

Influencing Variables on Life Satisfaction of Korean Elders in Institutions

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Purpose. The number of elders in institutions has increased as family supporting systems have changed in Korea. The purpose of this study were to understand the life satisfaction among elders in institutions and to identify the factors influencing on life satisfaction.

Methods. The instruments used were Yun(1982)'s scale modified Memorial University of Newfoundland Scale for Happiness(MUNSH) in life satisfaction, ADL and IADL in activity level, Self-rating Depression Scale(SDS) in depression and Norbeck Social Support Questionnaire(NSSQ) scale in social support. Also, Perceived health status was measured by Visual Graphic Rating Scale. The subject of this study is 107 cognitively intact and ambulatory elders in 7 institutions in Daegu city and Kyungpook province. The data have been collected from May 1 to June 30, 2001. For the analysis of collected data, frequency analysis, mean, standard deviation, Pearson's correlation and stepwise multiple regression analysis were used for statistical analysis by SPSSwin(version 9.0) program.

Results. Life satisfaction for the elders in institutions showed negative correlation with SDS, and positive correlation with activity level. The regression form of the stepwise multiple regression analysis to investigate the influencing factors of life satisfaction for the elders in institutions was expressed by $y = 90.988 - 0.733x_1 - 0.188x_2 - 0.069x_3 - 0.565x_4$ (x_1 : SDS x_2 : Social support x_3 : Activity level x_4 : Monthly pocket Money) and 57.9% of variance in life satisfaction was explained by the model.

Conclusion. The factors influencing on life satisfaction among the elders in institutions were SDS, social support, activity level and monthly pocket money. According to the results of this study, depression, social support and activity level are considered the prime causal factors for life satisfaction.

Key Words: Elderly, Institutions, Life satisfaction

INTRODUCTION

Korea is one of the countries where the number of elderly people is sharply increasing beyond the average global level. In the year 2001, the elderly over 65 years of age in Korea account for 7.3% (350,000 people) or more of the whole population; driving the country into the status of a full-fledged aging society (Ministry of

Health and Welfare, 2001).

The state of the old man who once had the highest status in a traditional Korean family has decreased because of the influence of foreign culture and the increase in nuclear families. The old man has been alienated from the family. The responsibility to take care of the elderly is being transferred from the family to society. The loss of the positions and roles of the elderly, plus their failing physical health and economic decline, make their ability

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to have an independent life impossible. These changes will bring about the need for social welfare facilities for the elderly and the spread of control and nursing for the old.

Currently, total in-patient beds in the medical and welfare institutions for the elderly in Korea, is reported as 0.3 per thousand population. This barely stands for the 33% of the lower level average of the total in-patient beds in the long-term care institutions in OECD countries, which is 1.0 - 1.7 per thousand population (Korean Health Industry Development Institute; 2000). Welfare facilities for the aged in Korea are limited to the available free facilities for those who have no family to rely on. The government is forming a plan to build welfare facilities for the old in low income families, but not for the old in a welfare family. These kind of social supports influence with these peoples health, life satisfaction, and emotions (Seo & Lee, 1995; Silverstein & Bengtson, 1994; Russell & Cutrona, 1991).

The state of life satisfaction is determined by evaluating subjectively how much a person is satisfied with his own life. In Korean research for life satisfaction of the elderly (Kim, et al., 1999; Kim & Park, 1999; Park, 1988) there were significant factors of life satisfaction that are related to dimensions of health, happiness of family, interrelationship with sons and daughters, and economic status. These factors have a great effect on the Korean elderly since interaction with sons and daughters is highly valued. Another study (Lee, 1993) reported that participation in social education, state of health and the standard of living are 35% among the factors affecting the life satisfaction of the elderly and people who are participating in social education are satisfied with their life more than other people. Life satisfaction is affected by various factors, but health, social and economic state and social activities are the main ones (Choi, 1986). The study of life satisfaction in the old is an important subject of study because a successful aging process is regarded as an index of life satisfaction of the old, but the study of the aged in institutions is still unsatisfactory in Korea (Choi, 1999; Jang, 1997).

