The Use of Life Story Interventions Between Older Adults with Dementia and Caregivers

Katelyn Mater, BSON BSN Student
Erikson’s final stage of development is integrity versus despair, where older adults review their lives in a search for meaning (McLeod, 2018). They wish to be satisfied with how they lived their lives. Life reviews and other storytelling techniques are a method of transferring that internal reflection to something that can be shared with others. In older adults with dementia, life stories become especially important for everyone involved in their care. This includes the person with dementia, their family, and any healthcare providers they interact with in their day to day lives. Dementia is becoming more and more common in older adults, dementia has no cure and the medications available are not able to stop the disease, only slow it down. It is important to use nonpharmacological treatments such as storytelling interventions to provide more person-centered care. Nurses and other healthcare professionals often perform systematic reviews in order to maintain up-to-date knowledge of advances in healthcare (Polit & Beck, 2018). Research has shown there are gaps in understanding the benefits of life story interventions on persons with dementia (PWD) and their professional caregivers.

**Reflection**

I chose this project after working at Amber Way, a dementia facility in Kalamazoo. Some of the residents had life stories available, some did not, but I always found them very helpful when I was providing care. One of the residents was mostly nonverbal, but according to her life story she was from another country and had a love for music so I would sing with her while we got ready for the day or during her baths. Sometimes she would sing a few words or hum along with me and it helped relax her during the parts of the day she would usually become agitated. It also helped me feel more accomplished and like I was providing holistic, quality care.

Attending the Midwest Nursing Research Society (MNRS) conference offered me the opportunity to show off my work and interact with other nurse researchers. I was initially
nervous about attending but as the conference approached I became more excited. I was surprised that nurse research was so popular, especially since I feel like it is not a priority at Bronson School of Nursing. After I presented, I felt much more confident about my project and I was more excited about pursuing a degree that would help me further my own research.

Methods

For my thesis I conducted a literature review using the databases CINAHL, Clinicalkey, OVID, Proquest, Pubmed, and Web of Science. The search terms used were “storytelling” and “caregiver”. Articles chosen for this review ranged from 2003-2018. There were 392 articles found in the initial search. This was narrowed down to nine articles by eliminating duplicates, secondary sources, articles unrelated to storytelling and dementia, and articles in which the participants were less than 55 years old.
Results

Nine studies were utilized for this literature review. Of these nine, three of the articles were randomized-control trials, two were experimental studies, one an observational study, one was a multiple case study design, one mixed-methods design, and one quasi-experimental design.

The articles reviewed support the idea that life story interventions allow healthcare providers to provide more person-centered care. After reading a life story or participating in a life story intervention, healthcare providers often felt like they had a better understanding of who the person was before they were diagnosed with dementia (McKeown, Clarke, Ingleton, Ryan,
Rupper, 2010). They were also able to realize that PWD still have value and are able to contribute (Fritsch, Kwak, Grant, Lang, Montgomery, & Basting, 2009).

Another major theme in many of these articles was that there was evidence to support that life story interventions reduce behavior symptoms in PWD. One study found that the Observed Emotional Rating Scales (OERS) of PWD who participated in a life story intervention was significantly higher than the scores of the control group (Phillips, Reid-Arndt, Pak, 2010). Another study found evidence that the use of donepezil with a life story intervention resulted in reduced apathy and irritability in PWD (Chapman, Weiner, Rackley, Hynan, Zientz, 2004).

There is some debate over whether or not life story interventions improve quality of life for PWD. Gouge and Houser’s article “I’m a Storyteller” offers evidence that Timeslips does improve quality of life (Gouge & Houser, 2014). However, another study reported that the results were insignificant and could not point one way or the other (Chapman, Weiner, Rackley, Hynan, Zientz, 2004). Further research will need to be done in order to determine the effects life story interventions have on quality of life for PWD.

