

：

*

**

(Choi, 2000),

1.

가

(氣)

(蓄氣),

(運氣)

, 가

(氣)

가

(下丹田)

가 (調身),

가

가

(調息),

가

가 (調心)

가

(Han, Lee & Lee, 2000).

(調身)

31.9 %

18.4 %

,

(動功)

가

(21.8%)

가

(Kim, 1983).

43.9%

(Yoo,

(走火)

(入魔)

Kim & Kim, 1999)

, 97.8%

가

가

20 40

(Back, 1998),

(導引)

(83%.),

(66.7%),

(氣) · (血)

(59.2%)

20-40

(Chi, 1983).

(氣)

(導引)

49.9

49.5%

가

(Choi, Jo & Kim, 2000)

(Lee,

(FVC) 1

20

S. H., 1999).

(調身),

(調息),

(調心)

*

2002

**

2001 11 30

2002 4 20

2002 6 30

가 , 3 가 : 가
가 .
가
가(Cho, Pyo & Park, 1999; Hyun, 2001),
(Choi, 1995; Hyun, 2001; Kim, 1991; Park, 1985; Pyo, Kim & Choi, 1997), (Ahn, 1996; Hyun, 2001) 가 ,
(Hyun, Kang & Ahn, 2000), (Lee, Jeong, Oh, Ryu & Chung 1998), (Lee et al., 1998), (Lee et al., 1998)

가 ,
6 , 12
가 가 .
1)
, 1 , ,
12
, 2)
, 1 , ,
6 , 12 가

2. 가

1가 :

1 가 :

2 가 : 1

2가 :

1 가 : 가

2 가 : 가

3가 : 가

3가 :

1 가 :

가 가

2 가 : 1

가 가

4가 :

가

1 가 :

가

2 가 :

가

3 가 :

가

3.

1)

(下丹田)

가

32

1 80 ,

3 , 12

(Hyun, 2001).

2)

(FVC), 1

(FEV1.0/FVC × 100)

3)

Kim, Kim & Won(1984)

(SCL-

90-R) , ,

(經絡)

(氣)

, (氣)

. (氣)

1 6.

, 2

가

SPSS Window

P = .05

t-

가

3) , , Kim et al(1984)

(SCL-90-R) 13 ,

10 , 6 5

가 , , 7.

가

= .90, = .92, 1)

= .86 가

2)

5. 3

1999 12 15 2000 1

30 6 15

2000 2 1 7 4 1.

, 6 , 12

, 12 ,

, 1 , , , 가 <Table 1-1>, t-

가 <Table 1-2>

가

<Table 1-1> Homogeneity test of general characteristics and variables in the experimental group and the control group

Characteristics	Classification	Total (n = 40) N (%)	EG (n = 20) N (%)	CG (n = 20) N (%)	² score	P score
Profession	all-day housewife	35(87.5)	17(85.0)	18(90.0)	.229	.633
	Working housewife	5(12.5)	3(15.0)	2(10.0)		
Monthly revenue Per household (10000₩)	below 100	8(20.0)	3(15.0)	5(25.0)	1.809	.613
	101-200	10(25.0)	4(20.0)	6(30.0)		
	201-300	11(27.5)	6(30.0)	5(25.0)		
	above 300	11(27.5)	7(35.0)	4(20.0)		
Menopause	yes	26(65.0)	12(60.0)	14(70.0)	.440	.507
	no	14(35.0)	8(40.0)	6(30.0)		
Physical symptom (score)	below 15	11(27.5)	5(25.0)	6(30.0)	1.558	.459
	16-30	22(55.0)	10(50.0)	12(60.0)		
	above 31	7(17.5)	5(25.0)	2(10.0)		
Smoking	yes	1(2.5)	1(5.0)	- (-)	1.026	.311
	No	39(97.5)	19(95.0)	20(100.0)		
EG : experimental group		CG : control group				

<Table 1-2> Homogeneity test of pre-experimental dependent variables of the experimental group and the control group.