A number of studies have shown that institutionalized elders who perceive themselves to have personal influence or control over daily activities also have higher life satisfaction scores (Fawcett, Stonner & Zeplan, 1980; Reid, Haas & Hawkings, 1977). Also health, emotionally stable personality and adequate income to meet living expenses are associated with a high life satisfaction (Hilleras et al.,

2001; Ho et al., 1995; Koseki & Reid, 1995).

The purpose of this study is to identify the influencing variables on life satisfaction of the elderly in institutions and to find the sources that cause the effects. Understanding the factors affecting life satisfaction of the elders in institutions is important for taking care of this population.

In this study, the specific research questions were;

- 1) How are the degree of life satisfaction in institutional elderly?
- 2) What are the factors affecting life satisfaction of the elderly in institutions?

LITERATURE REVIEW

Life satisfaction has been confused with the concepts of morale, happiness, adjustment, and psychological well-being. These definitions have been prescribed by various scholars. Life satisfaction is defined as a person's feeling about their activities of their daily life, their responsibilities, the meaning of their life, the achievement of goals, having a positive ego, regarding a person themselves valuable, and keeping an optimistic attitude.

Some areas of life satisfaction are difficult to assess in the elderly, insofar as many situations are parts of the normal aging process, and others are psychosocial conditions closely linked to the old age in it self. In old age, physical abilities decline, bringing about dependence on others. Pharmacokinetic response to treatment also differs at this time of life. Furthermore, the elderly experience particularly important events such as retirement, institutionalization, fall in income, combined with less occasion for social intercourse, and consequently an increased probability of their feeling (and being) isolated or lonely.

Life satisfaction is affected by a person's role in their family, religion, and the frequency of meeting they have with their children living far away (Kim, 1996). It is also directly affected by the economy such as the better the economic state, the higher the level of life satisfaction (Lee et al., 1994; Han, 1987). Health is also an important factor of the life satisfaction in the old. The better one's health is, the higher the level of life satisfaction (Ko, 1995; Lee et al., 1994; Park, 1988). When the elderly participate in social education and keep their health and the regular standard of living, life satisfaction rises (Lee, 1993). The period and frequency of participa-

tion show significant differences (Kim, 1995).

The other factors that affect life satisfaction of the aged are sex and age. Old women tend to be less satisfied with their life than men of the corresponding age (Ham, 1997). Religious activities are helpful not only in successful aging, but also for finding new meaning to life and gaining a positive attitude towards death and the loss associated with old age (Ko, 1995; Meng, 1986).

There are many factors influencing life satisfaction of the elderly, but economic condition, health and participation in social activities are among the most important.

METHOD

Research design and study subject

A descriptive design was used for this investigation. A convenient sample of 107 elderly was recruited from 7 institutions for elderly people located in Daegu city and Kyungpook province, Korea, which was free of charge and run by the government with standardized facilities. The study participants were selected according to the following criteria ; (1) 60 and over years old (2) cognitively intact (a score of at least 8 of 10 possible points on the Mini-Menta1 Status Examination-Korea) (3) able to ambulate without specific physical problem (4) able to communicate and able to understand question. The data were collected from May 1st to June 30th, 2001.

Procedure

All residents of the institution were reviewed based on the inclusion criteria prior to the investigation, with permission from the manager. The potential study candidates were selected, and the study purpose was explained to them. Each participant who signed the informed- consent from was individually interviewed to allow completion of the questionnaires on demographic information and other questionnaires.

Measures

Life satisfaction

The life satisfaction scale developed by Yun (1982) was used to measure life satisfaction of the elderly in institution. Yun (1982) measured life satisfaction of the old age according to The Memorial University of Newfoundland Scale for Happiness (MUNSH) developed by Stones and Kozma (1980). The scale consisted of 20 items, on 4 items on positive emotion, 4 items on negative emotion,

6 positive daily life experience questions, and 6 items related to negative daily life experiences, and representing their importance in a Korean sociocultural context. All items have a 4 point scale; agree (4) , disagree (1). The total score ranges from 20 to 80, higher scores indicate a more satisfied state. The value of Cronbach's alpha for this scale for the development state was .85. In this study the Cronbach's alpha represented internal consistency was .78 and test-retest reliability was .83.

