# The Physical Health and Self-Esteem of the Grandmother Raising Grandchildren in Rural Areas of Thailand

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**Objective:** To study the physical health and self-esteem, including factors that influence the self-esteem of grandmothers raising grandchildren in the rural areas of Northern Thailand.

Material and Method: A cross-sectional survey research was conducted among 400 grandmothers, aged 50-79 years, who raised their grandchildren in the rural areas of Northern Thailand. Participants were selected by cluster sampling. Data were collected through a structured interview from April to July, 2009 and analyzed by frequency, percentage, Pearson's product moment correlation coefficient and multiple regression analysis.

**Results:** 73.8% of grandmothers in the survey currently had health problems, 56.2% had a chronic disease of which hypertension was the most common and yet 44.5% displayed high self-esteem. The factors identified as influencing self-esteem were family relationships, age and social support. These factors provided 35.4% in predicting the self-esteem of grandmother who raised grandchildren with family relationship had the highest predictive value.

**Conclusion:** The present study suggested the responsible organizations should organize the program to strengthen the family relationship and social support activity for the grandmother that will lead to the better health and heightening self-esteem.

Keywords: Physical health, Self-esteem, Rural areas, Grandmothers raising children, Family relationships

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Throughout the world, from the earliest beginnings of civilization and the subsequent growth of cities, all civilizations have experienced the phenomenon wherein rural residents migrate to cities for jobs and opportunities. Less than one hundred years ago, Thailand was an agrarian country nearly in its entirety. One might say that Thailand came of age in the twentieth century, especially after the Second World War and has experienced phenomenal industrial growth in the last fifty years. Combined with this industrial growth has been a growth in the population as well and this had a great effect upon the rural family lifestyle. The agrarian community presents limited opportunities for employment and in the last twenty-five years Thailand has experienced an exponential increase in the number of people leaving the family farm to seek

affected the traditional family unit and it is not unusual today to find families where parents of children have moved to the city for economic reasons and left their children at home in the care of their grandmothers<sup>(1)</sup>. This situation gave birth to the present study as it became the concern of researchers who wanted to investigate the role of grandmothers raising their grandchildren. Statistics compiled by the Institute of Population and Social Research at Mahidol University, in cooperation with the National Statistical Office, show that a majority of migrants in Bangkok and its vicinity came here from the North and Northeastern areas of the country<sup>(2,3)</sup>. As a result, grandmothers became responsible for the care and upbringing of the children left behind. Concern developed over the general health and state of mind of these women who had already raised one family and were now placed in the position of having to raise another<sup>(4,5)</sup>. Has this new role created new problems for the health of these women? Has this new situation had an effect upon their self-esteem? If

work and opportunities in urban areas. This has greatly

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these individuals had already experienced low selfesteem, this new situation might further contribute to a further decline. Moreover, it could possibly lead to feelings of isolation, inferiority, anxiety and an overall feeling of being fed up with life ending in depression and further decline<sup>(6,7)</sup>. Coopersmith S<sup>(6)</sup>, indicated that the two factors influencing self-esteem were personal characteristics and environmental characteristics. Personal characteristics were identified as sex, age, admiration, intention, working ability, health problems, and mental problems. Environmental characteristics, on the other hand, were identified as family relationship, social status and social network. Previous studies concerning factors influencing the self-esteem of senior citizens in Thailand indicated that family, participating in social activities, social support, pride in oneself and community perception were important<sup>(8,9)</sup>.

The focus of the present study is, therefore, health problems, if any, experienced by grandmothers responsible for raising their grandchildren. Moreover the present study will focus upon the issue of selfesteem in these women and look at factors that influence it. It is hoped that the results would be used health outreach programs for these seniors raising a second family.