Dependant variables	EG((n=20)	CG(n=20)	t score	P score
	M(SD)	M(SD)		
FVC(Mℓ)	2609.00(423.55)	2690.50(400.25)	-0.62	0.53
FEV1.0/FVC(%)	81.23(8.61)	83.91(8.01)	-1.02	0.31
depression(score)	43.90(8.13)	44.00(8.43)	-0.38	0.97
anxiety(score)	41.95(8.09)	42.50(6.90)	-0.23	0.81
hostility(score)	44.35(8.66)	42.75(6.35)	0.66	0.51

EG : experimental group CG : control group

FVC : Forced vital capacity

FEV1.0/FVC(%) : Forced expiratory volume at one second / Forced vital capacity × 100

<Table 2> Comparison on average of difference of pre · post-experiment in the experimental group and the control group

dependent variables	Subject	pre-experiment M(SD)	12weeks experiment M(SD)	differences of pre · 12weeks experiment M(SD)	t score	P score
FVC (Mℓ)	EG	2609.00(423.55)	2777.50(510.45)	168.50(196.31)	4.84	0.00
	CG	2690.50(400.25)	2613.50(397.33)	-77.00(113.65)		
FEV1.0/FVC (%)	EG	81.23(8.61)	86.56(7.33)	5.33(6.83)	1.39	0.17
	CG	83.91(8.01)	86.25(7.33)	2.33(6.78)		
depression (score)	EG	43.90(8.13)	38.80(5.09)	-5.10(6.14)	-2.53	0.01
	CG	44.00(8.43)	45.00(10.05)	1.00(8.86)		
anxiety (score)	EG	41.95(8.09)	38.10(3.71)	-3.85(5.62)	-2.58	0.01
	CG	42.50(6.90)	44.85(12.40)	2.35(9.11)		
hostility (score)	EG	44.35(8.66)	40.70(3.92)	-3.65(6.99)	-2.93	0.00
	CG	42.75(6.35)	44.80(9.81)	2.05(5.13)		

EG : experimental group CG : control group

FVC : Forced vital capacity

FEV1.0/FVC(%) : Forced expiratory volume at one second / Forced vital capacity × 100

2. 가

2) 2가

“

1) 1가

” 가

“

”

1가

,

,

(1) 1 가

“

가

”

, 1

(1) 1 가

43.90

“

”

12

38.80

2609.00Mℓ

가

<Table 2>.

12

2777.50Mℓ

가

(2)

2 가

가

<Table 2>.

“

가

”

(2) 2 가

41.95

“

1

”

12

38.10

1

가

<Table 2>.

81.23%

12

86.56%

가

(3)

3 가

가 <Table 2>.

“

가

”

<Table 3> Comparison on average of dependent variables according to experimental period in the experimental group

dependent variables	pre-experiment (n = 20) M(SD)	6 weeks experiment (n = 20) M(SD)	12 weeks experiment (n = 20) M(SD)	F	sig
vital capacity (Mℓ)	2609.00(423.55)	2717.00(401.43)a	2777.50(510.45)b	8.98	0.00
FEV1.0/ FVC (%)	81.23(8.61)	85.05(8.23)	86.56(7.33)b	6.01	0.00
depression (score)	43.90(8.13)	41.85(6.78)	38.80(5.09)b	8.39	0.00
anxiety (score)	41.95(8.09)	40.20(5.23)	38.10(3.71)b	5.38	0.00
hostility (score)	44.35(8.66)	42.60(4.92)	40.70(3.92)b	4.50	0.01

FVC : Forced vital capacity

FEV1.0/FVC(%) : Forced expiratory volume at one second / Forced vital capacity × 100

a : The difference between pre-experiment and 6weeks experiment by sheffe test (P< .05)

b : The difference between pre-experiment and 12 weeks experiment by sheffe test (P< .05)

44.35
12 40.70
가 <Table 2>.
3) 3가
“
가
, 1
(1) 1 가
“
가
2609.00Mℓ
6 2717.00Mℓ, 12 2777.50Mℓ
6 , 12
가 <Table 3>.
(2) 2 가
“
1
가
81.23% 6 85.05%, 12
86.56% 6 가
12 가
<Table 3>.
4) 4가
“
가
가 (38)

5 12 13 , .
 13 ,
 1 4 , 5 12 , 13
 6 , ,
 .

2.

1)

가

2)

가

1.

References

Ahn, S. H. (1996). *Effects of Dan-jun breathing on the immune cells and stress*. Unpublished doctoral dissertation, The Catholic University of Korea, Seoul.

