SOCIAL SUPPORT AMONG ELDERLY IN KHON KEAN PROVINCE, THAILAND

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Abstract. The purpose of this research was to assess perceived social support and its factors among the elderly. The study group included 734 elders who were aged 60 years old or more, and living in eight villages in Khon Kaen Province, Thailand. A structured questionnaire was used to collect the information, and perceived social support was measured by PRQ85. This study found a high level of social support was perceived among the elderly. According to the PRQ85, the highest dimension of social support was the availability of information, emotional, and material support; while the lowest dimension was being an integral part of a group. Results from multiple regressions indicate that education level, number of close friend, knowing community health staff, working status, elderly club member, and religious activities were statistically significantly related to perceived social support. In conclusion, the elderly had a high level of social support. Close friends and community health staff are important sources of support among the elderly.

INTRODUCTION

The elderly population is now becoming of considerable concern around the world. The proportion of people age 60 and over is growing faster than any other group. From 1970 until 2025, the elderly population is expected to grow by approximately 694 million, or 223%. In 2025, there will be about 1.2 billion people over the age of 60; of which 80% will be living in developing countries (WHO, 2002).

In Thailand, a developing country in Southeast Asia, the population growth rate has been increasing, from 3.1% in the beginning of the Third National Social and Development Plan (1972-1977) to 1.2% (Wongboonsin, 1998). A United Nations Projection has indicated that the proportion of young people will decline to 19.6%, while the proportion of the elderly will increase to 17.1% and 21.1% in 2005 and 2050, respectively. The proportion of the oldest (70 and over) will increase from 1.7% to 5.5% in that same period. If this projection is accurate, the Thai population will have a much larger proportion of older people and a much smaller proportion of younger people (Kanchanakijsakul *et al*, 2002).

The impact of a changing Thai population structure has made the Thai family smaller in size, and with fewer children to undertake the role of caregiver for elderly parents (Choowattanpakorn, 1999). Young people struggle to find employment in the new society, and migration of rural laborers to cities separates family members and communities. These changes jeopardize the custom of reciprocity for parental well-being. Thai young people today experience a conflict between obligation to care for their parents and the hardships of life (Choowattanpakorn, 1999). In effect, family support is often different from

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what it was in the past. Moreover, non-communicable diseases and disability have had a striking effect on the Thai elderly. Thai elderly people, particularly those in the old-old age group, may suffer considerably due to the physical changes of aging, also due to a decline in health. Chronic illnesses such as stroke, heart diseases, osteoarthritis, accidents, blindness, deafness, and hypertension are fast becoming the leading causes of death and disability among Thai elders (Jitapunkul and Bunnag, 1999). Therefore, social support from family, friends, and community has become an important issue that should be recognized.

Social support is one of the important factors that plays a major role in maintaining well-being in the aged. McCauley *et al* (2000) indicated that the social relations integral to an exercise environment are significant determinants of subjective wellbeing, including perceived satisfaction in life, in older adults. McCulloch (1995) found social support was a significant predictor of mental health outcome. Similarly, van Baarsen (2002) indicated that elderly who had lost a partner experienced lower self-esteem, resulting in higher emotional loneliness and social loneliness, that is, the perception of less support. Koukouli *et al* (2002) also suggested that social support appears to play a significant role in explaining differences in subjective functioning; people living alone or only with a spouse, particularly the elderly, seem to be at greater risk for disability problems and should receive particular attention from preventive programs in the community. McNicholas (2002) asserted that social support, self-esteem, and optimism were all positively related to positive health practices; and social support was positively related to self-esteem and optimism. In addition, social support affects quality of life, as evidenced by a study by OHara (1998).

Cohen *et al* (2000) stated that social support is often used in a broad sense, referring to any process through which social relations might promote health and well-being; it refers to the social resources that persons perceive to be available or that are actually provided to them by nonprofessionals in the context of both formal support groups and informal helping relations. Definitions of social support fall into two categories. Objective social support indicates what people have actually received or report to have received. The other is a subjective perception, which captures an individual's beliefs about the available support, and which is more persistently and more powerfully related to health and well being than are objective measures (Seeman and Berkman, 1988; Faber and Wasserman, 2002). Thus, this study chose to focus on perceived social support, which reflects an individual's feeling that he/she is accepted, loved, and valued by other members of their social network. Such an experience should be protective of the individual's mental health.

