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1. (Riggs & Melton, 1992; Wardlaw, 1993; Johnell, 1993)

120 Shin & Han (2000) 62%가

(National Institute of Health)

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(Kim, Horan & Gendler, 1991). , 가

3 가 (Rowe, Jung & Lee, 1997), 200

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(Bilezikian, 1996),

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(Bandura, 1977, 1986).

(Rosenstock, 1974; Lee, 1993; Nam, 1997). Kim (1991)

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(self-referent thought) ,

(Becker, 1974; Rosenstock, 1974, 1990).

가 Kim (1991)

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295 (41.73%)

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<Table 1>

29 , 80 , 57.25
 45 59 48.43% 가
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 36.51% 가 55.56% 가
 , 100 가 88.89%
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<Table 1> General characteristics (N = 64)

Variable	No(%)
Age(years)	20-44 9(14.06)
	45-59 31(48.43)
	over 60 24(37.50)
Marital status	married 51(80.95)
	widowed 12(19.05)
	protestant 22(34.92)
Religion	buddhist 6(9.52)
	catholic 12(19.05)
	atheist 23(36.51)
	none 16(25.40)
Education	elementary school 35(55.56)
	middle school 5(7.94)
	more than high school 7(11.10)
Family income (1,000won/month)	1,000 below 56(88.89)
	1,000-3,000 7(11.11)

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24 10.03
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 21.81, 19.75, 19.05,
 18.95, 16.95,

<Table 2> Scores of osteoporosis knowledge, self-efficacy, and health belief (N = 64)

variable	Min	Max	Mean	SD
Osteoporosis Knowledge	0.00	18.00	10.03	4.45
Osteoporosis Self-Efficacy	18.00	60.00	37.95	9.26
Susceptibility	9.00	27.00	18.95	4.77
Seriousness	10.00	25.00	19.05	4.07
Benefits of Exercise	7.00	28.00	22.35	3.36
Benefits of Calcium Intake	9.00	27.00	21.81	3.44
Barriers of Exercise	8.00	25.00	16.95	3.35
Barriers of Calcium Intake	6.00	18.00	13.13	2.55
Health Motivation	10.00	28.00	19.75	3.32

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<table 3>, <table 4>

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<Table 3> Difference of osteoporosis knowledge, self efficacy by general characteristics

(N = 64)

variable		Osteoporosis Knowledge	Osteoporosis Self efficacy
		Mean \pm SD p value	Mean \pm SD p value
Age(years)	20-44	13.11 \pm 2.71	36.11 \pm 4.57
	45-59	11.35 \pm 4.00	38.35 \pm 9.97
	Over 60	7.17 \pm 4.03	38.13 \pm 9.80
		<.0001	.6204
Marital status	married	10.63 \pm 4.34	38.28 \pm 9.40
	widowed	7.92 \pm 4.40	37.42 \pm 8.92
Religion		.0566	.7750
	protestant	10.86 \pm 5.11	35.77 \pm 9.74
	buddhist	11.00 \pm 4.43	34.00 \pm 10.55
	catholic	9.92 \pm 4.01	41.25 \pm 6.09
	atheist	9.30 \pm 4.03	40.48 \pm 7.66
Education		.6546	.1033
	none	7.13 \pm 4.00	37.43 \pm 11.52
	elementary school	10.46 \pm 4.51	38.57 \pm 9.09
	middle school	12.80 \pm 3.42	37.00 \pm 7.51
Family income (1000won/month)	more than high school	12.71 \pm 2.63	38.71 \pm 4.99
		.0070	.9664
	1,000 below	9.80 \pm 4.27	38.33 \pm 9.03
	1,000-3,000	12.14 \pm 5.90	36.14 \pm 11.55
		.1954	.5583

<Table 4> Difference of osteoporosis health belief by general characteristics (N = 64)