Back, S. S. (1998). An analysis of relationship of menopausal symptoms of midlife women between urban area and rural area. *Korean J Women Health Nurs*, 4(3), 332-347.

Chi, S. A. (1983). *An analysis of relationship between middle-aged women's attitudes toward middle adulthood developmental changes and their self-reported climacteric symptoms*. Unpublished doctoral dissertation, The Yonsei University of Korea, Seoul.

Cho, C. H., Pyo, N. S., Park, J. S. (1999). Analysis of Cardiorespiratory Function through Low-abdomen(Dan-jun) Breathing and Exercise Treatment. *The 1999 Seoul International Sport Science Congress*, 63-71.

Choi, C. K. (1993). The effect of Dan-jun respiration training on the grip strength and physiological factors. *The Korean Journal of Physical Education*, 32(2), 478-490.

Choi, K. O., Jo, H. S., Kim, C. Y. (2000). A study on Health behavior of middle-aged women. *Korean J Women Health Nurs*, 6(1), 82-95.

- Choi, M. A. (1988). Effect of 8 week's aerobic dance training on the body composition, cardiopulmonary function and blood cholesterol concentration in young women. *J Korean Acad Nurs*, 18(2), 105-117.
- Choi, S. H., Kim, S. O. (1995). *An introduction to psychology*. Seoul: Park-YoungSa, 118, 342.
- Choi, Y. G. (1995). *The effect of Dan-jun breathing training on anxiety, heart rate, blood pressure, serum lipids and EEG*. Unpublished doctoral dissertation, The Pusan National University of Korea, Pusan.
- Choi, Y. H. (2000). *Elderly and health*. Seoul : Hyunmoonsa, 84.
- Han, K. S., Lee, P. S., Lee, Y. M. (2000). Influencing factors on symptoms of stress of middle aged women. *J Korean Acad Nurs*, 30(6). 1427-1454.
- Huh, B. Y., Kim, C. J. (1990). The effects of long-term training aerobic exercise on some risk factors of cardiovascular disease. *Korean Circ J*, 20(2), 226-231.
- Hyun, K. S., Kang, H. S., Ahn, D. H. (2000). A comparison of physical health, anxiety and depression between the Dan-jun breathing trained group and non-trained group. *J Korean Acad Adult Nurs*, 12(2), 245-255.
- Hyun, K. S. (2001). *The Effect of the DanJeon Breathing Exercise Program Applied to Health Promotion in Women in Midlife*. Unpublished doctoral dissertation, The KyungHee University of Korea, Seoul.
- Kabat-Zinn, J. Massion, A. O., Kristeller, J., Peterson, L. G., Fletcher, K. E. Pbert, L., Lenderking, W. R., Santorelli S. F. (1992). Effectiveness of a meditation-based stress reduction program in the treatment of anxiety disorders. *Am J Psychiatry*, 149(7), 936-943. Kang, S. J., Song, S. Y., Sim, B. C., Choi, Y. O., Yoon, T. Y., Lee, B. D., Kim, C. K., Yang, J. S., Jo, J. H. (1986). The effect of Dan-jun breathing and herbal medication on competence of sports racing. *The Research Institute, of Physical Education & Sports Science, Korean National College of Physical Education*, 5(1), 1-21.
- Kim, H. B. (1991). *The effect of Dan-jun respiration training on the athletic performance factors of bowling*. Unpublished doctoral dissertation, The Han-Yang University of Korea, Seoul.
- Kim, J. K. (1993). A study on middle-aged women inpatient. *Neuropsychiatry*, 22(4), 639-648.
- Kim, K. I., Kim, J. H., Won, H. T. (1984). *Korean Manual of Symptom Checklist-90-Reversion*. Seoul : ChungAng Aptitude Publishing Co.
- Lee, M. S., Bae, B. H., Ryu, H., Sohn, J. H., Chung, H. T. (1997). Changes in Alpha wave and state anxiety during chundo-sunbup Qi-training in trainees with open eyes. *Am J Chin Med*, XXV(3-4), 289-299.
- Lee, M. S., Choi, E. S. (1998). An effect of Qigong gymnastics program on the physiopsychological parameter in essential hypertension. *J Korean Acad Nurs*, 28(4), 856-868.
- Lee, M. S., Jeong, S. M., Oh, S. W., Ryu, H., Chung, H. T. (1998). Effect of ChunDoSun-Bup Qi-training on Psychological Adjustment : A cross-sectional Study. *Am J Chin Med*, XXVI(2), 223-230.
- Lee, M. S., Jeong, S. M., Kim, B. G., Ryu, H., Oh, S. W., Chung, H. T. (1999). A minnesota multiphasic personality inventory profile of chundosunbup Qi-trainees : A preliminary study. *Am J Chin Med*, XXVII(3-4), 307-313.
- Lee, K. E., Choi, E. S. (1999). The effect of dance movement program on psychological health in middle agee women. *Korean J Women Health Nurs*, 5(1), 43-53.
- Lee, P. S. (1999). Theoretical bases and

