



A CORRELATION BETWEEN STRESS AND COPING SKILL OF CAREGIVERS ELDERLY PATIENT IN BANGPLAMA HOSPITAL SUPHANBURI PROVINCE

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Abstract

The purpose of this descriptive study was to study the relationship between person factors, stress and coping in caregivers of elderly in hospital. Sixty-Four caregivers were studied in Bangplama hospital suphanburi Province. Data about person factors, stress and coping were collected between March to June 2010 by using questionnaire. Data analyzed was performed by using means, standard deviations and Pearson' Product- Moment Correlation coefficient.


The results of the study showed that: 1) The overall stress levels in caring were at a low level 2) Coping skills with the stress finduded on both the problems and emotions focused but there was more on the problem focused. 3) There was significantly positive correlation between stress and coping focused on the problem. $r = 0.254$ ($p < 0.05$) It is recommended that the governmental and private organization should to plan for preparing caregivers. Family nurse practitioner should support and providing continuing care for elderly.

Keywords: stress, coping, caregiver, elderly

Introduction

Presently, population of elderly is increasing due to change of populating enlargement as well as medical improvement. As rapid growth of public health, World Health Organization expects number of world population at aged 60 or over will increase to 976 million people by 2020. For Thai population statistic in past 20 years, tendency of population number at aged 60 or over has been increased doubly. In addition, there were 2.5 million elderly population in 1980, 5.3 million people in 2000, 6.2 and 12.3 million people in 2006 and 2020 respectively (The Office of the National Statistics, 2009). In Suphanburi Province, the number of elderly population is increasing annually. The increasing of elderly population started from 16.0% in 1990 to 19.6% in 2000. Moreover, mid 2009 survey results reported there was 25.68 percent of elderly population which were 11.21% male elderly and 14.47% female elderly (The Suphanburi Public Health Organization, 2009). Yearly, there are more than 1,000 elderly patients suffered by chronic disease getting treatment at Bangplama Hospital.

As the statistic number of elderly population increasingly mentioned in above paragraph, by consideration, the number is increasing continually. As a result, the elderly is confronting many problems such as physical, mental, emotional, and social degeneration which affected individually to the elderly both inside and outside. It not only affects on elderly but also impacts on family members and caregivers. Especially, when the elders are suffered by illness in environmental change in terms of society and economy, the caregivers have to deal with both Basic Needs and Economic Support. By these impacts, the caregivers carry long period burden which to be willing and unwilling. Facing situation that leads change into life might build pressure and stress to those caregivers. Consequently, the caregivers will be lacked of performance if they have high stress constantly. This stress influences on physical



health, mentality, and emotional intelligence of the caregivers. If the elderly have an illness that required hospitalization. Will add to the burden and stress more care. In Bangplama District, there are more than 1,000 elderly patients getting treatments as suffering from Diabetes, Hypertension, and Heart disease which needed continuous treatments (Bangplama Hospital, 2010). Due to the fact that there is no research of stress and coping skill of the caregivers in Bangplama District, Suphanburi, therefore, there should be the research of correlation between individual factors of the caregivers such as sex, occupation, income, education, and so on. Almost caregivers in Bangplama district are from expanded families and likely to be family members themselves.

This research applies stress theory of Lazarus and Folkman (Lazarus & Folkman, 1984: 150-152). It emphasizes how to cope with stress by focusing on problem solving and emotional management. Lazarus accentuated that when the caregivers confront stress they tend to use coping methods which combines action and thought attempts together to deal with stress. Coping with stress is dynamic method. It always changes. There is no way to decide which one is accurate method, it depends on the situation. Person who mostly is able to face stress often uses the right methods for the suitable situations. Lazarus divided coping skill into two methods. First, Problem-focused coping. It is how to confront stress by changing relationship between people and environment. This method aims to turn the situation into positive. Knowing either how to eliminate sources of stress or manage persons themselves by focusing on the problems. Another method, Emotional-focused coping. It is how to adjust emotional level and feelings with the intention of courage maintenance, willpower, and care giving performance. Thus, the caregivers have to realize how to cope with emotion and feelings to solving the problem accurately.

As the researcher is a Community Health Nurse Practitioner, hence, there is interested in studying the correlation between individual factors of the caregivers, stress by giving cares, as well as coping skill while looking after the patients. The study is purposed to find methods to enhance coping skill when stress occurs for the caregivers, families, and their communities.

