history of people with ADRD*	NSG: (n=20) SW: (n=22)	6.25 (SD .6) 5.73 (SD 1.2)	6.48 (SD .6) 6.55 (SD .7)	.839
Question 12: *It is possible to enjoy interacting with people with ADRD*	NSG: (n=20) SW: (n=22)	6.10 (SD .7) 5.64 (SD 1.7)	6.05 (SD 1.3) 6.27 (SD 1.5)	.903
Question 13: *I feel relaxed around people with ADRD*	NSG: (n=20) SW: (n=22)	4.40 (SD 1.3) 4.05 (SD 1.6)	4.57 (SD 1.1) 4.73 (SD 1.6)	.151
Question 14: *People with ADRD can enjoy life*	NSG: (n=20) SW: (n=22)	6.0 (SD 1.2) 5.59 (SD 2.0)	6.10 (SD .8)) 5.95 (SD 1.7)	.090
Question 15: *People with ADRD can feel when others are kind to them*	Nsg: (n=20) SW: (n=22)	6.40 (SD .7) 5.82 (SD 1.5)	6.43 (SD .5) 6.23 (SD 1.5)	.200
Question 16: *I feel frustrated because I do not know how to help people with ADRD*	NSG: (n=20) SW: (n=22)	4.5 (SD 1.4) 4.18 (SD 2.0)	4.10 (SD 1.6) 3.77 (SD 1.7)	.759
Question 17: *I cannot imagine caring for someone with ADRD*	NSG: (n=20) SW: (n=22)	2.75 (SD 1.2) 2.82 (SD 1.5)	2.48 (SD 1.2) 2.45 (SD 1.7)	.167
Question 18: *I admire the coping skills of people with ADRD*	NSG: (n=20) SW: (n=22)	5.45 (SD 1.1) 5.41 (SD 1.4)	6.05 (SD 1.0) 6.00 (SD 1.5)	.563
Question 19: *We can do a lot now to improve the lives of people with ADRD*	NSG: (n=20) SW: (n=22)	6.10 (SD 1.2) 5.14 (SD 2.1)	6.38 (SD .8) 6.09 (SD 1.6)	.224
Question 20: *Difficult behaviors may be a form of communication for people with ADRD*	NSG: (n=20) SW: (n=22)	5.55 (SD .99) 5.14 (SD 1.8)	5.62 (SD 1.6) 5.68 (SD 1.5)	.639

Table 3 *The Kiersma-Chen Empathy Scale Results*

		Mean Score: Pre	Mean Score: Post	Level of Significance
Question 1: *It is necessary for a healthcare practitioner to be able to comprehend someone else's experiences.*	NSG: (n=8) SW: (n=21)	5.50 (SD 2.2) 6.0 (SD 6.0)	6.00 (SD 2.4) 6.48 (SD .68)	*.035
Question 2: *I am able to express my understanding of someone's feelings.*	NSG: (n=8) SW: (n=21)	5.63 (SD 1.1) 5.68 (SD .89)	6.00 (SD 1.3) 6.29 (SD .64)	*.028
Question 3: *I am able to comprehend someone else's experiences.*	NSG: (n=8) SW: (n=21)	5.0 (SD 1.3) 4.91 (SD 1.7)	5.38 (SD 1.1) 6.00 (SD .77)	.081
Question4: *I will not allow myself to be influenced by someone's feelings when determining the best treatment.*	NSG: (n=8) SW: (n=21)	4.75 (SD 1.2) 4.68 (SD 1.1)	4.38 (SD 1.9) 4.00 (SD 1.8)	.987

Question 5: *It is necessary for a healthcare practitioner to be able to express an understanding of someone's feelings.*	NSG: (n=8) SW: (n=21)	6.38 (SD .74) 6.36 (SD .65)	6.88 (SD .35) 6.38 (SD .74)	*.003
Question 6: *It is necessary for a healthcare practitioner to be able to value someone else's point of view.*	NSG: (n=8) SW: (n=21)	6.50 (SD .75) 6.73 (SD .55)	7.0 (SD .00) 6.43 (SD .67)	*.000
Question 7: *I believe that caring is essential to building a strong relationship with patients.*	NSG: (n=8) SW: (n=21)	6.88 (SD .35) 6.73 (SD .55)	6.63 (SD .48) 6.67 (SD .51)	.706
Question 8: *I am able to view the world from another person's perspective.*	NSG: (n=8) SW: (n=21)	5.50 (SD .92) 5.95 (SD .65)	5.88 (SD .83) 6.14 (SD .79)	.669
Question 9: *Considering someone's feelings is not necessary to provide patient-centered care.*	NSG: (n=8) SW: (n=21)	1.50 (SD .92) 1.77 (SD 1.1)	1.13 (SD .35) 2.52 (SD 2.0)	*.003
Question 10: *I am able to value someone else's point of view.*	NSG: (n=8) SW: (n=21)	5.88 (SD 1.1) 6.23 (SD .97)	6.00 (SD 1.4) 6.29 (SD .78)	.183
Question 11: *I have difficulty identifying with someone else's feelings.*	NSG: (n=8) SW: (n=21)	2.13 (SD 1.1) 2.32 (SD 1.2)	2.50 (SD 1.6) 2.86 (SD 1.8)	.680
Question 12: *To build a strong relationship with patients, it is essential for a healthcare practitioner to be caring.*	NSG: (n=8) SW: (n=21)	6.75 (SD .46) 6.59 (SD .79)	7.00 (SD .00) 6.81 (SD .40)	*.002
Question 13: *It is necessary for a healthcare practitioner to be able to identify with someone else's feelings.*	NSG: (n=8) SW: (n=21)	5.75 (SD 2.3) 6.14 (SD 1.0)	6.75 (SD .46) 6.29 (SD 1.3)	.168
Question 14: *It is necessary for a healthcare practitioner to be able to view the world from another person's perspective.*	NSG: (n=8) SW: (n=21)	6.38 (SD .744) 6.32 (SD 1.5)	6.75 (SD .59) 6.57 (SD .46)	.136
Question 15: *A healthcare practitioner should not be influenced by someone's feelings when determining the best treatment.*	NSG: (n=8) SW: (n=21)	4.25 (SD 2.2) 4.18 (SD 1.5)	3.38 (SD 2.0) 3.86 (SD 2.0)	.735