#### **Material and Method**

The present study was a cross-sectional survey that used data from the Happiness and Way of Life among Elderly Female Who Take Care of Grandchild in Rural Area of the Northern Thailand Project<sup>(10)</sup>. The areas studied lay within six districts of two northern

 Table 1. Number and percentage of grandmother who raised grandchildren classified by general characteristics, family factors and social factors (n = 400)

General-Family-Social Factors	Number	Percentage	
Age (year)			
50-59	153	38.2	
60-69	198	49.6	
70-79	49	12.2	
Mean = 61.1, SD = 6.76, MIN = 50, MAX = 79			
Religion			
Buddhist	400	100	
Education level			
No	169	42.2	
Primary	221	55.3	
Secondary	10	2.5	
Marital status			
Couple	131	32.8	
Single	30	7.5	
Widow/Divorced	239	59.7	
Family income (baht)			
Less than 3,000	174	43.5	
3,000-5,000	174	43.5	
Over 5,000	52	13.0	
Mean = 4,309.90, SD = 3,295.87, Min = 500, Max = 28,000			
Family relationship			
Poor (13-26)	28	7.0	
Moderate (27-30)	102	25.5	
Good (31-39)	270	67.5	
Social support			
Low (15-30)	62	15.5	
Moderate (31-35)	114	28.5	
High (36-45)	224	56.0	
Participation in social activities			
Low (8-15)	97	24.2	
Moderate (16-18)	94	23.6	
High (19-24)	209	52.2	

provinces of Thailand and included Lap Lae, Muang, and Thong Saen Khan in Uttaradit, along with Shong, Nong Muang Khai and Rong Kwang in Phrae. The subjects consisted of 400 grandmothers raising children between the ages of one and twelve. The subjects were selected using cluster sampling from six districts in Uttaradit and Phrae as noted above, then sub-districts and villages in rural areas were selected to complete the sample size. Data was collected through interviews from April to July, 2009. The questionnaire for the present study was developed by the researchers and consisted of five parts. Part I asked about age, marital status, education level, monthly income, present physical health problems, any illness in the past month, and chronic disease categorized as present or resolved. Part II contained thirteen multiple choice questions to determine family relationships rated with a scale of three responses developed using the concept of Friedman M M<sup>(11)</sup>, Morrow WR and Wilson RC<sup>(12)</sup>. The family relationships were classified as poor, moderate, and good. Part III contained eight questions to determine the level of participation in social activities categorized into three levels based on the concept set forth by Lemon BW et al<sup>(13)</sup>. Participation in social activities was listed as low, moderate and high. Part IV covered sixteen social support questions evaluated through receiving social responses based upon the concept set forth by Cobb S<sup>(14)</sup> and Schaefer C et al<sup>(15)</sup> which addressed issues of financial support, emotional support, appraisal support, social participation support, and information support. Social support was classified as either low, moderate, or high. Part V contained questions concerning self-esteem based upon ideas set forth in Coopersmith S<sup>(6)</sup>, again with three levels. Responses to the twenty multiple choices questions were scored as high (total score  $\geq$  80), moderate (60-79) and low (< 59). The physical health of grandmothers was evaluated by current health problems, illnesses in the past month and the presence of any chronic disease.

The interview questionnaire was examined by three experts for content validity. Reliability was accomplished by a pilot study among thirty grandmothers with characteristics similar to those in the actual study population. The results were analyzed for reliability by using Cronbach's Alpha Coefficient. The reliability values of the questionnaire were as follows: family relationships = 0.83, participation in social activities = 0.78, social support = 0.85 and selfesteem = 0.87. Data were analyzed by frequency, percentage, mean, standard deviation, Chi-square and Pearson's product moment correlation coefficient and the stepwise multiple regression with the significant level at p < 0.05.

#### Ethical consideration

The research shared some parts of data from The Happiness and Way of Life among Elderly Female Who Take Care of Grandchild in Rural Area of the Northern Thailand Project which was approved by the Ethics Committee for Human Research, Faculty of Public Health Mahidol University, Bangkok, Thailand with the approval number MUPH2008-185.

### Results

# General characteristics of grandmothers

The results showed the average age of the grandmothers was 61.1 years old, of which 49.6% were between 60-69. All grandmothers were Buddhist, 55.3% finished primary school, 59.7% were widowed/divorced, 59.8% had a family monthly income of around 3,000-5,000 baht, with the average being 4,309.90 baht. The majority of grandmothers (67.5%) had good family relationships, 56% had a high level of social support, and about half (52.2%) had a high level of participation in social activities.

#### Physical health problems

Most of the grandmothers (73.8%) had current health problems, 33.8% had been sick in the past month while 66.2% had no illness. More than half (56.2%) had a chronic disease, with the most common being hypertension (22.0%), arthritis (9.8%), diabetes (8.5%), and heart disease (3.2%) (Table 2).

# Self-esteem of grandmother

About 44.5% had high self-esteem, followed by low levels (28.8%) and moderate levels (26.7%).