- technical application of breathing therapy in stress management. *J Korean Acad Nurs*, 29(6), 1304-1313.
- Lee, S. H. (1999). *Dan-Jun breathing*. Seoul : Daewonsa, 43-44, 91.
- Niaura R., Banks S. M., Ward K. D., Stoney C. M., Spiro III A., Aldwin C. M., Landsberg L., Weiss S. T. (2000). Hostility and metabolic syndrome in older males : the normative aging study. *Psychosom Med*, 62, 7-16.
- Park, H. Y. (1985). *The effect of Dan Jun respiration on state-anxiety relaxation*. Unpublished doctoral dissertation, The Seoul National University of Korea, Seoul.
- Park, J. O., Kwon, H. C. (1995). Risk factors of coronary artery disease in Korean. *The ninth spring academic conference, Korean J Lipidol*, 1-6.
- Pyo, N. S., Kim, Y. B., Choi, Y. G. (1997). Effects of Dan-jeon breathing on anxiety, heart rate, blood pressure and EEG. *Korean Journal of Sport Psychology*, 8(1), 45-55.
- Seo, H. K., Lee, S. W., Na, J. C., Kang, S. B., Kim, J. M. (1999). The effect of muscle endurance weight training on physical fitness, blood lipid and lipoprotein in middle-aged women. *Korean J Sports Med*, 17(2), 224-234.
- Shin, Y. H., Choi, Y. H. (1996). The effect of walking exercise program on cardiorespiratory function and flexibility in elderly women. *J Korean Acad Nurs*, 26(2), 372-386.
- Smith T. M., Gallo L. C. (1999). Hostility and cardiovascular reactivity during marital interaction. *Psychosom Med*, 61, 436-445.
- Smith, T. W. (1992). Hostility and Health : current status of a psychosomatic hypothesis. *Health Psychol*, 11, 139-150.
- Yoo, E. K., Kim, M. H., Kim, T. K. (1999). A study of the relationship among health promoting behaviors, climacteric symptoms and depression of middle-aged women. *J Korean Acad Nurs*, 29(2), 225-237.

- Abstract -

The Effect of the Dan-Jun Breathing Exercise Program on pulmonary function and psychological Health of Women in Midlife*

Hyun, Kyung-Sun **

Purpose: This study was to examine the effects of the Dan-Jun Breathing Exercise Program on pulmonary function and psychological health promotion of women in midlife.

Method: Experimental group(20) was matched to control group(20) according to age, education, religion and marital status. The Dan-Jun Breathing Exercise Program was carried out for 80 minutes a day, 3 times a week for 12 weeks. FVC and FEV1.0/FVC(%) were measured by using the Health Management System developed by the Korean Physical Science Institution. The scores of depression, anxiety and hostility were measured by the Korean Manual of Symptoms-Checklist -90 revision.

Result: 1) FVC of the experimental group was higher than that of the control group, FEV1.0/FVC(%) was not higher than that of the control group. 2) The scores for depression, anxiety and hostility in the experimental group were lower than those of the control group. 3) FVC of 6 weeks and 12 weeks experiment in the experimental group was higher than that of

* This research was supported by East-West Nursing Research Institutes, KyungHee University

** College of Nursing Science, KyungHee University

pre-experimental group.

Conclusion: The Dan-Jun Breathing Exercise Program promotes the Pulmonary function and psychological health of women in midlife.

Key words : Dan-Jun Breathing Exercise Program, midlife women, pulmonary function, psychological health