



Original Article

Risk Factors, Subjective Symptoms, Knowledge of Coronary Artery Disease and Preventive Health Practices in Postmenopausal Women

Jung, Jungja¹⁾ · Kim, Namcho²⁾

1) Unit manager, Kang-nam St. Mary's Hospital 2) Professor, College of Nursing, The Catholic University of Korea

Abstract

Purpose: The purpose of this study was to investigate postmenopausal women's risk factors and subjective symptoms of coronary artery disease, their knowledge about the risk factors and their performance of health behaviors. **Method:** The subjects were 285 women aged between 50~60 who had naturally reached menopause. We interviewed them using a questionnaire on the subjects' risk factors of coronary artery disease, their knowledge about the risk factors and their performance of preventive health behaviors. Collected data was analyzed through t-test, ANOVA & Duncan test. **Results:** Risk factors of coronary artery disease observed in the subjects were diabetes (10.9%), hypertension (22.8%) and hyperlipidemia (14.7%). Symptoms of coronary artery disease were experienced more by those who had diabetes, smoked, had a history of coronary artery disease, and thought that they might have coronary artery disease. With regard

to the subjects' knowledge about the risk factors of coronary artery disease, the average score was 13.88 out of 20 points. **Conclusion:** The results of this study suggest that postmenopausal women have several risk factors of coronary arterial disease but they did not have sufficient knowledge about the risk factors and did not manage the factors appropriately.

Key words : Postmenopause, Women, Coronary disease

10
가 . 2000
10 15.0 ,
10 10.7 1984 5 가 (Seo, I.,

: 2005. 11. 14. 1 : 2005. 11. 24. 2 : 2005. 12. 24. 3 : 2006. 3. 3. : 2006. 3. 10.

• Address reprint requests to : Kim, Namcho(Corresponding Author)

College of Nursing, The Catholic University

505 Banpo-dong, Seocho-gu, Seoul 137-701, Korea

Tel: +82-2-590-1061 Fax: +82-2-590-1099 E-mail: kncpjo@catholic.ac.kr

2003).

가

가 1/10

가

, 75

55.4%,

44.6%

가

(Moon, Kim et al., 2003). Chun (1998)

10

40-44 가 49 ,

64-69

78

(Kim, Lee, & Park, 1997; Kim et al., 2001; Moon, Lee et al., 2003; Yoon et al., 1999),

45

60

가

60

가

40-44

가

1

60-74

234

가

. Moon Lee (2003)

68.2%,

31.8%

75

55.4%,

44.6%

(Joung et al., 2000).

1.

(King et al., 2002).

가

2.

(Moon, Kim et al., 2003)

가

McSweeney (2003)

285

50

60

2004 10

7

11

30

(King et al., 2002).

“Healthy People 2010”

2010

3.

20%

1)

(Rankin, 2002).

가

(McSweeney

가

9

et al., 2003),

2

11

60-75%

(Kim, 2000),

2)

SAS program

7
(1), (0) 1

0 7
가

Cronbach's α .76

t-test, ANOVA

Duncan test

3)

Rahe, Scalzi Shine(1975)

Nam(1998) 32 가 1.

3, 5, 8, 54.5, 89.1%

4, 20, 0, 31.2% 가

1 0 20 가 가, 200 31.9%

Cronbach's α .84, 78.6%, BMI 23.0

4)

(Lee, 2001)

10 31.9%, BMI 가 25.0

10.9%, 22.8%, 14.7%

1.1%

16.8%, 20.7% 가

35.8%

6.7%

4.

<Table 1> Differences of knowledge and symptoms of CAD according to general characteristics of subjects (N=285)

Characteristics	n(%)	Symptom			Knowledge		
		Mean ±SD	t or F	p	Mean ±SD	t or F	p
Spouse							
No	31(10.9)	0.87±1.09	-0.09	.931	14.4±3.74	0.69	.494
Yes	254(89.1)	0.89±1.49			13.4±4.42		
Family income (1,000won)							
<2,000	89(31.2)	0.98±1.47	0.59	.620	12.6±4.80a,b	4.71	.003
≤2,000-<3,000	73(25.6)	0.96±1.52			13.7±4.83		
≤3,000-<4,000	63(22.1)	0.68±1.31			15.1±2.91b		
≥4,000	60(21.1)	0.88±1.47			14.7±3.79a		
Educational level							
≤Elementary school	25(8.8)	1.12±1.69	0.59	.623	12.4±4.88a	3.91	.009
Middle school	43(15.1)	0.95±1.27			12.9±4.86b		
High school	126(44.2)	0.77±1.37			13.7±4.02		
≥University	91(31.9)	0.96±1.56			15.0±4.19a,b		
Job							
No	224(78.6)	0.79±1.39	-2.30	.022	14.2±4.00	1.83	.070
Yes	61(21.4)	1.26±1.60			12.8±5.36		