Activity level

Activities level was measured by a scale composed of 15 items. Barthel Index and IADL (Instrumental Activity of Daily Living Scale) has been translated into Korean by the researcher and modified after performing pre-test for 20 old persons. All items have a 4 point scale; independent (4), dependent (1). The total score ranges from 15 to 60, higher scores indicate a more active state. In this study, the Cronbach's alpha represented internal consistency of Activity level was .92 and test-retest reliability was .93 (r= .93).

Depression

Depression was measured by Lee & Jung's scale (1985), SDS (Self-rating Depression Scale) (Zung, 1971) which was composed of 20 items. The scale included items related to loss of interest, decreased appetite, fatigue and discomfort etc.

The scores ranged from 20 to 80. The higher score indicate a more depressive. In this study, Cronbach's alpha represented internal consistency of SDS was .86 and test-retest reliability was .90 (r= .90).

Social Support

Social Support was measured on the NSSQ scale (Norbeck Social Support Questionnaire) (Norbeck, Linsey & Carrieri, 1981) which was translated Korean and modified by Park (1985). The scale composed of 25 items and included items related to affect, information, affirmation and material aid. In this study, Cronbach's alpha of NSSQ was .82 and test-retest reliability was .95.

Perceived health status

Perceived health status was measured by Visual Graphic Rating Scale.

Data Analysis

Collected data were analyzed after coding by using

SPSSWIN 9.0.

- 1) The sociodemographic characteristics of the subjects were analyzed using descriptive statistics.
- 2) Mean score and standard deviation was used to identify degree of the life satisfaction and other variables among the aged in institutions.
- 3) Pearson correlation was used to analyze the relationship between life satisfaction and predictive variables.
- 4) Stepwise multiple regression was used to expect variables for life satisfaction of the aged in institutions.

RESULTS

General characteristics of the subjects

The general characteristics are presented on table 1. The gender distribution of the elderly in institutions showed that male accounted for 38.3% and females for 61.7%. The age distribution showed that 70% of the elders were from 65 years old to 79 years old. The length of stay in an institution for less than 3 years was 47.3% and more than 9 years was 25.2%. The percentage of elderly in institution that had no education was 40.2% and an elementary degree was 39.3%. In regard of their religion, the aged in institutions had protestant (61.7%), buddhism (13.1%). And almost of the aged in institu-

tions didn't have spouse (96.3%) and sons and daughters (36.4%). The main supporter of elderly in institutions were the family (21.5%) and the clergy (16.8%).

Correlations among life satisfaction and other variables of the elderly in institutions

In Pearson correlation (table3), life satisfaction was positively correlated with activity level ($r = .221, p = .023$) and negatively correlated with SDS ($r = -.706, p = .000$). High life satisfaction scores are related to less depression and better activity level.

Influencing variables on life satisfaction of the elders in institution

The result of influencing variables on life satisfaction are presented on table 4, 5.

Table 2. Mean Score of Life Satisfaction and Other Variables Among Elders in Institutions (N=107)

	Mean (S.D)	Range (min - max)
Life satisfaction	46.96 (11.09)	51.00 (25.00 - 76.00)
Activities level	49.26 (7.34)	28.00 (28.00 - 56.00)
SDS	45.65 (10.72)	49.00 (22.00 - 71.00)
Social support	19.80 (8.15)	34.00 (2.00 - 36.00)
Perceived health status	56.59 (26.09)	95.00 (.00 - 95.00)
Monthly pocket money (10,000 won)	5.49 (2.91)	17.00 (.00 - 17.00)

SDS: Self-rating Depression Scale

Table 1. Sociodemographic Characteristics of Study Sample

Characteristics		Number	%	Characteristics		Number	%
Gender	male	41	38.3	Religion	buddhism	14	13.1
	female	66	61.7		catholic	9	8.4
Age (years)	60 - 64	10	9.3		protestant	66	61.6
	65 - 69	25	23.4		others	1	.9
	70 - 74	22	20.6	Spouse	none	16	15.0
	75 - 79	28	26.2		living with	4	3.7
	80v84	16	15.0		living without	103	96.3
	>85	6	5.6	Number of sons and daughters	none	39	36.4
Period* (years)	< 1	25	23.4		1 - 2	18	16.8
	1 - 2	26	24.3		3 - 4	38	35.5
	3 - 4	14	13.1		> 5	12	11.3
	5 - 6	9	8.4	Main supporter	family	23	21.5
	7 - 8	6	5.6		relatives	7	6.5
	>9	27	25.2		friends	4	3.7
Education	no school	43	40.2		neighbors	2	1.9
	elementary	42	39.3		health specialist	8	7.4
	middle school	13	12.1		clergy	18	16.8
	high school	6	5.6		others	41	38.2
	above college	3	2.8				
Total							

