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(Conn, Taylor & Wiman, 1991)

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(American Association of
Cardiovascular & Pulmonary Rehabilitation,
1999;　　AACVPR; Kinney & Packa, 1996).

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(Lindsay, Jennrich, & Biemolt,
1991),
(Lavie, Milani, & Littman, 1993),

(Castelein &　　　　　　　　，
Kerr, 1995).　　　　　　　　　　　　　　　　(Hamalainen,
Luurila, Kallio & Knuts, 1995; Linden, 1995).

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(Kim, 1991),   1)   1   :
  (Lee, 1992),
(Nam, 1998)   .

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                        (Hong, 1996),   .
                                    (Choo et al.,
1997),   (Lee,   4 .
1998),
          (Jo, 1999)   .   1)

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1998),
                                                        (AACVPR, 1999),

            (Hong, 1996),
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    (Choo et al., 1997).   ,   3
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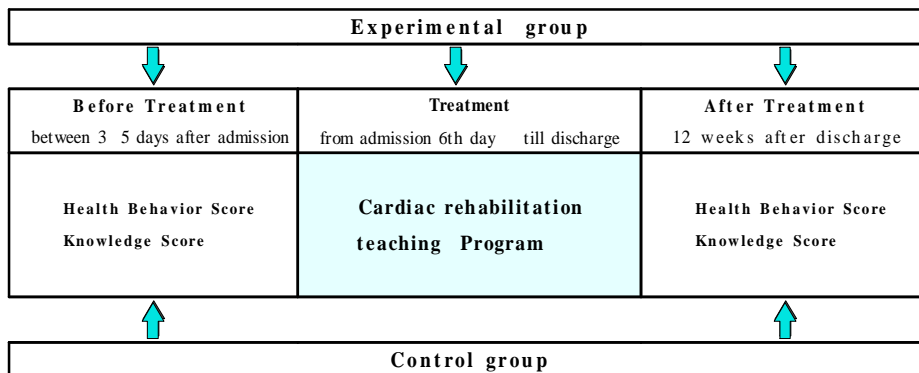   1991),   Lee(1992)   Nam(1998)

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                    .   (Marriam-Webster's New Collegiate
1)   Dictionary, 1991),   Jeong(1996)

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23   24   47   .   4 .

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                                                            (1998)
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        <Figure 1>.   4   ,   8   ,
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                                        .   Cronbach's
                                        alpha   .92,
                    .   .90   .

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        3   ,   1   2)
20   25   .   3   5   J eong(1996)
                        ,   1   .

Experimental group		
Before Treatment	**Treatment**	**After Treatment**
between 3 5 days after admission	from admission 6th day till discharge	12 weeks aft er discharge
Health Behavior Score **Knowledge Score**	**Cardiac rehabilitation teaching Program**	**Health Behavior Score** **Knowledge Score**
Control group		

<Fig . 1> Re s e a rc h De s ig n

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(Fletcher, 1987)   .

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19   ,   10
21   5   12
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.   Cronbach's alpha
.72,   .90   .   6.

5.   SAS program for Windows version
6.12   .
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2)   univariate procedure
3   t-test   ,
,   Pearson   correlation
.   coefficient   .
3)   1   1   2
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4)   12
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(Kim, 1991),   ,   ,   ,
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60   , 90   , 1
(Miller, Wikoff, McMahon, Garrett &   <Table 1>.
Ringel, 1989)   2

<Table 1> Homogeneity test of the general and the medical characteristics between the experimental and the control group

Characteristics		Exp. N(%)	Cont. N(%)	²	p
General characteristics					
Age(year)	Over 60	9 (39.1)	8 (33.3)	0.17	.679
	Below 60	14 (60.9)	16 (66.7)		
Sex	Male	19 (82.6)	20 (83.3)	0.00	.945
	Female	4 (17.4)	4 (16.7)		
Educational level	Under Middle School	13 (56.5)	14 (58.3)	0.02	.900
	Above High School	10 (43.5)	10 (41.7)		

<Table 1> Homogeneity test of the general and the medical characteristics between the experimental and the control group(continued)