Research Objectives

This research objectively studies the following:


1. The correlation between the individual factors namely sex, age, income, and education and the stressed coping skill of the caregivers while giving care to the elderly patients at Bangplama Hospital, Suphanburi.
2. The correlation between the stress and the stressed coping skill of the caregivers while giving care to the elderly patients at Bangplama Hospital, Suphanburi.

Research Hypothesis

1. The individual factors i.e. sex, age, income, and education are related to the stressed coping skill of the the caregivers while giving care to the elderly patients at Bangplama Hospital, Suphanburi.
2. The stress is related to the stressed coping skill of the the caregivers while giving care to the elderly patients at Bangplama Hospital, Suphanburi.

Methodology

This research is the Descriptive Research using questionnaire. The questionnaire is based on the literature considering. It is derived from conceptual convention of stress theory of Lazarus and Folkman (Lazarus & Folkman, 1984: 150-152). The questionnaire consists of 3 parts.



Part I Data of the individual factors, part II The stress of the elderly patient caregivers, and part III the stressed coping skill of the elderly patient caregivers. The evaluation was performed by three qualified persons which were Register Nurse - Chief of Health Promoting Division, Hygienic Register Nurse, and Psychiatry Nursing Instructor. The evaluation focused on corrective data examination which CVI = 1 IOC = 1. Besides, it also examined the accuracy of the questionnaire toward 30 caregivers in the Bangplama Hospital by using Cronbach's Alpha Coefficient. The evaluation emphasized on the questionnaire part II the stress of the elderly patient caregiver and part III the stressed coping skill of the caregivers, Reliability Value of both parts were 0.95 and 0.87 respectively.

Query evaluation criteria.

- 4 score Means Stress
- 3 score Means Moderate Stress
- 2 score Means Less
- 1 score Means no stress

Population and Samplings

The sampling of this study was the caregiver who taking care to the elderly patients in the admission ward of Bangplama Hospital, Suphanburi. The sampling was based on the Convenience Sampling method. There were 64 caregivers to be the sampling group. The evaluation used the Power Analysis of Sample Size formula at Reliability Level 80%.

Collection of Data

The researcher submitted requested letter of Baromrajchonnani college of Nursing, Suphanburi to the Director of Bangplama Hospital, Suphanburi in the purpose of collecting data of the elderly patient caregivers. The researcher received authorized letter from the Director of Bangplama Hospital. The researcher approached to the candidate caregivers from March to June 2010 between 4pm - 6pm to explain the objectives of the data collection and advocacy of the candidates . The researcher asserts the right to information from the data collection process. The results are presented. Getting cooperation from the sample. This research aims to provide information and inform them of the purpose and process of information collection without cover. After that, there was the data collecting process which operated by the researcher using 20 minutes per candidate.

Analysis of Data

The analysis was performed by computer software as the following procedures.

1. The analysis of the individual factors, the stress of the elderly patient caregivers, and the stressed coping skill of the caregivers. The analysis showed Percentage, Mean, and Standard deviation.
2. The analysis of the correlation between the individual factors and the stressed coping skill of the elderly patient caregivers. It analyzed the correlation between the stress and the stressed coping skill of the elderly patient caregivers by using the Pearson Product Moment Correlation.

Results

General data of the sampling group

There were 84.4 percent female caregivers, 53.1 percent age between 41-60 years old, 34.4 percent housewife, and 28.1 percent agriculturists. For income of the caregivers, there were 39.1 percent less than 5,000 Baht/month and 37.5 percent between 5,001-10,000 Baht/month. There were 42.2 percent primary school educational level and 43.8 percent were child of the elderly patients. The percentages of caring period were 39.1 percent between 1-5 years and 37.5 percent between 6-10 years. The percentage of caring period per day was 57.8 percent 13 hours or over. There were 51.6 percent of the caregivers having good health condition.

Almost of the elderly patients were female which 60.9 percent was. There was a 39.1 percent male patient. The patient age was between 70-80 years old which 40.6 percent. The patient education was primary school which 67.2 percent. Most of patients are parents of the caregivers which 51.6 percent. Every patient has had congenital diseases which were Diabetes, Hypertension, and Heart disease however has ability to perform daily routines.

The stress of the caregivers whilst giving care to the elderly patients at the hospital

From the study, there overall stressed level of care giving was less ($\bar{x} = 1.84$, S.D. = 0.87). When looked into the Standard deviation, there was less expansion of the overall stressed level of care giving. That means there were similarities stresses among the caregivers while giving care to the patients. The maximum score was observing abnormality of the patients which occurred by diseased suffer ($\bar{x} = 2.14$, S.D. = 1.33). The following score was giving care to the patients alone ($\bar{x} = 2.01$, S.D. = 1.20). The minimum score was doing enema when the patients having constipation ($\bar{x} = 1.39$, S.D. = 1.34), as shown in Table 1.

