



Effects of Geriatric Training Program on RNs' Geriatric Care Competencies in Hospitals

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BACKGROUND

The health problems of hospitalized elderly patients are complicated. Nurses, as the core members of the geriatric interdisciplinary team, must have good geriatric care competencies so as to provide appropriate aged care services. However, to date, there is lack of geriatric training program for nurses in hospitals.

PURPOSES

The purpose of this study is to develop a geriatric training program for nurses in hospitals and to evaluate the effects of the training program.

METHODS

The quasi-experimental research design was adopted. Nurses who had more 3 months' clinical experience and worked in the medical center in the southern Taiwan were included. The nurses in experimental group should receive geriatric training program; the nurses in control group were selected from the same unit by head nurse. The structured questionnaire was developed based on the literature review and validated through expert consensus, which included: demographic variables, variables related to nursing careers, geriatric educational variables, geriatric care knowledge scale, attitude toward geriatric care scale and self-reported geriatric care competency scale. The structured questionnaire was collected before training program. The self-reported geriatric care competency scale was measured after training program and six months after training program. Data were analyzed with independent-sample t test, chi-square test and repeat measure.

RESULTS

A total of 124 nurses were included in the. There was no difference in baseline characteristics between experimental and control group. The geriatric care competencies in experimental group was improvement after training program (73.33 ± 8.01 v.s. 61.37 ± 12.77 , $p < .01$) and six months after training program (74.29 ± 9.72 v.s. 61.37 ± 12.77 , $p < .01$). However, there was not significant improvement between after training program and six months after training program ($p = .27$). Besides, The geriatric care competencies in control group was significant improvement between after training program and six months after training program (71.28 ± 9.12 v.s. 64.23 ± 11.20 , $p < .01$). However, there was not significant improvement after training program ($p = .15$).