This study was modified by integrating a conceptual model of how social networks impact health (Berkman *et al*, 2000) and social support determinants (Cornman *et al*, 2001), which include four factors related to social support: 1) socio-demographic characteristics, which includes age, gender, education, and income; 2) social network characteristics, that is, the elderly web of social relationships, which focus on family size, family caregiver, number of close friends, and knowing community health staff; 3) social integration characteristics, which refer to the participation of elderly people in a broad range of social relationships, which are measured by marital status, living arrangements, working status, elderly club membership, visits with children, and religious activities; and 4) elderly health characteristics, which are perceived health status, chronic diseases, and stress.

However, social support studies among Thai elderly have been conducted under the context of describing social support behaviors rather than identifying the social support level and its factors. Yodpech *et al* (2000) indicated that the social support system of the Thai elderly derives primarily from the family, and almost all Thai elders received and perceived social support from family members. The support perceived included financial support, material support, and information support. Little is known about perceived social support, which is recognized as an dependent variable. Thus, this study aimed to study social support levels and factors that influence the nature and degree of perceived social support among the elderly in Khon Kaen Province, Thailand.

MATERIALS AND METHODS

A cross-sectional descriptive study was conducted in Khon Kaen Province, in the northeastern region of Thailand. The sample included elderly persons, aged 60 years and over, who had been living in Khon Kaen Province for more than one year. A cluster sampling technique was used to identify the sample; there were 756 sampled elders in eight villages. A structured questionnaire was used, which included four parts: socio-demographic, social network, social integration, and personal health characteristics.

This study adapted the part dealing with perceived social support from the Personal Resource Questionnaire (PRQ85) Part 2 (Weinert and Brandt, 1987). This tool consisted of 25 items that were based on the five dimensions of support: 1) the indication that one is valued; 2) that one is an integral part of a group; 3) the provision for attachment/intimacy; 4) the opportunity for nurturing; and 5) the availability of information, emotional, and material help. Each item response was scored on a 7-point Likert scale, with scores ranging from 5-75; higher scores indicated higher levels of perceived social support. After frequent use, the α reliability of Part 2 has been demonstrated to be approximately 0.90. The PRQ85 had already been translated into Thai, and used to determine social support among the elder clients at Nakhon Sawan Provincial Psychiatric Clinic, Thailand. PRQ85 Thai version was tested for validity (reliability: Cronbach's α = 0.87) (Noisuk, 2002). However, because of expert advice and the findings from the literature review, the questionnaire was pre-tested and adjusted somewhat: the contents underwent some changes in improved understandability by the northeastern elderly of Thailand. Content validity was again reviewed and tested by experts. Cronbach's α using a 7-point Likert scale was 0.83.

Data were collected through an interview, for which interviewers were trained to administer the questionnaire in a standardized procedure. The data abstraction and interview forms were checked for completeness, then double entered and validated by EpiInfo™ (version 6), before the data were entered into SPSS for analysis.

Descriptive statistics were used to describe sample characteristics, such as frequency, percentage, mean, standard deviation, median, IQR, and 95% CI. Interferential statistics, such as univariate analysis, was performed using *t*-test and ANOVA to assess associations between each dependent factor and perceived social support. Factors found to be significantly associated with perceived social support in univariate analysis were considered for inclusion in the multivariate analysis. In multivariate analysis, multiple regression analysis was used to identify factors predicting social support among the elderly. Prior to starting data collection, this study was reviewed and approved by the Ethics Committee for Research on Human Subjects, Faculty of Medicine, Chulalongkorn University, Thailand.

RESULTS

During the study period, 734 elders

agreed to participate in this study; thus, the response rate was 97.1%. The sample elders were comprised of more females than males, mean age was 69.46 years old (SD 6.43), and the mean age among males was slightly less than that of females (male 68.72, SD 6.29), female 69.95, SD 6.47). In terms of education level, most sample elders had finished primary school 611 (83.2%). Regarding marital status, approximately half the sample elders (54.1%) were married, 327 (44.6%) widowed, and 10 (1.4%) single. Of the 734 sample elders, 249 (33.9%) lived with their child's family, 152 (20.7%) lived with a spouse and their child's family, and 80 (10.9%) lived with their spouse only. In terms of working status, 324 (44.1%) of the sample elder were working, and their occupations fell mostly within the categories of agricultural laborer, vendors, and handicraft workers. Most of the sample elders (470, 64.0%) had an approximate monthly income of 1,250 baht (IQR = 1,500 baht).

Perceived social support

The degree of perceived social support was measured on a rating scale from 0-7. This study found a high level of perceived social support, as the mean score was 6.55 (SD = 0.57; 95CI: 6.50, 6.59). When comparing social support dimensions, the highest dimension of perceived social support was the opportunity for nurturing, while the lowest dimension was the feeling of being an integral part of group (Table 1).