#### Factors associated with self-esteem

It was found that age, education level, marital status, family relationships, social support and participating in social activities were associated with self-esteem with a statistic significance at (p-value < 0.05) (Table 4). The monthly family income, current physical health problems, history of illness in the past month and chronic diseases had no association with self-esteem (p-value > 0.05).

#### Factors influencing and predicting the self-esteem

Family relationship, age and social support had influence and could predict the self-esteem of the grandmother with statistical significance (p-value < 0.05). These factors could 35.4% predict the selfesteem of grandmother with the highest predictive value by beta value were family relationship (Beta = 0.632) followed by aged (Beta = 0.135) and social support (Beta = 0.107). Surprisingly, family income and

**Table 2.** Number and percentage of grandmother who raised grandchildren classified by physical health (n = 400)

Health status	Number	Percentage	
Current physical health problem			
No	105	26.2	
Yes	295	73.8	
Illness in the past 1 month			
No	265	66.2	
Yes	135	33.8	
Chronic disease			
No	175	43.8	
Yes	225	56.2	
Types of chronic disease			
No	175	43.8	
Hypertension	88	22.0	
Arthritis	39	9.8	
Diabetes mellitus	34	8.5	
Heart disease	13	3.2	
Cancer	3	0.7	
Renal disease	2	0.5	
Asthma	6	1.5	
Others (allergy, back pain etc.)	40	10.0	

**Table 3.** Self-esteem of grandmother who raised grandchildren (n = 400)

Level of self-esteem	Number	Percentage
Low level (20-41)	115	28.8
Moderate level (42-47) High level (48-60)	107 178	26.7 44.5

participation in social activities had no influence on self-esteem (Table 5).

#### Discussion

Most of the grandmothers had current physical health problems, one third had a history of illness in the past month and more than half (56.2%) had a chronic disease. The most common chronic disease was hypertension (22%). The present study was different from the data of the national elderly survey of the National Statistical Office(16) which found 24.5% of the elderly had poor health in the past week, while the most common disease was hypertension. Health problems experienced by the grandmothers may increase with their age which could lead to problems in taking care of themselves, as well as the children they are raising. The present study was consistent with Musil CM and Ahmad M<sup>(4)</sup> and Waldrop DP and Weber JA<sup>(5)</sup> which found that the grandmother who raised grandchildren reported their health in more negative terms, greater difficulties in life and less satisfied with their health, when compared to others.

For the self-esteem of the grandmothers, 44.5% expressed high levels and 28.8% expressed low levels, which differed from the present study of Tomana P and Srisuchart R<sup>(8)</sup> who found 35.1% of ageing Thais had high self-esteem and the studied of self-esteem among elderly in rural area of Nakornsawan which found 15.1% of them had high self-esteem<sup>(9)</sup>. This may be due to a feeling of pride, bonding and warm relations with their grandchildren, while they still actively performed their daily activities. The present study is congruent with the present study of Kim M<sup>(17)</sup> who found that grandmothers who raised their grandchildren have greater feeling of self-esteem. The study of Hugher ME et al<sup>(18)</sup> found no evidence that caring for grandchildren caused a negative effect on grandmothers' health and also found that grandmothers who

Table 4. Factors associated with self-esteem of grandmother who raised grandchildren (n = 400)

Variables	Self-esteem of grandmother		
	Coefficient Correlation (r)	p-value*	
Age	0.106	0.035	
Family income	-0.042	0.403	
Family relationship	0.571	< 0.001	
Social Support	0.19	< 0.001	
Participation in social activities	20.171	0.001	

\*p-value tested by Pearson's product moment correlation coefficient

Variables	$\mathbb{R}^2$	В	Beta	t	p-value
Family relationship	0.326	0.113	0.632	13.617	< 0.001
Age	0.346	0.137	0.135	3.317	0.001
Social Support	0.354	0.128	0.107	2.309	0.021

**Table 5.** Stepwise multiple regression analysis between predictors and self-esteem of grandmother who raised grandchildren (n = 400)

B (0) = 6.301, Sig F < 0.001

were baby-sitters felt closer to their grandchildren and enjoyed spending time with them. For the grandmothers with low self-esteem, they faced health problems which were major obstacles for rearing their grandchildren; specifically, among those within the early phases of ageing who were not well prepared for child rearing because of the limitation of family income.

