Journal of Engineering and Applied Sciences 11 (7): 1613-1616, 2016
ISSN: 1816-949X
© Medwell Journals, 2016

Factors Correlated to Stress Management among Thai Elderly

[1]Kunwadee Rojpaisarnkit and [2]Yuvadee Rodjarkpai
[1]Department of Public Health, Faculty of Science and Technology,
Rajabhat Rajanagarindra University, Muang, Thailand
[2]Department of Health Education, Faculty of Public Health,
Burapha University, Saen Suk, 20130 Chon Buri, Thailand

Abstract: This cross-sectional survey research aimed to study the correlations among responsibility for health, interpersonal relationships, spiritual health and stress management among Thai elderly. Samples comprised 400 elderly people residing in the municipality area in eastern Thailand selected by multi-stage sampling. Research instruments included 4 questionnaires, i.e., stress management, interpersonal relationships, spiritual health and responsibility for health. Personal interviews were conducted to collect data between May and July, 2015. Results showed that stress management correlated with interpersonal relationships and spiritual health but did not correlate with responsibility for health.

Key words: Elderly, sesponsibility for health, interpersonal relationships, spiritual health, stress management

INTRODUCTION

In Thailand, the elderly population has grown rapidly and will continue to do so in future decades. In 2014, Thailand had 67,222,972 total elderly while the number of people aged 60 and over stands at about eight million, accounting for 13% of the population (Knodel and Napaporn, 2008). As the ASEAN community will be in place in late 2015, the Royal Thai government would like to encourage Thai society to help prepare senior citizens for the aging society, so that the community will fully benefit from their wisdom and experience and look after their well-being.

Stress is a normal part of life (Ugoji, 2012). According to the World Health Organization, stress is a significant problem and affects both physical as well as the mental health of people (Liza, 2011). When people age and retire or move to a new community, they may not have quite as many opportunities to socialize as they did when they were younger. Advancing age is often accompanied by loss of social support systems due to the death of a spouse or siblings, retirement or relocation of residence. Changes in an elderly person's circumstances occur because of the fact that elderly people are expected to slow down (Knodel and Napaporn, 2008). Therefore, stress will be a common factor in elderly life and the evidence of stressful life events are causes for the onset of depression among the elder (Schneiderman *et al*., 2005).

In this study, elderly stress management was defined as the actions of the elderly to manage their feelings of stress in their life. One study showed that stress management was one of the measurement indicators of the health promoting lifestyle (Lucas *et al*., 2000). Stress management has been associated with increased elderly health and well-being while retirement is hoped to be a time of little stress. Elderly stress can originate from relationships, finances and retirement itself as well as from many other areas of life.

Interpersonal relationships are associated with stress and stress management of the elderly. Aging and close relationships hold central importance in the life span and in developmental psychology and close relationships are among the most defining aspects of an individual's life (Miller, 2002). Relationship quality affects levels of depression and happiness in life (Antonucci *et al*., 1997). In addition, personal responsibility for health means that persons take responsibility for their choices and for the consequences of these choices. Moreover, spiritual health is an expanded sense of time in relation to the quality of life (Ebersole and Hess, 2005) and also ability to handle stress. One study on spiritual health found a significant negative correlation between perceived stress and spiritual well-being.

Furthermore, effective stress management is associated with many health benefits. Many studies have investigated the associations among interpersonal

Corresponding Author: Kunwadee Rojpaisarnkit, Department of Public Health, Faculty of Science and Technology, Rajabhat Rajanagarindra University, Muang, Thailand

Table 1: Frequency and percent of subject characteristics (n = 400)

Personal characteristics of subjects	Frequency	Percent
Sex		
Male	164	41.0
Female	236	59.0
Age (years)		
60-69	168	42.0
70-79	144	36.0
80 or above	88	22.0
Education		
Illiterate	110	27.5
Primary school	218	54.5
Secondary school	44	11.0
Diploma	6	1.5
Bachelor or higher	22	5.5
Marital status		
Single	12	3.0
Married	190	47.5
Widow	164	41.0
Separated	34	8.5
People living with		
Live alone	8	2.0
Spouse	30	7.5
Spouse and child	156	39.0
Child or grandchild	190	47.5
Others	16	4.0
Career		
Unemployed	218	53.0
Pensioner	18	4.5
Farmer	72	18.0
Small business owner	52	13.0
Employee	46	11.5
Income per month (baht)		
2,000 or less	24	6.0
2,001-3,000	112	28.0
3,001-4,000	64	16.0
4,001-5,000	58	14.5
5,001 or more	142	35.5
Adequacy of income		
Enough	176	44.0
Insufficient	224	56.0
Illness history		
Have certain diseases	212	53.0
Do not have illness	188	47.0

relations, spiritual health and responsibility for health with stress management of the elderly in various countries (Knodel and Napaporn, 2008; Scott, 2013; Miller, 2002; Tuck, 2007)). Thus, this study aimed to determine whether such factors were associated with stress management of Thai elderly.