Period* : Institutionalized period

Multiple regression was used to identify the effect of the influencing variable on life satisfaction of the elders in institutions. For multiple regression, selected variables were activity level, SDS, social support, perceived health status and monthly pocket money which were presented relating factors on life satisfaction in elderly by literature review.

In R square of expected variables for life satisfaction SDS, social support, activity level and pocket money were .579. And the most influencing variable for life satisfaction in institutional elders was SDS ($\beta = -.733$), next was pocket money ($\beta = -.565$), social support ($\beta = -.188$) and activity level ($\beta = -.068$) orderly.

The regression equation was expressed by $y = 90.988 - 0.733x_1 - 0.188x_2 - 0.069x_3 - 0.565x_4$ (x_1 : SDS x_2 : Social support x_3 : Activity level x_4 : Monthly pocket Money). The explanation of the regression equation was 57.9%.

DISCUSSION

It is natural, in accordance with the prolongation of average life expectancy of the Koreans, to expect that the number of the elderly in need of long-term care would be rapidly increasing but current situation in Korea leaves much to be desired as to both the social counter-measure and the life satisfaction of the elderly. The number of elders in institutions has been increasing as the family support system has changed in Korea. There needs to be a better knowledge about the elderly's lives in order to understand them and, to provide them with good nursing care.

In this study, the results are similar with the previous report that the institutionalized elderly were mostly women, widowed, and under educated in Korean institution (Lee and Jung, 1998; Seo et al., 1997). In this study, the influencing variable on life satisfaction of the elders in institutions were depression, social support, activities level and monthly pocket money. Depression was negatively related to life satisfaction (McCurren et al., 1999), and providing and receiving social support was a significant impact on life satisfaction of the elderly (Kim et al.,

Table 3. Correlation between Life Satisfaction and Other Variables of Elders in Institutions (N=107)

	1	2	3	4	5	6
1. Life satisfaction	1.000					
2. Activities level	.221 (.023)	1.000				
3. SDS	-.706 (.000)	-.429 (.000)	1.000			
4. Social support	-.162 (.097)	.320 (.001)	-.041 (.677)	1.000		
5. Perceived health status	.037 (.707)	.224 (.020)	-.137 (.158)	.182 (.060)	1.000	
6. Monthly pocket money	-.162 (.092)	.261 (.007)	-.022 (.821)	.159 (.102)	.097 (.319)	1.000

() : P value

SDS: Self-rating Depression Scale

Table 4. ANOVA Table for Test of Regression Model According to Life Satisfaction in Institutional Elders

Model		SS	df	MS	F	p
SDS (x_1)	Regression	6444.685	1	6444.685	103.415	.000
	Residual	6481.164	104	62.319		
	Total	12925.849	105			
SDS (x_1) Social support (x_2)	Regression	6921.145	2	3460.572	59.360	.000
	Residual	6004.704	103	58.298		
	Total	12925.849	105			
SDS (x_1) Social support (x_2) Activity (x_3)	Regression	7213.468	3	2404.489	42.934	.000
	Residual	5712.381	102	56.004		
	Total	12925.849	105			
SDS (x_1) Social support (x_2) Activity (x_3) Money (x_4)	Regression	7490.225	4	1872.556	34.794	.000
	Residual	5435.624	101	53.818		
	Total	12925.849	105			

SDS: Self-rating Depression Scale

Money: Monthly pocket money

Table 5. Influencing Variables Table for Life Satisfaction by Stepwise Model in Institutional Elders