Factors influencing perceived social support

The univariate analysis of the factors influencing perceived social support is summarized in Table 2. Due to socio-demographic factors, educated elders perceived higher levels of social support compared with elders who had had no schooling by a statistically significant difference ($p < 0.05$). In addition, respondent elders who had income reported a statistically significant higher level of social support than those elders who had no income ($p < 0.05$). In terms of social network characteristics, there was no statistical difference between perceived social support among elders who had large families compared with those who reported having no family caregiver. But, having close friends and knowing community health staff was shown to influence perceived social support significantly.

Concerning social integration factors, there were no statistically significant differences between the elders' perceptions of family status, such as marital status and living arrangement. For non-family relations, the elders who were still working had higher levels of perceived social support than elders who were not working. Similarly, elders who joined an elderly club, visited with children, and joined religious activities perceived social support at statistically higher levels than elders who were not elderly club members, never visited with their child, and did not join religious activities.

Due to personal health factors, half of the

Table 1
Distribution perceived social support by dimensions (n = 734).

Social support dimensions	Mean (SD)	95% CI
1 The provision for attachment/intimacy	6.59 (0.84)	5.53, 6.65
2 An indication that one is valued	6.56 (0.75)	6.51, 6.62
3 The feeling of being an integral part of group	6.37 (0.79)	6.31, 6.42
4 The opportunity for nurturing	6.63 (0.75)	6.56, 6.68
5 The availability of information, emotional and material help	6.58 (0.74)	6.52, 6.63
Total score	6.55 (0.57)	6.50, 6.59

Table 2
Factors related to perceived social support among the elderly.

Variables	Perceived social support			
	n	mean	SD	p-value
1. Sociodemographic factors				
Education				
None	102	6.34	0.68	<0.001[b]
Primary	611	6.56	0.55	
Secondary +	21	6.79	0.21	
Income				
No income	264	6.45	0.7	0.003[a]
Income	470	6.59	0.47	
2. Social network factors				
Family size				
None	44	6.46	0.6	0.326
1-3	391	6.53	0.63	
4 +	299	6.58	0.48	
Family caregivers				
None	44	6.46	0.6	0.463
Spouse	239	6.59	0.5	
Child	381	6.53	0.63	
Grand-child	60	6.5	0.43	
Relatives	10	6.67	0.25	
Number of close friends				
0	151	6.29	0.7	<0.001[b]
1	341	6.63	0.52	
2 and over	242	6.59	0.49	
Knowing community health staff				
No	380	6.48	0.54	0.003[a]
Yes	354	6.61	0.59	
3. Social integration factors				
Marital status				
Single/widowed	337	6.54	0.58	0.876
Married	397	6.55	0.56	
Living arrangement				
None	44	6.46	0.59	0.776
Spouse	348	6.55	0.54	
Child	287	6.55	0.62	
Grandchild	55	6.53	0.44	
Working status				
Not working	343	6.42	0.69	<0.001[b]
Working	391	6.65	0.41	
Elderly club member				
Yes	250	6.65	0.48	<0.001[b]
No	484	6.49	0.60	
Visit with children				
Yes	501	6.6	0.50	<0.001[b]
No	233	6.42	0.67	

Table 2 (continued).

Variables	Perceived social support			
	n	mean	SD	p-value
Religious activities				
Yes	646	6.61	0.51	<0.001[b]
No	88	6.10	0.75	
4. Personal health factors				
Perceived health status				
Good	136	6.59	0.48	0.419
Moderate	390	6.58	0.61	
Poor	208	6.51	0.53	
Chronic diseases				
Yes	475	6.51	0.59	0.017[a]
No	259	6.61	0.53	
Stress level				
Normal	650	6.56	0.59	0.062
Stressed	84	6.44	0.41	

Significant tests evaluate the different characteristics of the elderly and perceived social support. Tests were undertaken with independent sample *t*-test for two groups of different subjects on one variable and ANOVA for more than two sets of scores.

[a]Significant at the level $p<0.05$, [b]Highly significant at the level $p<0.01$

sample elders perceived their health status as moderate; however, there was no statistically significant relationship between perceived health status and perceived social support. Regarding stress level, even though elders who reported stress had a mean perceived social support less than elders who denied stress, there was no statistically significant correlation between stress and perceived social support. Only current chronic disease was there a statistically significant difference with perceived social support.