For analyzing the factors influencing selfesteem of the grandmother, the family relationship had the highest effect. A good family relationship, harmony, caring and joining in activities among family members brought about the closeness and warmth of the family which led to feelings confidence in themselves. The present study was consistent with the present study of Thanakwang K and Soonthorndhada K<sup>(19)</sup>, who found that family relationships had a significant influence on the well-being of the elderly and led to the promotion of good health behavior. The next factor was the age of the elderly. The older grandmothers had higher self-esteem than the younger. When they became elderly, the grandparent adopted the role as a baby-sitter, particularly in the family where parents migrated to work in the city. In the family with a late elderly grandmother, they were likely to raised the grandchild and be proud to take this role when compared with the younger elderly group which still had to work for the family and wanted to participate in social activities. Social support was also another important factor which had an influence on the selfesteem of grandmothers. Those who received social support from family members and the community either by asset, materials, love, care and social activities would encourage the elderly to have good physical and mental health that led to a heightening of self-esteem. The findings are congruent with the present study of Musil C et al<sup>(20)</sup> which stated that social support and resourcefulness may help in protecting grandmothers from the effects of family stresses and strain and also the study of Nanthamongkolchai S et al<sup>(9)</sup> which pointed out that social support had an influence on self-esteem of the elderly who lived in rural areas of Nakornsawan Province, Thailand.

The recommendation for the organizations involved, such as the provincial health office, district health office and local authority at all levels, is to cooperate and build up the self-esteem of grandmothers who raise grandchildren. The holistic approach by organize the programs and activities to increase the self-esteem of grandmother focusing on strengthening the family relationships and fully support the social activity to make the grandmother having high selfesteem and could happily reared their grandsons. In addition, the present study found that 73.8% of grandmothers who raised grandchildren had current health problem and 56.2% had chronic diseases. The organizations involved in the area should provide activities to maintain self health care and improve the well-being of women caregivers.

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# Potential conflicts of interest

None.

# References

- Soonthorndhada K, Kanungsukkasem U, Punpueng S, Tangchonlatip K. Child-care situations in Thailand: a synthesis report. Bangkok: Institute for Population and Social Research Mahidol University, Thailand; 1998.
- Chamratrithirong A, Archavanitkul K, Richter K, Guest P, Thongthai V, Boonchalaksi W, et al. National migration survey of Thailand. Bangkok: Institute for Population and Social Research, Mahidol University Thailand; 1995.

- 3. National Statistical Office. Report on the 2004 survey of the migration in Thailand [Internet]. 2004 [cited 2010 Apr 4]. Available from: http://ervice.nso. go.th/nso/nsopublish /service/serv\_survey.html.
- 4. Musil CM, Ahmad M. Health of grandmothers: a comparison by caregiver status. J Aging Health 2002; 14: 96-121.
- 5. Waldrop DP, Weber JA. From grandparent to caregiver: the stress and satisfaction of raising grandchildren. Families in Society 2001; 82: 461-72.
- Coopersmith S. Self-esteem inventory. 2<sup>nd</sup> ed. California: Consulting Psychologists Press; 1984.
- Butler FR, Zakari N. Grandparents parenting grandchildren: assessing health status, parental stress, and social supports. J Gerontol Nurs 2005; 31:43-54.
- Tomana P, Srisuchart R. Self-esteem of the elderly and support factors. J Mental Health Thai 2005; 13:28-37.
- 9. Nanthamongkolchai S, Makapat A, Charupoonphol P, Munsawaengsub C. Self-esteem of the elderly in rural areas of Nakhon Sawan Province. J Med Assoc Thai 2007; 90: 155-9.
- Nanthamongkolchai S, Munsawaengsub C, Taechaboonsermsak P, Powwattana A. Happiness and way of life among elderly female who take care of grandchild in rural area of the Northern Thailand. Bangkok: Witoonkarnpok; 2010.
- 11. Friedman MM. Social support sources and psychological well-being in older women with heart disease. Res Nurs Health 1993; 16: 405-13.
- 12. Morrow WR, Wilson RC. Family relations of bright

high-achieving and under-achieving high school boys. Child Dev 1961; 32: 501-10.