<table>
<thead>
<tr>
<th>Citation</th>
<th>Type of Study</th>
<th>Findings</th>
<th>Strengths</th>
<th>Weaknesses</th>
<th>Gaps</th>
<th>Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gouge &amp; Houser, 2014.</td>
<td>RCT Qualitative Randomized program to select cohort</td>
<td>↑creativity ↑involvement in meaningful activities Improved quality of life Positively altered bx Staff expressed that</td>
<td>First qualitative study of timeslips Researcher s withheld study goals from staff Researcher s minimized</td>
<td>Small interventional group (10) All white women No control group Short study interval (6wks)</td>
<td>Did not incorporate culture challenges (related to gender, socioeconomi c status, etc.) in implementing timeslips</td>
<td>There may be benefits in using Timeslips with other populations (children with behavioral problems such as oppositional defiant disorder, attention</td>
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<tr>
<td>Fritsch, Kwak, Grant, Lang, Montgomery, &amp; Basting, 2009.</td>
<td>Observational study</td>
<td>↑level of engagement</td>
<td>Control group</td>
<td>Small group (10-12)</td>
<td>Not a RCT</td>
<td>Staff engaged in more social interactions</td>
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<tr>
<td>Impact of Timeslips on Nursing Home Residents with dementia and caregivers</td>
<td>Experimental design (tx/control)</td>
<td>TS facility residents had more frequent challenging behaviors, general alertness, and fear/anxiety</td>
<td>Developed preliminary framework (threshold framework)</td>
<td>Short study interval (10wks)</td>
<td>Examine changes in resident outcomes over time</td>
<td>Researchers should continue to study CEs are strategies for enhancing quality of life to PWD</td>
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<td>Time sampling observation</td>
<td>TS facility had more social interactions between staff and residents</td>
<td>Considered sociodemographic and clinical characteristics</td>
<td>Timesampling measure did not allow researchers to limit observation s to residents exposed to TS (pg 125)</td>
<td>Limited to SCUs (special care units)</td>
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<td></td>
<td>Survey of daytime staff of attitude and job satisfaction</td>
<td>TS facility had more social interactions between staff and residents</td>
<td>Staff trained in TS over 9 wks</td>
<td>Did not examine patterns of change</td>
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<td></td>
<td>Convenience sample</td>
<td>Staff less likely to</td>
<td>Outlined how things were measured</td>
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**timeslips showed PWD can “contribute in a meaningful way”**

Nurturing relationship

Improved atmosphere of the unit.

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Short interviews with residents

No demographic data collected from staff (explore staffing strategies that support the success of CE interventions)

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Fritsch, Kwak, Grant, Lang, Montgomery, & Basting, 2009. Impact of Timeslips on Nursing Home Residents with dementia and caregivers

- Observational study
- Experimental design (tx/control)
- Time sampling observation
- Survey of daytime staff of attitude and job satisfaction
- Convenience sample

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**timeslips showed PWD can “contribute in a meaningful way”**

Nurturing relationship

Improved atmosphere of the unit.
<p>| Houder, George, Chinchili, 2014. TS and Psychotropic meds | Cluster-randomized pilot study | No statistically significant results when comparing intervention and control groups with outcomes of mood and behavior | No statistically significant data within/between groups in regards to psychotropic drugs | Assess interrater reliability | Short time interval (6wks) | 20 participants | No men in tx group | Care providers not blind to the study | No current studies have quantitative evaluated TS to determine if it is associated with decreased mood and behavioral sx in PWD | No studies have determined if CE programs decrease use of psychotropic meds | Larger trials of longer duration needed | Pharmacological approaches to dementia only provide “modest help” and antipsychotics can increase risk for mortality. Need for nonpharmacologic tx that is effective |</p>
<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Design</th>
<th>Framework</th>
<th>Participants</th>
<th>Further research/ Implications</th>
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<tbody>
<tr>
<td>McKeown, Clarke, Ingleton, Ryan, Rupper, 2010</td>
<td>Life story work to enhance person-centered care</td>
<td>Multiple case study design</td>
<td>LSW allowed staff and family members to see the “personhood” of a PWD</td>
<td>4 participants</td>
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<td>Constructivist approach</td>
<td>LSW allowed the PWD to be heard</td>
<td>All family carers were female</td>
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<td>Framework analysis approach</td>
<td>Allows PWD to take pride in themselves and value their lives</td>
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<td>Holm, Lepp, Kinsberg, 2005</td>
<td>Interventions study</td>
<td>Storytelling can generate associative conversations in PWD</td>
<td>Outlines how future interventions can be done</td>
<td>6 pts (5 women, 1 man)</td>
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<td></td>
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<td>Caring interventions</td>
<td>Stories selected related to Erikson’s theory of human development</td>
<td>Met 6 times total</td>
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<td>Storytelling triggered emotional/verbal reactions in pts</td>
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<td>Chapman, Weiner, Rackley, Hynan, Zientz, 2005</td>
<td>Randomized treatment and control groups</td>
<td>Treatment group maintained level of performance</td>
<td>Intervention only lasted 8 wks of the study</td>
<td>Emotional symptoms not directly targeted but may be</td>
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<td>54 participants (54% females, 46%)</td>
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<td>Treatment and control groups showed smaller</td>
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2004. 
Donepezil 
e on MMSE over 1 year, control group had significant decrease 
Treatment group had nonsignificant change for relevance of discourse, control group had significant decline from baseline 
Both groups saw a significant decline in functional ability but treatment group declined less than control 
Quality of life results were insignificant 
Treatment group showed 