The results of multivariate analysis are summarized in Table 3. Variables that were statistically different on univariate analysis were included in the multivariate model. When controlling other related factors, this study found six statistically significant variables were that influenced perceived social support: 1) educational level, 2) number of close friends, 3) knowing community staff, 4) working status, 5) elderly club member, and 6) joining religious activities. All of the predictive variables were in the positive direction; joining religious activities was the factor with the strongest positive correlation, while the factor with the weakest positive correlation was educational level.

DISCUSSION

Social support is the natural product of relationships that exhibit certain properties or involving certain types of interaction. Supportive actions, and the perception that support would be available if needed, should be more common to extent that a given relationship possesses these relevant properties. Therefore, social support to an individual can be actual or perceived; and there is considerable evidence from previous research that subjective assessment of social support are more persistently and more powerfully related to

Table 3
Multivariate analysis of factors associated with perceived social support among the elderly.

Factors	Standardized coefficients (B)	95% Confidence interval for β		*t*	p-value
		Lower bound	Upper bound		
Education	0.08	0.01	0.21	2.136	0.033[a]
Income	0.05	-0.07	0.10	0.438	0.661
Number of elderly close friends	0.11	0.02	0.19	2.951	0.003[a]
Knowing community health staff	0.12	0.05	0.21	3.238	0.001[b]
Working status	0.13	0.07	0.23	3.562	< 0.001[b]
Elderly club member	0.10	0.04	0.21	2.874	0.004[b]
Visit with children	0.06	-0.01	0.16	1.670	0.095
Religious activities	0.28	0.23	0.53	6.437	< 0.001[b]
Chronic disease	-0.03	-0.07	0.03	-0.925	0.355
Constant	5.77	5.59	5.96		
R square	0.15				
F	15.20				
p-value	< 0.001[b]				
N	734				

[a]Significant at the level $p < 0.05$, [b]Highly significant at the level $p < 0.01$

health and wellbeing than are objective measures (Faber and Wasserman, 2002; Chan and Rance, 2005). Previous studies in Thailand indicated that Thai elders' level of perceived social support was high (Noisuk, 2002; Phokruprasert, 2002; Polinn *et al*, 2005). The results of this study are consistent with the previous studies. According to Thai culture, Choowattanpakorn (1999) indicated that social support among the elderly and their families is an obligation; social support occurs in terms of caring for parents and supports all kinds of family activities. Jitapunkul *et al* (2001) have suggested that young Thais generally have a positive attitude towards elderly care, recognizing that care for the elderly is one of the greatest duties that they have. However, because the Thai population structure and socio-economic situation had been changing large number of unskilled agricultural workers has moved to the manufacturing and service sectors. Both male and female laborers migrated from rural areas. They wanted high incomes to support their families back home. As a result, many old people were left at home alone with their grandchildren (Caffrey, 1992). Since most Thai elderly had no job, a result is that the elderly had more opportunity for nurturing, by looking after and caring for their grandchildren.

Factors associated perceived social support

Multivariate analysis indicated that there were two sociodemographic factors associated with perceived social support among the sample elderly. The Second National Long-term Plan for Older Persons Thailand 2002-2021 indicated that 59.5 % of Thai elderly have completed a primary school or higher, while 24.6% received no schooling at all (Jitapunkul *et al,* 2002). It is important to note that the sizeable proportion of the elderly who had had no schooling and who were illiterate was correlated with problems that the elderly had in accessing health services and important information. In addition, Cornman *et al,* (2001) stated that the elderly who have a higher education are more likely to have consistently positive perceptions about available support. Similarly, a study of Suwonnaroop (2002) that used PRQ85 found that education, had direct influence on health-promoting behaviors, through social support among American older adults.