MATERIALS AND DISCUSSION

Information was obtained through the following four questionnaires: stress management, interpersonal relationships, spiritual health and responsibility for health. The questionnaires were constructed based on information from various sources such as the literature review, previous studies and suggestions from experts. Cronbach's alpha coefficient was used to test the reliability of the questionnaires. The reliability of all questionnaires was higher than 0.70. Data was analyzed using Pearson's product moment correlation to analyze relationship of the variables.

Table 2: Mean, standard deviation and level of 4 variables

Variables	Total score	Min.	Max.	Mean	SD	Level
Stress management	20	11	20	15.48	1.66	Moderate
Responsibility for health	24	14	24	19.41	1.63	High
Interpersonal relationships	28	16	28	21.85	2.32	high
Spiritual health	40	21	36	27.95	2.82	Moderate

Table 3: Correlations of stress management, responsibility for health, interpersonal relations and spiritual health

Correlation	Interpersonal relationships	Spiritual health	Stress management
Responsibility for health	-0.155 (0.029)*	-0.089 (0.211)	-0.130 (0.067)
Interpersonal relationships		0.586 (0.000)**	0.360 (0.000)**
Spiritual health			0.385 (0.000)**

*Correlation was significant at the 0.05 level (2-tailed); **Correlation was significant at the 0.01 level (2-tailed)

RESULTS AND DISCUSSION

Sample characteristics: Personal characteristics of samples showed 59% were female, 42.0% were 60-69 years old, 47.5% were married, 47.5% lived with a child or grandchild, 53.0% were unemployed, 35.5% had 5,001 baht or more monthly income, 56.0% had insufficient income and 53.0% had illness history, as shown in Table 1.

Level of 4 variables: Average mean of elderly stress management and spiritual health were at moderate levels while responsibility for health and interpersonal relationships were at high levels as shown in Table 2.

Correlations of stress management, responsibility for health, interpersonal relations and spiritual health: Stress management was moderately correlated with interpersonal relationships ($r = 0.360$, $p = 0.000$) and spiritual health ($r = 0.385$, $p = 0.000$) but not correlated with responsibility for health. Spiritual health was highly correlated with interpersonal relationships ($r = 0.586$, $p = 0.000$). Additionally, interpersonal relation showed a low inverse correlation with responsibility for health ($r = 0.155$, $p = 0.029$) as shown in Table 3.

CONCLUSION

The results found stress management was correlated with interpersonal relationships in concurrence with the findings of researchers who reported that stress was the result from interpersonal relationships in the family and family relations and friendships were associated with successful aging (Chen *et al*., 2002; Moraes and Souza, 2005). In contrast were the findings among Chinese

elderly indicating that the elderly preferred to manage stress on their own rather than rely on social support from family, friends and professionals (Kwong and Kwan, 2004). Stress management was found to correlate with spiritual health in congruence with the study of who reported a negative correlation between perceived stress and spiritual well-being. Stress management was not correlated with responsibility for health, in contrast with the findings among Chinese elderly regarding the notion of saving face in the Chinese culture and an inadequate supply of social support were possible reasons the elderly did not like to seek help from others to reduce stress (Kwong and Kwan, 2004).

Moreover, spiritual health was found to correlate with interpersonal relationships in concurrence with the findings of researchers reporting interpersonal relationships affected health and well-being (Agnew and South, 2014) and interpersonal relationships maintained spiritual health (Douglas and Howard, 2015). In addition, people who continued to maintain close friendships and find other ways to interact socially lived longer than those who became isolated.