| Males) 41 completed study | Long study interval (1 year) | Use of MMSE and ADAS-Cog to evaluate cognitive function | NPI used to evaluate psychiatric symptoms | QOL to measure quality of life | CIBIC to measure global functioning | TFLS to measure performance of ADLs | Raters received extensive training and effort made to keep raters blinded | ANCOVA | Control group only evaluated every 4 months | Some participants missed visits/tests | Composite discourse score failed to reach significance for group, time, and interaction of group and time | TFLS failed to reach significance for group, time, and interaction of group and time | 12 hours of group intervention | Treatment group had better scores on ADAS-Cog at baseline so cannot be sure that indirectly influenced by active stimulants | Further testing altering one of four categories: increased dose of stimulation, longer intervention, individual treatment or active involvement of caregiving | Try individual treatment sessions instead of group or group/individual treatment sessions | Future studies should address effects of combined cognitive with pharmacological regimens earlier in 
than average decline in MMSE over 1 year, showing that donepezil alone will slow disease symptoms 
MMSE showed that donepezil and active stimulation slows decline even further |
benefits in areas of discourse, functional abilities, emotional well-being, and global function

Treatment group showed slower rate of decline in discourse function, performance of functional abilities, and global functioning

Treatment group showed reduced apathy and irritability when compared to the control group

Benefits in discourse and functional abilities were present 8 months after

used to analyze continuous variables

differences were due solely to treatment or milder severity of disease

Individuals knew if they were in treatment or control group

the course of Alzheimer’s disease, such as preclinical stages of mild cognitive impairment
<table>
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<tr>
<th>Phillips, Reid-Arndt, Pak, 2010. “Effects of CE interventions on emotions, communications, and quality of life in persons with dementia</th>
<th>treatment</th>
<th>Collect measures at 2 points (baseline, week 7, week 10)</th>
<th>Repeat with larger sample size</th>
</tr>
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<tbody>
<tr>
<td>Quasi-experimental 2 groups (control and treatment) Repeated measures design</td>
<td>OERS pleasure scores at weeks 3, 6, and 7 were significantly higher for treatment group than control group Social communication scores higher from treatment group at week 7 but not statistically significant</td>
<td>Study materials inexpensive (Timeslips materials) NPI-NH scores favored the control group at week 10 but not statistically significant</td>
<td>More ethnic and racial diversity</td>
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<td>Control group had significantly lower CSDD than treatment group</td>
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| | Collected measures at 2 points (baseline, week 7, week 10) Small group (28 each, 56 total) Sample mostly white women with moderate cognitive impairment Participants were not randomly assigned within the facility to treatment or control group Study lacked ethnic/racial diversity | | | Timeslips associated with increased expressions of pleasure and better communication for the treatment group when compared with the control group Results suggest that cognitively impaired persons may need continued reinforcement to sustain gains Timeslips promotes the positive psychosocial environment foundational to person-centered care | Timeslips
Vigliotti, Chinchili, & George, 2015.  

<table>
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<tr>
<th>Mixed-methods approach</th>
<th>Participants with mild-moderate dementia significantly more likely to experience benefits compared to those with severe dementia.</th>
<th>Long intervention period (6 months, 21 sessions)</th>
<th>22 participants</th>
<th>Not a representative sample of the population.</th>
<th>Use of timeslips and other creative expression programs can improve quality of life and caregiver-resident relationships for those with less advanced forms of dementia.</th>
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<tbody>
<tr>
<td>Convenience sampling</td>
<td>Mild-moderate dementia group (MMDG) more likely to experience increased interest, pleasure, self-esteem, normalcy, and sustained attention than severe dementia group. MMDG experienced more.</td>
<td>MMSE used. MMSE evaluated at start of study and every 2 months during the study. Used both quantitative and qualitative methods.</td>
<td>All participants caucasian. All 4 caregivers involved in study were female. Possible interrater reliability challenge since only one member of the research team did data collection on dementia severity and outcomes for timeslips sessions.</td>
<td>No control group. Did not get participant feedback in regards to findings. Not enough caregiver feedback on how timeslips could be improved/augmented in residential care settings.</td>
<td>Can develop personalized care plans for persons with dementia. Creative expression programs and timeslips can become a standard practice in dementia.</td>
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increased positive social interactions and positive care interactions with caregivers than severe dementia group

MMDG less likely to be disengaged than severe dementia group

MMDG exhibited greater nonsocial engagement and social engagement than severe dementia group

Severe dementia group experienced decline in interest during timeslips over the 6 month course of study, the
Conclusion

Future studies need larger intervention groups, longer study intervals, and more racial, gender, and socioeconomic diversity in the study sample. These additions will help to provide stronger evidence for the benefits of storytelling techniques. Current data suggests that storytelling techniques should become standard practice on units for patients with dementia.
References