Social networking plays an essential role in health and wellbeing in later life (Turner and Mario, 1994). It can provide social companionship, instrumental aid, as well as emotional comfort to the elderly; helping to release pressure, to reduce depressive feelings, and to buffer the harmful effects of stressful life events on health (Silverman *et al*, 2000). Supportive relationships within social networks are essential for enhancing life quality and ensuring happiness in later life (Chan and Rance, 2005). Although, this study found that the elderly perceived social support at a high level, it did not find that the social network of the family was related to perceived social support. Instead, this study found that the number of close friends and knowing community health staff was statistically significant ($p < 0.05$). It is accepted that family members are the most important source of help and support from informal networks. However, given the demographic changes in Thai society that have affected the population structure, those elderly who have no or very few kin to count on would turn to close friends or community staff for support. Elderly people also tend to replace missing kin by converting close friends into quasi-kin or fictive kin (MacRae, 1992). Chan and Rance (2005) indicated that friends and relatives constitute a dominant part of social networks and are often important sources of support for the aged. Slater (1995) suggested that companionship provides information support, sharing knowledge or skills, offering advice, and giving others forums of assistance to others who need health. Apart from knowing community health staff, Forschner (1992) indicated that older individuals in a strong and well-developed neighborhood and community usually receive ongoing support from a variety of sources. Activities and services available in the community provide meaning and stimulation to daily life, while also fulfilling basic personal and household needs. A study by Sritanyarat *et al* (2002) confirmed the findings that the neighborhood has become an important social support source among Thai elderly when there are caregivers working or living apart; most of the daytime the elderly spend with their friends, social support occurs in terms of information and emotional support.

In terms of social integration factors, this study found that working status, being an elderly club member, and joining religious activities, was associated with perceived social support. Social integration factors related to perceived social support was explained by Cohen *et al* (2000), which described an identity and esteem model of the psychological influence of social relationships. This suggested that the ability to meet role expectations may result in cognitive benefits, such as increased feelings of self-worth and control over one's environment, which may influence health through a variety of pathways. Activities that elders integrated were means to possess the amount of social contacts made by each elder. It was assumed that the presence of extensive social ties and interactions ensured that support would be being provided.

In terms of working status, this study found working status was strongly related to perceived social support. Hargrave and Suzanane (1997) stated that working is the degree to which the elderly has come to terms with his or her contribution to the family and society; those elderly who are still working are more likely to have more social interaction and more perceived social support. Aquino *et al* (1996) also suggested that a larger number of hours working at a paid job would lower levels of depression and lead to greater perceived social support; this is directly related to higher levels of life satisfaction.

Elderly club membership was associated with perceived social support. In Thailand, elders clubs give members an opportunity for social interaction that consequently affects their social relationships and which ultimately influences the flow of resources to each member. Siripanich *et al* (1996) found that the Thai elderly club was relevant for the elderly. Most of the members were elders at the age of 60 and over, while some clubs were open to elders from the age of 50 years. Elderly clubs were established in government offices (hospitals and health centers, 34.9%), in *wats* (32.9%) and in elderly homes (27.3%). The members prioritized and selected activities, such as religious activities, entertainment activities, health education activities, physical exercise, working activities, art and culture activities, tourism, moral activities, and funeral support fund. Jittrasirinuwat (2001) postulated that the elderly club is a mechanism to provide activities and be beneficial for elderly groups, to decrease stress resulting from lack of social support.

In terms of religious activities, merit-making is generally performed at a temple or *wat*. Thai custom makes the *wat* the moral, social, and symbolic center of the community (Choowattanpakorn, 1999). Most institutionalized merit-making activity is undertaken by elderly people. The elderly do not go to a temple when they are lonely or to enjoy the company of others. Burr (1978) found that Thai elderly did not go to temple for companionship, but to accumulate merit. However, emotional support was provided when the elderly joined in religious activities at the temple. A study by Kruas (2006) indicated that the potentially beneficial effects of religious attendance on social relationships tend to thrive in church settings. Kruas (2006) also suggested that providing emotional support to fellow church members tends to lessen the deleterious effects of the support provider's own economic problems on each person's mortality.

In conclusion, most of the elderly perceived their level of social support to be high. This study found that social networks and social integration were important factors related to perceived social support among Khon Kaen elderly. Factors associated with perceived social support were education level, number of elderly close friends, knowing community health staff, working status, joining the elderly club, and joining religious activities.

The study findings will be useful for Thai elderly; however, the recommendations are based on the results of studying only the Khon Kaen Province community. Also, the limitations of a cross-sectional descriptive design that studied only a single point in time should be considered when applying the results of this study during other periods and in other similar areas. In addition, perceived social support assessment of this study is a subjective evaluation; it relies on the elders' perception, mood and attitude which change over time. Therefore, the measurement depends on the elderly perception only.

However, this study has emphasized the importance of social networks among the elderly, such as families, friends, and the community. More understanding is needed about the social support role of these networks, social network range, social network structure, and social network ties. The recommendation is to focus on each network related to the elders' perceived social support. In addition, we need to understand more about social integration characteristics, and the role of the elderly friends and community integration. Finally, this study did not assess perceived social support among frail elderly, elderly who had serious health problems, or their caregivers. The recommendation from this study would be to explore these populations because these groups need more support than any other group.

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