



Application of the Attentively Embracing Story Theory in Older Persons Living in Long-Term Care Facilities



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Background

The “Attentively Embracing Story” is a middle-range nursing theory, which employs intentional dialogue to encourage individuals to describe events that are a challenge to their health. The “Attentively Embracing Story” helps individuals transform negative thoughts into positive thoughts, reflect on new meanings and values, and boost spiritual healing and health improvement. However, most studies had methodological shortcomings, including small sample sizes (N<10), pre-post designs, lack of objective outcome, and lack of active treatment controls, which preclude clear conclusions regarding efficacy.

Purpose

The purpose of this study was to examine the effectiveness of a “Story-Centred Care Intervention Program” based on the “Attentively Embracing Story”, in improving quality of life, blood pressure and heart rate variability in institutionalized older adults.

Method

A single-blind two-group longitudinal experimental design was used. Participants (N = 60) were adults over 65 years of age living in long-term care facilities in northern Taiwan. Participants were randomly assigned to an intervention group (n = 29) or a control group (n = 31). The experimental group received a “story-centred care intervention program” once a week for 4 weeks. The control group received a control intervention of medical and life consultations over the same time period. Measurements were obtained in four waves: pre-intervention, post-intervention, and one month after completion of the intervention. Instruments included the WHOQOL -BREF Questionnaire, an electronic blood pressure monitor((type HEM-7210, made by OMRON Co., Ltd., Japan) and 5-minute heart rate variability time-domain parameters of SDNN, and RMSSD (DailyCare BioMedical, Inc., Chungli, Taiwan). Data were analysed using Fisher’s exact test, chi-square test, independent-t test, Mann–Whitney U test, and generalized estimating equation.

Table 1. Baseline demographics, clinical characteristics, and health measures of participants

Variable	Participants (N = 60)		<i>X</i> ² / <i>Z</i>	<i>P</i>
	IG (n = 29)	CG (n = 31)		
Gender, n (%)			0.409	0.523
Male	8 (27.6)	12 (38.7)		
Female	21 (72.4)	19 (61.3)		
Age, mean (SD)	84.38 (4.74)	84.23 (7.03)	-0.200	0.841
Education, n (%)			6.726	0.081
Primary school	6 (20.7)	14 (45.2)		
Junior high school	7 (24.1)	2 (6.5)		
Senior high school	11 (38)	8 (25.8)		
≥ College	5 (17.2)	7 (22.6)		
Marital status, n (%)			1.359	0.715
Single	2 (6.9)	2 (6.5)		
Married	6 (20.7)	6 (19.4)		
Widowed	21 (72.4)	23 (74.2)		
Smoking			2.954	0.238
No	29 (100)	28 (90.3)		
Yes	0 (0.0)	3 (9.7)		
Exercise, n (%)			0.285	0.594
No	1 (3.4)	2 (6.5)		
Yes	28 (96.6)	29 (93.5)		
Number of chronic diseases, mean (SD)	2.62 (1.15)	2.62 (2.52)	-0.091	0.928
Physical function, n (%)			4.540	0.033
Unassisted activity	25 (86.2)	18 (58.1)		
Assisted activity (using a device)	4 (13.8)	13 (41.9)		
Perceived health status, n (%)			1.696	0.638
Very poor	4 (13.8)	5 (16.1)		
Poor	6 (20.7)	9 (29.0)		
Good	12 (41.4)	8 (25.9)		
Very good	7 (24.1)	9 (29.0)		
Social support satisfaction, mean (SD)	53.41 (8.10)	49.39 (7.19)	-2.032	0.042
Health measures pre-intervention				
WHOQOL-BREF	65.51(8.30)	66.05(7.84)	-0.256	0.799
Systolic blood pressure	145(19)	142(18)	0.622	0.536
SDNN, ms, mean (SD)	28.66 (19.72)	35.50 (34.50)	-0.377	0.706
RMSSD, ms, mean (SD)	25.52 (22.21)	29.12 (27.63)	-0.599	0.549

Result

At 1-month follow-up, the group that received the story-centred care intervention program had significantly higher scores for quality of life (p< 0.001) compared with the control group. Neither Blood pressure nor heart rate variability parameters did not show a statistically significant improvement, however a trend of improvement in parameters was observed in the intervention group.

Conclusion

The story-centred care intervention program was effective in improving quality of life in older adults living in long-term care facilities; however, further study is needed to demonstrate its role in improving blood pressure and heart rate variability.

Figure 1. Figure1.Quality of life, blood pressure, and Time-domain parameters of heart rate variability(SDNN, RMSSD) for the intervention group (IG) and control group(CG)