Table 1 The stress of the caregivers whilst giving care to the elderly patients at the hospital.

The stress levels by giving care to the elderly patients	\bar{X}	S.D.	Stress level
Observing the patient abnormality occurred by diseases	2.14	1.33	less
Giving care to the patients alone	2.01	1.20	less
Giving care to the patients at night	1.95	1.27	less
Stimulating to the patients to do exercise	1.84	2.00	less
Aware of the patient safety from accidents	1.81	1.24	less
Maintaining medicine taking of the patients	1.78	1.07	less
Cooking and preparing food for the patients	1.76	1.21	less
Helping while the patients eating	1.64	1.15	no stress
Toilet helping/using bedpan/changing diaper	1.54	1.22	no stress
Maintaining resting period of the patients	1.51	1.08	no stress
Taking bath/wiping body/cleaning mouth and brushing teeth	1.45	1.08	no stress
Helping for cloth changing	1.45	1.08	no stress
Cleaning after urine and stools discharge	1.42	1.15	no stress
Helping enema when having constipation	1.39	1.34	no stress
Overall stress level of the elderly patient caregivers	1.84	0.87	less

*p < 0.01

The stressed coping skill of the caregivers whilst giving care to the elderly patients at the hospital

The study reported that the caregivers sometimes used the coping skill focusing on the problems ($\bar{x} = 3.03$, S.D. = 0.73). When concentrate on the standard deviation, there was less expansion of the stressed coping skill focused on the problems. This signifies that there were similarities between the stressed coping skills of those caregivers. The maximum score was being patient and helping to solve the problems ($\bar{x} = 3.18$, S.D. = 0.94). The second score was attempting to find the best solution and start solving problems ($\bar{x} = 3.03$, S.D. = 0.94). The minimum score was enquiring for assistance from associated organizations ($\bar{x} = 2.12$, S.D. = 1.01). For the stressed coping skill focusing on the emotional management, the caregivers occasionally used this skill to cope with the stress ($\bar{x} = 2.93$, S.D. = 0.66). The maximum score was looking into the problems; there will be the right solutions for those

($\bar{x} = 3.28$, S.D. = 0.98). The following score was relieving from the stress by doing favorite activities and hobbies ($\bar{x} = 3.08$, S.D. = 0.91). The minimum score was leaving it at the mercy of the nature; it depended on fate ($\bar{x} = 1.58$, S.D. = 0.90). Each stressed coping skills are shown in Table 2.

Table 2 The stressed coping skill of the caregivers whilst giving care to the elderly patients at the hospital.

The stressed coping skill of giving care to the elderly patients	\bar{X}	S.D.	Skill applied
Focusing on Problem			
Keeping patient/being calm/helping to find solving solution	3.18	0.94	sometimes
Attempting to find solving methods and solve the problems	3.03	0.94	sometimes
Getting advice from professional such as Doctor and Nurse	2.97	0.96	sometimes
Reading from the books and other medias	2.87	0.89	sometimes
Correcting the sources of stress	2.81	0.97	sometimes
Enquiring to neighbors or persons who experience giving care to the elderly patients	2.67	0.98	sometimes
Asking for help from relatives and neighbors	2.53	0.81	sometimes
Asking for assistance from associated organizations	2.12	1.01	rarely
Overall stressed coping skill focusing on the problems	3.03	0.73	sometimes

* p<0.01

The stressed coping skill of the elderly patient caregivers	\bar{X}	S.D.	Skill applied
Emotional management			
Thinking that every problems has its own solutions	3.28	0.98	sometimes
Relief stress by doing favorite activities or hobbies	3.08	0.91	sometimes
Having thought of it is luckier than other families	3.01	1.01	sometimes
Chanting, preying to Budha, vowing to god	2.73	0.93	sometimes
Using traditional medicine such as traditional massage	2.72	0.98	sometimes
Talking to other family members	2.70	0.90	sometimes
Trying to do not remember	2.31	0.92	rarely
Doing meditation	2.28	0.90	rarely
Letting things go/do not pay attention	2.04	1.60	rarely
Stop doing things/spending times outside	1.92	0.96	rarely
Crying	1.86	0.89	rarely
Leaving it at the mercy of the nature	1.58	0.90	very rarely
Overall stressed coping skill focusing on the emotion	2.93	0.66	sometimes

*p < 0.01

From the analysis, there was no correlation between the individual factors and the coping skill of the caregivers while giving care to the elderly patients as shown in table 3.