CAD: coronary artery disease

a, b : Duncan test(Means with the same letter are significantly different)

<Table 2> Knowledge and symptoms of subjects according to risk factors of CAD

(N=285)

Characteristics	n(%)	Symptoms			Knowledge		
		Mean ±SD	t	p	Mean ±SD	t	p
Diabetes mellitus							
Yes	31(10.9)	1.58±1.93	2.18	.036	12.7±3.73	-1.64	.103
No	254(89.1)	0.80±1.36			14.0±4.41		
Hypertension							
Yes	65(22.8)	1.08±1.53	1.20	.281	13.7±3.83	-0.33	.740
No	220(77.2)	0.83±1.42			13.9±4.50		
Hyperlipidemia							
Yes	42(14.7)	1.26±1.70	1.82	.069	14.6±3.23	1.55	.125
No	243(85.3)	0.82±1.39			13.8±4.51		
Exercise regularly							
Yes	194(68.1)	0.89±1.46	-0.02	.985	14.1±4.37	1.08	.279
No	91(31.9)	0.89±1.42			13.5±4.31		
Smoking							
Yes	3(1.1)	2.67±2.08	-2.15	.032	14.3±3.21	-0.18	.857
No	282(98.9)	0.87±1.43			13.9±4.37		
Alcohol							
Yes	48(16.8)	1.23±1.68	-1.80	.073	12.9±4.76	1.65	.100
No	237(83.2)	0.82±1.39			14.1±4.25		
BMI							
<25	237(83.2)	0.85±1.43	-1.03	.305	13.9±4.36	0.30	.764
≥25	48(16.8)	1.08±1.53			13.7±4.36		
Past history of CAD							
Yes	8(2.8)	2.00±2.14	2.22	.027	12.1±5.57	-1.16	.248
No	277(97.1)	0.86±1.41			13.9±4.32		
Potential for CAD							
Yes	59(20.7)	1.71±1.96	3.89	.000	14.6±4.44	1.48	.139
No	226(79.3)	0.67±1.20			13.7±4.32		
Family history (DM or HBP)							
Yes	102(35.8)	0.97±1.45	0.72	.471	14.5±4.21	1.86	.064
No	183(64.2)	0.84±1.45			13.5±4.40		
Family history(CAD)							
Yes	19(6.7)	0.63±0.83	-0.80	.425	15.6±3.24	1.82	.070
No	266(93.3)	0.91±1.48			13.8±4.40		
Total	285(100)	0.89±1.45			13.9±4.35		

BMI: body mass index CAD: coronary artery disease
HBP : hypertension DM : diabetes mellitus

22.6%, 15.4%, ' , 11.6%가 ' 가 ,
23.8% <Table 1, 2>. , 10.5%가 '가 가 ,
<Table 3>. (p=.022)<Table 1>,
2. 가 (p=.036), (p=.032),
31.2%가 (p=.027), 가 (p=.000)
1 ' , 14.0%가 <Table 2>.

<Table 3> Experienced subjective symptoms of coronary artery disease (N=285)

Experienced symptoms	n(%)
Palpitation	89(31.2)
Irregular pulsation	40(14.0)
Nocturnal chest discomfort	33(11.6)
Squeezing chest pain	30(10.5)
Chest discomfort	27(9.5)
Dyspnea	18(6.3)
Respiratory difficulty	16(5.6)
Others	32(11.3)

3.

20
13.9 100 68.4
100
76.4 , 72.0 , 65.3 ,
60 <Table 4>.
(p=.003) (p=.009)
가 . 200
300 - 400 400
가 ,
<Table 1>.

<Table 4> Mean score of knowledge by dimensions (N=285)

Dimensions(Items)	Mean ± SD	Knowledge Score
Diet(8)	6.11±1.75	76.4
Exercise & rest(4)	2.88±1.14	72.0
Characteristics of disease(3)	1.96±1.13	65.3
Risk factor & control(5)	3.00±1.58	60.0
Total	13.9±4.35	68.4

4.