An interesting point was that interpersonal relationships were inversely correlated with the responsibility for health of Thai elderly. This condition was probably caused by a reliance on others, making it an issue to consider how to encourage elderly people to take responsibility for themselves as well as reducing their reliance on others (Moos *et al*., 2006; Szanton *et al*., 2011; Steverink *et al*., 2005). It was congruent with researchers studying Indian elderly who suggested that “organized family and social support was needed to improve the physical and psychological health of the elderly” (Mani *et al*., 2014).

The findings of this study showed stress management was moderately correlation with interpersonal relationships and spiritual health at moderate levels. However, spiritual health was highly correlated with interpersonal relationships and interpersonal relationships showed a low negative correlation with responsibility for health. These findings could serve as important implications for promoting elderly behaviors for health and well-being including how to promote interpersonal relationships for elderly spiritual health and responsibility for health. Also, caring for the health of the elderly is everyone’s duty in society, not only the duty of public health organizations, the public or government sectors.

However, this study has some limitations because it is a cross-sectional design, some factors affected health promoting behavior of the elderly may change in the futures. So it should be repeated in studies over similar periods of time to verify the present findings.

ACKNOWLEDGEMENTS

Researchers are grateful for Royal Thai Government and Rajabhat Rajanagarindra University for funding to researchers. The researchers are grateful to all of the elderly people who served as the subjects in this study.

REFERENCES

Agnew, C.R. and S.C. South, 2014. Interpersonal Relationships and Health: Social and Clinical Psychological Mechanisms. Oxford University Press, Oxford, Mississippi, USA., ISBN:978-0-19-993663-2, Pages: 293.

Antonucci, T.C., R. Fuhrer and J.F. Dartigues, 1997. Social relations and depressive symptomatology in a sample of community-dwelling French older adults. Psychol. Aging, 12: 189-195.

Douglas, B.M. and E.P. Howard, 2015. Predictors of self-management behaviors in older adults with hypertension. Adv. Preventive Med., 2015: 1-6.

Ebersole, P. and H. Hess, 2005. Toward Healthy Aging: Human Needs and Nursing Response. 5th Edn., Nosby-Year Book Inc., St. Louis, MO., USA.

Knodel, J. and Napaporn C., 2008. Population ageing and the well-being of older persons in Thailand. Master Thesis, Populations Studies Center, University of Michigan, Ann Arbor, Michigan.

Kwong, E.W.Y. and A.Y.H. Kwan, 2004. Stress-management methods of the community-dwelling elderly in Hong Kong: Implications for tailoring a stress-reduction program. Geriatric Nurs., 25: 102-106.

Liza, V., 2011. Stress management techniques: Evidence-based procedures that reduce stress and promote health. Health Sci. J., 5: 74-89.

Lucas, J.A., S.A. Orshan and F. Cook, 2000. Determinants of health-promoting behavior among women ages 65 and above living in the community. Scholarly Inq. Nurs. Pract., 14: 77-100.

Mani, G., S. Udayakumar, K. Annamalai and D.J. Ramasamy, 2014. Perceived levels of stress and its correlates among residents of old age home in Kanchipuram District Tamil Nadu. Med. J. Dr. DY Patil Univ., 7: 728-731.

Miller, J.G., 2002. Aging and close relationships. Int. Soci. Stud. Behav. Dev. Newsletter, 1: 1-27.

Moos, R.H., P.L. Brennan, K.K. Schutte and B.S. Moos, 2006. Older adults' coping with negative life events: Common processes of managing health, interpersonal and financial-work stressors. Int. J. Aging Hum. Dev., 62: 39-59.

Moraes, J.F.D.D. and V.B.D.A. Souza, 2005. Factors associated with the successful aging of the socially-active elderly in the metropolitan region of Porto Alegre. J. Psychiatry, 27: 302-308.

Schneiderman, N., G. Ironson and S.D. Siegel, 2005. Stress and health: psychological, behavioral and biological determinants. Annl. Rev. Clin. Psychol., 1: 607-628.

Steverink, N., S. Lindenberg and J.P. Slaets, 2005. How to understand and improve older people's self-management of wellbeing. Eur. J. Ageing, 2: 235-244.

Szanton, S.L., J. Wenzel, A.B. Connolly and R.L. Piferi, 2011. Examining mindfulness-based stress reduction: perceptions from minority older adults residing in a low-income housing facility. BMC. Complementary Altern. Med., 11: 1-7.

Ugoji, N., 2012. Perceived emotional intelligence and stress management among undergraduate students. Ife. Psychol., 20: 102-106.