Variable		Suscepti- bility	Seriousness	Benefits of Exercise	Benefits of Calcium Intake	Barriers of Exercise	Barriers of Calcium Intake	Health motivation
		M±SD p value	M±SD p value	M±SD p value	M±SD p value	M±SD p value	M±SD p value	M±SD p value
Age(years)	20-44	18.00±5.21	17.56±4.07	23.33±2.29	22.33±2.82	15.67±3.67	13.11±4.01	16.44±3.17
	45-59	18.52±3.95	18.59±4.17	22.58±3.08	22.07±2.89	17.81±5.97	14.35±5.25	20.52±3.09
	Over 61	19.78±5.53	20.17±5.53	21.68±3.97	21.30±4.26	19.04±4.68	15.46±4.10	20.09±3.00
Marital status		.5459	.1938	.4216	.6562	.2591	.4129	.0034
	married	18.72±4.36	19.00±4.13	22.69±2.50	22.30±2.38	18.00±5.03	14.61±4.67	19.67±3.14
	widowed	20.00±6.51	19.73±3.82	21.73±5.26	20.64±5.57	18.17±6.59	14.58±5.14	20.46±4.11
Religion		.4316	.5967	.5665	.3555	.9229	.9872	.4850
	protestant	16.39±5.80	17.37±4.15	21.00±4.46	20.85±3.79	17.86±6.85	15.05±5.57	19.30±3.71
	buddhist	18.80±4.27	18.40±2.88	24.00±3.16	22.60±2.30	20.33±7.92	15.33±7.47	19.40±3.28
	catholic	21.17±4.06	20.25±3.96	23.25±2.05	22.75±3.49	18.08±2.87	14.50±2.84	20.33±4.01
	atheist	19.83±3.52	19.96±4.02	22.67±2.52	21.91±3.34	17.57±3.78	14.39±3.56	19.96±2.79
Education		.0309	.1343	.1478	.4495	.7308	.9505	.8413
	none	19.67±5.64	20.47±4.02	21.00±4.80	20.86±4.70	20.38±5.44	16.63±4.46	20.07±3.58
	elementary school	19.10±4.37	18.91±3.91	22.42±2.67	21.88±3.03	17.05±4.35	13.42±4.00	19.85±2.84
	middle school	20.40±3.44	20.40±3.78	23.60±2.97	23.20±2.17	18.20±2.49	15.20±4.60	20.20±3.03
	above high school	15.71±4.79	15.71±3.82	23.86±2.34	22.43±3.26	14.29±4.15	13.14±3.80	18.29±5.22
Family income (1,000won/m)		.2589	.0646	.2252	.5567	.0228	.0724	.1231
	1,000 below	19.38±4.71	19.42±3.99	22.13±3.41	21.74±3.52	17.96±4.76	14.52±4.35	19.96±2.97
	1,000-3,000	15.00±4.12	15.20±3.56	24.20±2.68	22.17±3.13	17.71±9.20	15.57±7.37	18.67±5.72
		.0498	.0270	.1954	.7753	.9078	.5809	.3650

<Table 5> Relationships of osteoporosis knowledge, self-efficacy and osteoporosis health belief

	Osteoporosis knowledge(p value)	Osteoporosis self-efficacy(p value)
Osteoporosis knowledge	-	.0917
Osteoporosis self-efficacy		-
Susceptibility	.3922	.9370
Seriousness	.5219	.4545
Benefits of exercise	.0004	.1506
Benefits of calcium intake	.0065	.1012
Barriers of exercise	.0747	.0486
Barriers of calcium intake	.9805	.7295
Health motivation	.5488	<.0001

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<Table 5>

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Kim, Choi, Kim, Hong & Park(1995) 9 3 가

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Siddall(1996)

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22.35, 21.81,

19.75, 19.05, 18.95,

가 16.95, 13.13

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Kim(1998)

Siddall(1996)

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Kim (1991)

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- Abstract -
- ### A Study on the Relationships between Osteoporosis Knowledge, Self-efficacy and Health Belief of Women in an Island
- Shin, Kyung-Rim *. Kang, Young-Mi **
- Purpose:** This study was to examine the relationships between knowledge, health belief and self-efficacy of osteoporosis with the women residents in an island.
- Method:** The subjects were 64 women who lived in an island located in Incheon
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- * Professor of Ewha Womans University, College of Nursing Science
- ** Clinical Instructor of Ewha Womans University, College of Nursing Science

metropolitan city. Data collection was performed by using questionnaire that included Osteoporosis Knowledge Test, Osteoporosis Self-Efficacy Scale and Osteoporosis Health Belief Scale by Kim, Horan & Gendler (1991). The Data were analyzed using SAS computer program that included descriptive statistics, t-test, ANOVA, Pearson correlation coefficient.

Result: 1) The mean of osteoporosis knowledge was 10.03 in the range of 0 to 24, shows the relatively lower score than mean score. The mean of osteoporosis health belief variables were susceptibility 18.95, seriousness 19.05, benefits of exercise 22.35, benefits of calcium 21.81, barriers to exercise 16.95, barriers to calcium 13.13, and health motivation 19.75 in every range of 6 to 30. The mean of osteoporosis self-efficacy was 37.95 in the range of 12 to 60, shows a relatively higher score than mean score. 2) There were statistically significant differences in the degree of osteoporosis knowledge according to age, education. But There was no significant difference in the degree of osteoporosis and self-efficacy according to general characteristics. There were statistically significant differences in the degree of susceptibility according to religion, family income. There were statistically significant differences in the degree of

seriousness, health motivation according to family income. There was statistically significant difference in the degree of barriers to exercise according to education. 3) There were statistically significant positive correlations between osteoporosis knowledge and benefits to exercise, benefits of calcium intake. There was statistically no significant correlation between osteoporosis knowledge and osteoporosis self-efficacy. There was statistically a significant positive correlation between osteoporosis self-efficacy and barriers to exercise. There was statistically a significant negative correlation between osteoporosis self-efficacy and health motivation.

Conclusion: According to the result, osteoporosis education program including exercise, calcium intake should be operated to increase benefits to exercise and calcium intake for osteoporosis prevention. In addition, the program of improving self-efficacy should be designed and operated to decrease the perception of barriers to exercise and to increase the perception of health motivation of women in island.

Key words : Women, Osteoporosis, Knowledge, Self-efficacy, Health belief