Table 3 The Product Moment Correlation of Eta between the individual factors and the coping skill of the caregivers whilst giving care to the elderly patients

Variable	The coping skill of while giving care to the elderly patients of the caregivers	
	r	p-value
Sex	0.602	0.112
Occupation	0.628	0.260
Education	0.793	0.197
Income	0.732	0.059

The correlation between the individual factors, having stress by giving care, and the coping skill dealing with the stress of the caregivers whilst giving care to the elderly patient. From the analysis of the correlation between the individual factors, having stress by giving care, and the stressed coping skill of the caregivers, there was correlation between period of caring and the coping skill of the caregivers focusing on emotional management at statistic level 0.05 ($r = -2.89$ p- value = 0.020). Having stress while giving care to the elderly patients was positively correlated with the coping skill of the caregivers focusing on the problem solving at the statistic level 0.05 ($r = 0.254$ p- value = 0.043) as shown in table 4.

Table 4 The Pearson Product Moment Correlation between the individual factors, having stress by giving care, and the coping skill of the caregivers whilst giving care to the elderly patients.

Variable	The coping skill of the caregivers while giving to the elderly patients	
	r	p-value
The coping skill focusing on problem solving		
1. The stress of the caregivers while giving care to the elderly	0.254 *	0.043
The coping skill focusing on the emotional management		
2. The stress of the caregivers while giving care to the elderly	0.010	0.936
3. The period of giving care to the elderly	-0.289*	0.020

*Statistic significant level at 0.05


Discussion

The researcher divided the discussion based on the objectives and hypothesizes of the research as follows.

Objective I To study the correlation between the individual factors namely sex, age, income, and education with the coping skill of the caregivers dealing with the stress while giving care to the elderly patients at the Bangplama Hospital, Suphanburi

Hypothesis I The individual factors such as sex, age, income, and education which were correlated with the coping skill of the caregivers while giving care to the elderly patients at the Bangplama Hospital, Suphanburi.

By research study, there was no correlation between the individual factors which consisted of sex, age, income, and education and the coping skill of the caregivers while giving care to the



patients. The care giving period was negatively correlated with the coping skill of the caregivers focusing on the emotional management. The caregivers used the stress relieving methods by initially focusing on emotion. This might be from less knowledge and do not know how to give the care to the elderly patients. The method was not consistent with the study of Somrudee Sitthimongkol (1998:62) which revealed as long period as giving care, there was more stress in the caregivers because of decreasing of the coping skill.

Objective II The correlation between the stress and the coping skill dealing with stress while the caregivers giving care to the elderly patients at the Bangplama Hospital, Suphanburi.

Hypothesis II The stress correlated to the coping skill while the caregivers giving care to the elderly patients at the Bangplama Hospital, Suphanburi.

The research proved that the stress of giving care to the elderly patients had positive correlation to the coping skill focusing on solving the problem.

The study results explained that the caregivers were having stress while taking care to the elderly patients owing to constantly observing the ill condition of the patients. Besides, they had to maintain the daily routines, prepared food and medicine for the elderly. These were the routines which brought about stress. When the caregivers were having stress they used the coping skill which focusing on the problem solving to relief their stress. This method was consistent with the study of Suwaluck Wongchanlongsil (1999:1). The source of the stress was occurred by the longer caring period each day. On the other hand, the short period yearly had the negative correlation as lack of adaptive capability which was not consistent with the study of Wilai Surasakorn (2006:1). The coping skill which the caregivers often used to deal with the stress was the problem solving skill. This was consistent with the study of Somrudee Sitthimongkol (1998:1).

Research Suggestions


1. Both government and private organizations should plan the readiness of the caregiver relatives in order to reduce the stress of the caregivers from giving care to the elderly are illness.
2. The director and the instructors of the nursing college should scheme learning plans which related to needs of the caregiver from giving care to the elderly are illness. . There should be more topics in the syllabus such as needs, response of needs, and enhancement of caring performance.
3. Community nurses should encourage giving knowledge, training, and supporting continually. There should be distributing plan, visiting plan, and caring service for the family members with the aim of reducing stress of the caregivers from giving care to the elderly are illness.

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