- 13. Lemon BW, Bengtson VL, Peterson JA. An exploration of the activity theory of aging: activity types and life satisfaction among in-movers to a retirement community. J Gerontol 1972; 27: 511-23.
- Cobb S. Presidential Address-1976. Social support as a moderator of life stress. Psychosom Med 1976; 38: 300-14.
- 15. Schaefer C, Coyne JC, Lazarus RS. The healthrelated functions of social support. J Behav Med 1981;4:381-406.
- National Statistical Office. Report on the 2007 survey of the older persons in Thailand. Bangkok: Bureau of Socio-Economic and Opinion 1, National Statistical Office; 2008.
- 17. Kim M. A study of the caregiving burden on grandmothers who raise their grandchildren: a phenomenological research. Taehan Kanho Hakhoe Chi 2007; 37: 914-23.
- Hughes ME, Waite LJ, LaPierre TA, Luo Y. All in the family: the impact of caring for grandchildren on grandparents' health. J Gerontol B Psychol Sci Soc Sci 2007; 62: S108-S119.
- Thanakwang K, Soonthorndhada K. Family relations and health-promoting behavior among older people in Nan Province. J Med Assoc Thai 2008; 91: 1102-8.
- 20. Musil C, Warner C, Zauszniewski J, Wykle M, Standing T. Grandmother caregiving, family stress and strain, and depressive symptoms. West J Nurs Res 2009; 31: 389-408.

# สุขภาพกายและความรู้สึกมีคุณค่าในตนเองของย่ายายที่เลี้ยงหลานในเขตชนบทของประเทศไทย

# สุธรรม นั้นทมงคลชัย, พิมพ์สุรางค์ เตชะบุญเสริมศักดิ์, โชคชัย หมั่นแสวงทรัพย์, อาภาพร เผ่าวัฒนา

**วัตถุประสงค์**: เพื่อศึกษาสุขภาพกาย และความรู้สึกมีคุณค่าในตนเองของย่า ยาย รวมถึงบัจจัยที่มีอิทธิพล ต่อความรู้สึกมีคุณค่าในตนเองของย่า ยาย ที่เลี้ยงหลานในเขตชนบทภาคเหนือของประเทศไทย

**วัสดุและวิธีการ**: เป็นการศึกษาเชิงสำรวจภาคตัดขวาง กลุ่มตัวอย่างคือ ย่า ยาย ที่ทำหน้าที่เลี้ยงหลานซึ่งมีอายุ ระหว่าง 50-79 ปี ที่อาศัยอยู่ในเขตชนบทภาคเหนือของประเทศไทย จำนวน 400 คน ได้จากการสุ่มตัวอย่างแบบจัดกลุ่ม เก็บรวบรวมข้อมูลโดยการสัมภาษณ์ระหว่าง เดือนเมษายน ถึง เดือนกรกฎาคม พ.ศ. 2552 วิเคราะห์ข้อมูลโดยใช้สถิติ ความถี่ร้อยละสัมประสิทธิ์สหสัมพันธ์ของเพียร์สันและการวิเคราะห์ถดถอยพหุคูณแบบขั้นตอน

**ผลการศึกษา**: ย่า ยาย ที่เลี้ยงหลานในเขตชนบทร้อยละ 73.8 มีปัญหาสุขภ<sup>ำ</sup>พกายในปัจจุบัน ร้อยละ 56.2 มีโรค ประจำตัวเรื้อรัง โดยความดันโลหิตสูงเป็นโรคที่พบมากที่สุด ย่า ยาย ร้อยละ 44.5 มีความรู้สึกมีคุณค่าในตนเอง ในระดับสูง ส่วนปัจจัยที่มีอิทธิพลต่อความรู้สึกมีคุณค่าในตนเอง ได้แก่ สัมพันธภาพในครอบครัว อายุ และแรงสนับสนุน ทางสังคม ซึ่งปัจจัยเหล่านี้สามารถร่วมทำนายความรู้สึกมีคุณค่าในตนเองของย่า ยาย ที่เลี้ยงหลานได้ร้อยละ 35.4 โดยสัมพันธภาพในครอบครัวร่วมทำนายได้สูงสุด

**สรุป**: หน<sup>่</sup>วยงานที่รับผิดชอบควรจัดโปรแกรมเสริมสร้างสัมพันธภาพในครอบครัว รวมถึงจัดกิจกรรมสนับสนุนทางสังคม เพื่อให้ย<sup>่</sup>า ยาย มีสุขภาพและความรู้สึกมีคุณค่าในตนเองที่ดีต่อไป