Characteristics		Exp. N(%)	Cont. N(%)	^{2}	p
Spouse	Yes	22 (95.7)	22 (91.7)	0.31	.577
	No	1 (4.3)	2 (8.3)		
Economic status	Above middle	13 (56.5)	16 (66.7)	0.51	.474
	Low	10 (43.5)	8 (33.3)		
Medical characteristics					
FHC*	Yes	5 (21.7)	2 (8.3)	0.87	.349
	No	18 (78.3)	22 (91.7)		
Smoking	Yes	15 (65.2)	17 (70.8)	0.17	.680
	No	8 (34.8)	7 (29.2)		
Hypertension	Yes	13 (56.5)	11 (45.8)	0.53	.464
	No	10 (43.5)	13 (54.2)		
Diabetes Mellitus	Yes	8 (34.8)	9 (37.5)	0.03	.746
	No	15 (65.2)	15 (62.5)		
Complication	Yes	3 (13.0)	4 (16.7)	0.67	.413
	No	20 (87.0)	20 (83.3)		
Exercise	Yes	4 (17.4)	4 (16.7)	0.00	.947
	No	19 (82.6)	20 (83.3)		
%Ideal Body Weight	= >120	13 (56.5)	15 (62.5)	0.17	.676
	<120	10 (43.5)	9 (37.5)		
Total		23 (100.0)	24 (100.0)		

Exp.: Experimental group, Cont.: Control group
*FHC: Family History of Cardiovascular Disease

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1)

(P = 0.621)

(P = 0.434),   (P = 0.484),

(P = 0.707),   (P = 0.532),

(P = 0.561)

<Table 2>.

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        t-test   <Table 3>   .

                        32.95

      25.62   (t = 6.26;

P = 0.000),

(P = 0.000),   (P = 0.001),   (P = 0.000),

(P = 0.000),   (P = 0.000)

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    <Table 3>.

2)

                                          (P = 0.730)

                      (P = 0.687),   (P = 0.829),   (P = 0.990),   (P = 0.528),

      (P = 0.475)

            <Table 2>.

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                t-test   <Table 4>   .

                                        89.08

            68.29   (t = 7.62;

P = 0.000),   (P = 0.005),   (P = 0.000),   (P = 0.001),

    (P = 0.000)   (P = 0.000)

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            <Table 4>.

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                                          (P = 0.040),

<Table 2> Homogeneity test of knowledge level and compliance of health behavior between the experimental and the control group

	Before Treatment Mean± SD	t	P
Knowledge level			
Total			
Exp.	20.73± 9.99	0.49	.621
Cont.	21.95± 6.56		
Nature of disease			
Exp.	1.91± 1.47	0.78	.434
Cont.	2.25± 1.45		
Risk factors			
Exp.	5.34± 2.53	0.70	.484
Cont.	5.79± 1.71		
Diet			
Exp.	5.08± 2.39	0.37	.707
Cont.	4.83± 2.21		
Medication			
Exp.	3.26± 1.54	0.62	.532
Cont.	3.50± 1.02		
Exercise & daily activities			
Exp.	4.39± 2.87	0.58	.561
Cont.	4.79± 1.61		
Compliance of health behavior			
Total			
Exp.	52.95± 12.05	0.34	.730
Cont.	54.00± 8.34		
Smoking Cessation			
Exp.	1.34± 0.48	0.40	.687
Cont.	1.29± 0.46		
Diet			
Exp.	3.11± 0.72	0.21	.829
Cont.	3.07± 0.43		
Exercise			
Exp.	2.13± 1.73	0.01	.990
Cont.	2.12± 1.51		
Stress contrl			
Exp.	1.69± 1.18	0.55	.528
Cont.	1.87± 1.10		
Others			
Exp.	3.26± 0.76	0.71	.475
Cont.	3.10± 0.57		

Exp.: Experimental group(N = 23), Cont.: Control group(N = 24)

<Table 3> Knowledge level between the experimental and the control group after treatment