Table 1.
Demographic characteristics of nurses

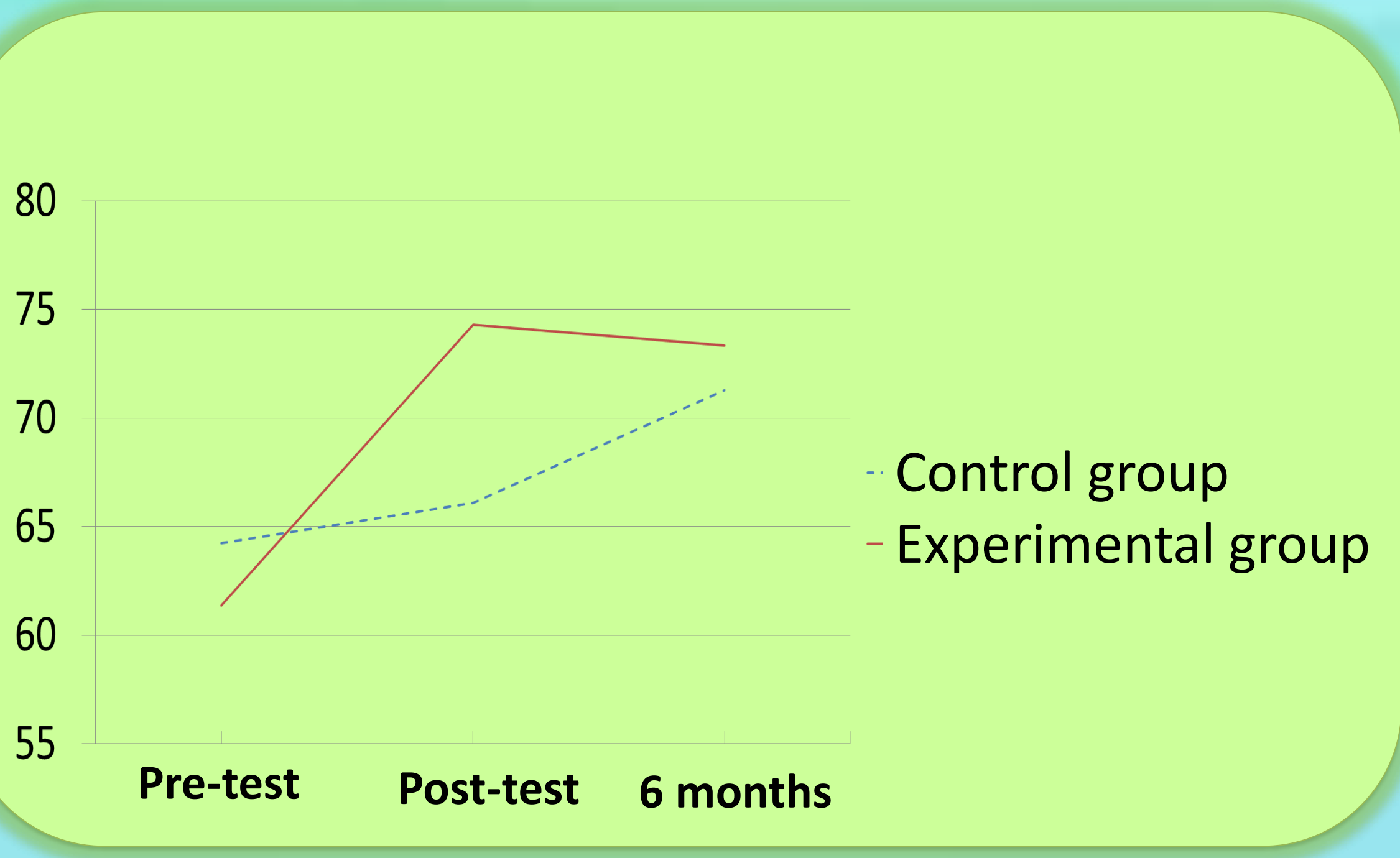
	Total (N=124)	Experimental (n=62)	Control (n=62)	
Variables	n (%)	n (%)	n (%)	p
Age (M±SD)	34.32±8.8	36.15±8.39	32.43±8.88	.74 ^a
Marriage				
Unmarried	81 (65.3)	38 (61.2)	43 (69)	.35 ^b
Educational level				.25 ^b
Bachelor	101 (81.5)	48 (77.4)	53 (85.5)	
Master or PhD	23 (18.5)	14 (22.6)	9 (14.5)	
Nursing job characteristics				.82 ^b
Medical ward	51 (41.1)	28 (45.1)	23 (37.1)	
Acute and Critical care ward	31 (25)	14 (22.5)	17 (27.4)	
Surgical ward	26 (21)	12 (19.4)	14 (22.6)	
Intergraded ward	16 (12.9)	8 (13)	8 (12.9)	
Working experience				.25 ^b
<5 years	35 (28.2)	10 (16.1)	25 (40.3)	
5-10 years	36 (29)	21 (33.9)	15 (24.2)	
11-15 years	18 (14.5)	10 (16.1)	8 (12.9)	
16-20 years	10 (8.1)	7 (11.3)	3 (4.8)	
>20 years	25 (20.2)	14 (22.6)	11 (17.8)	
Clinical ladder system				.25 ^b
Below N1	16 (12.9)	5 (8.0)	11 (17.8)	
N2	60 (48.4)	27 (43.5)	33 (53.2)	
N3	18 (14.5)	11 (17.8)	7 (11.3)	
N4	29 (23.4)	19 (30.7)	10 (16.1)	
Geriatric in-service training	42 (33.9)	28 (45.2)	14 (22.6)	.01 ^b
Geriatric care knowledge (M±SD)	85.99±11.78	88.06±14.28	83.92±15.89	.05 ^a
Geriatric care attitude (M±SD)	58.33±13.78	64.76±5.94	51.9±16.22	<.01 ^a

Table 2.
The Generalized Estimating Equation analysis course effect of geriatric care competencies

Parameter	β	S.E.	Wald χ ²	p value
Intercept	62.06	13.49	21.16	<.01*
Group(Control V.S.Experimental)	-3.18	20.30	0.02	.88
Time(6M V.S. Pre-test)	-11.20	1.34	69.74	<.01*
Time(6M V.S.Post-test)	1.1	0.99	1.23	.27
Group*Time	-6.27	1.42	19.33	<.01*
Geriatric nursing continuous education	-4.64	1.40	11.49	<.01*
Geriatric care attitude	0.28	0.20	1.93	.17
Geriatric care knowledge	0.13	0.16	0.62	.43

Table 3. Geriatric care competencies changes between control group and experimental group

Group	Pre-test (T0)	Post-test (T1)	6 months (T2)	F	p	post hoc (Bonferroni test)
	Mean(SD)	Mean(SD)	Mean(SD)			
Control group	61.34 (12.77)	74.29 (9.72)	73.33 (8.01)	3933.49	<.01	T2>T0 T1>T0
Experimental group	64.23 (11.20)	66.08 (8.80)	71.28 (9.12)	4184.04	<.01	T2>T0 T2>T1



CONCLUSION

This study showed geriatric care training program can improve nurses' geriatric care competencies not only in experimental group but also in control group. We suggest the educator in hospital should plan and provide geriatric training program in order to improve nurses' geriatric care competencies.