가 , ' 가
56.8% 가 , ' 55.3%, ' (Seo. H. S., 2003).
' 49.8%, ' 37.5%
<Table 5>.

5. 가

가 23.2% 가 , 가

<Table 5> Preventive healthy practices of subjects (N=285)

Items	n(%)*
Positive attitude	162(56.8)
Control stress	157(55.3)
Exercise regularly	142(49.8)
Control the weight	107(37.5)
Caffeine restriction	95(33.3)
No drinking	84(29.5)
Human doc	81(28.4)
Diet control	80(28.1)
Quit smoking	64(22.7)
Others	10(3.5)

* multiple response

21.4% , 20.4% , 20.0% ,
6.7%

<Table 6>.

<Table 6> Risk factors that the subjects perceived causing coronary artery disease (N=285)

Items	n(%)*
Stress	66(23.2)
Hypertension	61(21.4)
Hyperlipidemia	61(21.4)
Age	58(20.4)
Obesity	57(20.0)
Family history	41(14.4)
Diabetes mellitus	39(13.7)
Smoking	36(12.6)
Alcohol	27(9.5)
Female gender	19(6.7)
Sedentary lifestyle	10(3.7)
Others	3(1.1)

* multiple response

가 , 가
(Seo. H. S., 2003).
, , , , , 가 , ,
, , , , , 가 , ,

(Kim et al., 2001).

가

- Il Cho Kak.
- McSweeney, J. C., Cody, M., O'Sullivan, P., Elberson, K., Moser, K. D., & Garvin, B. J. (2003). Women's early warning symptoms of acute myocardial infarction. *Circ*, *108*, 2619-2623.
- Ministry of Health & Welfare. (2002). *The survey of national health & nutrition*. Seoul: Ministry of Health & Welfare, 46-48.
- Moon, H. K., Kim, Y. D., Yang, D. G., Kim, S. G., Cha, K. S., Kim, M. H., Kim, J. S., Cha, T. J., Joo, S. J., Lee, J. W., Hong, T. J., Shin, Y. W., Kim D. I., Kim, D. S., Park, J. S., Shin, D. G., & Kim, Y. J. (2003). Age and gender distribution of patients with acute myocardial infarction admitted to university hospitals during the period of 1990-1999. *Korean Circ J*, *33*(2), 92-96.
- Moon, K. W., Lee, M. Y., Chung, W. S., Kim, C. J., Seung, K. B., Jeon, D. S., Kim, H. Y., Jin, S. W., Ihm, S. H., Kim, P. J., Park, I. S., Kim, J. H., Choi, K. B., & Hong, S. J. (2003). Sex differences in early management of patients with acute myocardial infarction(AMI) in the 1990s. *Korean Circ J*, *33*(2), 85-91.
- Moser, K. D. (1997). Correcting misconceptions about women and heart disease. *AJN*, *97*(4), 26-33.
- Nam, D. L. (1998). *Knowledge and learning needs with coronary artery disease patients and their family members*. Unpublished master's thesis, Catholic University, Seoul.
- Rahe, R. H., Scalzi, C., & Shine, K. (1975). A teaching evaluation questionnaire for postmyocardial infarction patients. *Heart Lung*, *4*(5), 759-766.
- Rankin, S. H. (2002). Women recovering from acute myocardial infarction: Psychosocial and physical functioning outcomes for 12 months after acute myocardial infarction. *Heart Lung*, *31*, 399-410.
- Seo, H. S. (2003). Guidelines for preventing heart attack and death in patients with atherosclerotic coronary disease. *Postgrad Med*, *31*(4), 191-200.
- Seo, I. (2003). Epidemiology of coronary heart disease in Korea. *Postgrad Med*, *31*(4), 184-190.
- Yeom, S. G. (2003). The investigation on the risk factors of cardiovascular disease for postmenopausal women over 50 years. *J Korean Soc Menopause*, *9*(3), 266-272.
- Yoon, B. K., Kim, J. Y., Shin, K. J., Shin, M. H., Choi, D. S., & Lee, J. M. (1999). Risk factors for cardiovascular disease in Korea women-influences of age, BMI, and menopause. *J Korean Soc Menopause*, *5*(1), 48-54.