Category	Exp. Mean± SD	Cont. Mean± SD	t	p
Total	32.95± 2.18	25.62± 5.28	6.26	.000
Nature of disease	4.00± 0.00	2.95± 9.54	5.23	.000
Risk factors	7.73± 0.86	6.62± 1.34	3.39	.001
Diet	7.73± 0.54	5.33± 2.09	5.43	.000
Medication	4.86± 0.45	3.70± 1.04	4.98	.000
Exercise & daily activities	7.60± 0.78	6.12± 1.51	4.24	.000

Exp.: Experimental group (N = 23), Cont.: Control group (N = 24)

<Table 4> Compliance of health behavior score between the experimental and the control
         group after treatment

Category	Exp.	Cont.	t	p
	Mean± SD	Mean± SD		
Total	89.08± 5.86	68.29± 11.58	7.62	.000
Smoking Cessation	4.91± 0.28	3.91± 1.55	3.07	.005
Diet	4.44± 0.30	3.46± 0.62	6.96	.000
Exercise	3.73± 1.73	2.04± 1.57	3.51	.001
Stress management	4.30± 0.87	2.66± 1.23	5.21	.000
Others	4.42± 0.36	3.46± 0.65	6.21	.000

Exp. : Experimental group (N=23), Cont. : Control group (N=24)

<Table 5> Correlation of knowledge and compliance of health behavior of the subjects

	Knowledge (Before)	knowledge (After)	Compliance of health behavior (Before)	Compliance of health behavior (After)
Knowledge (Before)		0.300 (P=0.040)	0.014 (P=0.927)	0.017 (P=0.904)
Knowledge (After)			-0.046 (P=0.757)	0.994 (P=0.000)
Compliance of health behavior (Before)				0.097 (P=0.515)
Compliance of health behavior (After)				

(P=0.000)   .   .

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            <Table 5>.

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                                        (Lindsay et al., 1991; Raleigh & Odtohan,

(Nam, 1998; Turton, 1995)   1987; Scalzi, Burke & Greenland, 1980).

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   (Kim, 1991; Lee, 1998),   ,

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                                                    (1990)   .

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al., 1993),

       (Conn, Taylor, & Casey, 1992),   (Bae & Jun, 1999)

                        (Hamalainen et al., 1995)

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1998).

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(Castelein & Kerr, 1995).   Fletcher(1987)   Scalzi   (1980)

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(Miller, Wikoff, Garrett, McMahon, & Smith,   .

1990).

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- Abstract -

Effects of Cardiac Rehabilitation Teaching Program on Knowledge Level and Compliance of Health Behavior for Patients with Myocardial Infarction

Jeong, Hye-Sun * *Kim, Hee-Seung* **
Yoo, Yang-Sook ** *Moon, Jung-Soon* **

Purpose: The purpose of this study was to investigate the effects of cardiac rehabilitation teaching program on knowledge level and compliance of health behavior for the patients with myocardial infarction.

Method: The subjects were 47 patients 23 were assigned to the experimental group and 24 were for the control. The cardiac rehabilitation teaching program is a individualized teaching program which was delivered to the experimental group during hospitalization period by present researcher. Data were collected through questionnaire surveys for knowledge level and compliance of health behavior from September 15, 1999 to December 31, 2000. The collected data was analyzed by using the SAS program.

Results: 1. With regard to the knowledge scores 1) The total knowledge level in the experimental group was significantly higher than in the control group. 2) As to the knowledge domains, nature of disease, risk factors, diet, medication, exercise, and daily activities were significantly higher in score in the experimental group than in the control group. 2. With regard to the compliance of health behavior 1) The average compliance with good health behavior was significantly higher in the experimental group than in the control

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** Catholic University, College of Nursing

group. 2) As to the health behavior domains smoking cessation, diet, stress management, regular exercise, and other measures for lifestyle modification were significantly higher in score in the experimental group than in the control group. 3. The pre-treatment knowledge score was positively correlated to the post-treatment knowledge score and post-treatment knowledge score was positively correlated to the post-treatment compliance of health behaviors.

Conclusion: The above findings indicate that the cardiac rehabilitation teaching program for the experimental group was effective in increasing level of knowledge and improvement of compliance with good health behavior of patients with myocardial infarction.