Model			t	p
SDS (x1)	(Constant)	80.206	23.887	.000
	x1	-.727	-10.169	.000
	y = 80.206 - 0.727x1			R ² = .499
SDS (x1) Social support (x2)	(Constant)	85.751	22.669	.000
	x1	-.736	-10.625	.000
	x2	-.260	-2.859	.005
y = 85.751 - 0.736x1 - 0.260x2			R ² = .535	
SDS (x1) Social support (x2) Activity (x3)	(Constant)	88.505	22.702	.000
	x1	-.731	-10.772	.000
	x2	-.220	-2.416	.017
	x3	-.070	-2.285	.024
y = 88.505-0.731x1 - 0.220x2 - 0.070x3			R ² = .558	
SDS (x1) Social support (x2) Activity (x3) Money (x4)	(Constant)	90.988	22.887	.000
	x1	-.733	-11.015	.000
	x2	-.188	-2.081	.040
	x3	-.069	-2.296	.024
	x4	-.565	-2.268	.025
y = 90.988-.733x1 - .188x2 - .069x3 - .565x4			R ² = .579	

y : depression

: regression coefficient

SDS: Self-rating Depression Scale

Money: Monthly pocket money

1999; McCamish-Svensson et al., 1999; Ho et al., 1995). Daily activity was crucial to increase their life satisfaction (Park, 1998; Sugai et al., 1996), and therefore efforts to enlarge their daily activities were also required. And Adequate monthly pocket money to meet living expenses also increased their life satisfaction (Ho et al., 1995). It is also directly affected by the economy such as the better the economic state, the higher the level of life satisfaction (Lee et al., 1994; Han, 1987).

The elders in the institution were leading unhappy life with irresponsibility, idleness, and hardness. They experienced a regretful life through remorse, guiltiness, and the present economic sufferings comes from the unfortunate aspect of their lives (Lee, 2000). Moreover, bad health which came with age made them to live in institutions from their family. When the elderly are experiencing poor economic conditions, they feel unsatisfied with their life (Lee et al., 1994; Han, 1987; Kim, 1986).

As mentioned above, the two main factors affecting the satisfaction of the elders in institutions are depression and economic conditions. This shows that emotional and economic support are important factors in nursing the elders in institution. Thus, emotional and economic support must be considered as main factors in taking

care of institutionalized elders. There is a need to provide varied programs for the promotion of health, along with parallel resolution of social, psychological and economic issues.

A nursing strategy that will lead the elderly into society and encourage them to join the recreation programs and voluntary support is necessary. This strategy can result in decreasing the feeling of helplessness of the elderly and their feeling of physical and mental loss, making their life satisfaction better and leading them to successful aging.

In nursing the elderly, one must observe and respect their uniqueness and differences. It is also very important to respect their human rights when taking care of them.

CONCLUSION

This study was aimed at differentiating predictive variables influencing the life satisfaction among the elders in institutions and suggesting intervention strategies and nursing programs for improving the quality of life for the elderly under nursing care.

The scores for life satisfaction were collected from 107

elders in 7 institutions in Daegu city and Kyungpook province from May 1st to June 30th, 2001. The trained social workers interviewed the target population. The survey-questionnaire used in this study was taken from the Yun (1982)'s scale for measuring life satisfaction of the aged. The data were analyzed by SPSSWIN using frequency, percentage, means, standard deviation, Pearson correlation and stepwise Multiple Regression statistical testing procedures and technique.

The findings of this study were as follows:

1. Life satisfaction for the elders in institutions has negative correlation coefficients with SDS, and positive correlation coefficients with activity level.
2. The factors influencing on life satisfaction among the elders in institutions are SDS, Social support, Activity level and Monthly pocket Money. The suitable regression form resulting from the stepwise multiple regression analysis to investigate the influencing factors of Life satisfaction for the elders in institutions was expressed by $y = 90.988 - 0.733x_1 - 0.188x_2 - 0.069x_3 - 0.565x_4$ (x_1 : SDS x_2 : Social support x_3 : Activity level x_4 : Monthly pocket Money) and $R^2 = .579$.

According to the result of this research, depression and social support were considered as the prime influencing factors of life satisfaction and represented the area of interest for developing nursing strategies. New nursing strategies will improve life satisfaction amongst the elderly in institutions. Various social activities and new nursing programs for elders are also needed.

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