Factors Influencing the Mental Health of the Elderly in Songkhla, Thailand

Suttama Suwanmanee MSc*, Sutham Nanthamongkolchai PhD**,
Chokchai Munsawaengsub MD**, Pimsurang Taechaboonsermsak PhD**

* Graduate Student in Master of Science (Family Health), Faculty of Public Health, Mahidol University and Faculty of
Graduate Studies, Mahidol University, Bangkok, Thailand
** Department of Family Health, Faculty of Public Health, Mahidol University, Bangkok, Thailand

Objective: To study the factors which influence the mental health of the elderly in Songkhla, Thailand.
Material and Method: A cross-sectional survey research was conducted among 250 elderly residents aged 60-94 years, using multi-stage random sampling. The data were collected through interview questionnaires circulated between February 22nd and March 22nd, 2011 and thereafter analyzed by frequency, percentage and multiple logistic regression.
Results: Most of the subjects (79.2%) had good mental health and 20.8% had poor mental health. The factors influencing their mental health were age, physical health status, presence of chronic disease, family relationship and membership or active participation in a civic or social group. Those aged 60-79 years reported 2.9 times better mental health than those who were 80-94 years. Those reporting good physical health status also reported having 6.5 times better mental health than those with poor physical health. Subjects without chronic disease reported 3.5 times better mental health than those reporting the presence of chronic diseases. Seniors with a good family relationship had 4.9 times better mental health than those who did not report a good family relationship and the subjects who were members of a social or civic group had 2.4 times better mental health than those who were not.
Conclusion: The factors influencing mental health of the elderly were age, physical health status, chronic disease, family relationships and membership or participation in a civic or social group. To promote mental health amongst these people, responsible organizations should establish activities that promote good family relationships and encourage active participation in civic or social groups and support organizations.

Keywords: Mental health, Elderly, Thai GHQ, Family relationship, Physical health condition, Senior citizens

Recent advances in medical technology and public health systems have gradually led to a longer life expectancy of people throughout the world. A report from the United Nations revealed that in 1999, the number of people aged 60 and over reached 600 million throughout the world. This means that one in ten people is elderly senior citizen, 53% of these individuals live in Europe, while just 25% are living in Asia. These two continents were ranked first and the second in terms of regions with the highest population. It is estimated that in 2050, there will be two billion seniors, or one in five people[1]. In 2007, a survey indicated that the elderly in Thailand had reached 10.7% of the population. Of that number, 44.6% were male and 55.4% were female.

In 2009, the Institute for Population and Social Research, Mahidol University revealed that seniors numbered approximately 7.2 million, or 11.4% of the population[2].

This rapid increase in the number of senior citizens has put a strain upon economic dependency and social support. The numbers of those working who support the elderly is decreasing while the seniors themselves are experiencing continued degeneration and deterioration of both physical and mental health. As a result these individuals are experiencing feelings of a lack of well being. A study of Thongtang O et al[3] found that the prevalence of mental depression among Thai elderly was 12.78% with its main causes being forced to deal with financial issues, family relationships and physical health problems. Data on these people surveyed by the National Statistics Office[4] stated that about 21.5% of Thai elderly assessed themselves as having poor physical health, while 2.8% said that their overall health condition was very poor. Hypertension was the most common complaint. A survey reported on

Correspondence to:
Nanthamongkolchai S, Department of Family Health, Faculty of Public Health, Mahidol University, Bangkok 10400, Thailand.
Phone: 0-2354-8536
E-mail: phsnt@mahidol.ac.th

health status of Thai elderly in 4 regions in 2005-2006, a survey conducted in four regions of the country by the Institute of Geriatric Medicine, Department of Medicine[5], revealed that depression, anxiety and desperation were the mental challenges found in most senior citizens. This finding was in accordance with the Thai Mental Health Survey in 2009[6], which showed that the mental health score among citizens in this group was 32.9 points. This was the lowest overall score when compared with other age groups.

Songkhla is a province with an aging population. Data on the registered population classified by age groups and sex from 2000-2009[7] showed that in 2004, the number of seniors constituted 10.05% of the total population in the province, whereas in 2007, this number reached 10.50% and further increased to 13.78% in 2010. At present, Songkhla has dramatically changed from a traditional society to a more modernized one due to the Fifth National Economic and Social Development Plan which had pushed Songkhla to become the center province of the South[8]. Also, the political unrest situation in the three southern provinces which has been ongoing since 2004 brings about mental health problems in many groups of people[9]. This condition has especially affected the elderly people in four districts of Songkhla with borders close to Pattani and Yala. These districts are Thepha, Na Thawi, Chana and Saba Yoi. In addition, there has been no study directly focusing on the mental health of the elderly in Songkhla, Thailand. Thus, the present study aimed to explore the mental health and factors influencing mental health problems with the elderly. The finding is expected to be beneficial for concerned agencies to formulate prevention plans and mental health promotion for those affected in order to help them live with greater feelings of happiness.

Material and Method

A cross sectional study was conducted in Songkhla, Thailand. The data were collected through a structured interview from February 22nd to March 22nd, 2011. The subjects were 250 elderly people aged 60-94 who live in Songkhla and have no problems related to hearing and communication. Moreover, the subjects help themselves through daily activities and do not have any severe illnesses. They were selected using multi-stage random sampling from Mueang Songkhla District, Khlong Hoi Khong District, Sathing Phra District and Na Thawi District. The four districts in Songkhla were selected randomly. Then, one Sub-district was randomly selected from each of the selected districts. Eight villages were then selected randomly from these four sub-districts, *i.e.* two from each. The 250 households with elderly were then randomly selected and one senior person was also randomly selected as a representative for each household.

The research instrument was divided into seven parts: Part I included questions developed by the researchers to elicit information regarding the statistical information of participants such as gender, age, occupation, educational attainment, marital status, religion, physical health status, type of family and family earnings. Part II contained questions about self-esteem based on the concept of self-esteem by Coppersmith S[10]; the 21 multiple choice questions were used to place the subjects in two categories. A score of 80% or greater was deemed to be high level, while scores of 79% or less were deemed as being low level. Part III covered 15 family relationship questions developed from a family relationship evaluation form by Nanthamongkolchai S et al[11] and again subject attained either a high score, or a low score. Part IV covered 16 social support questions modified from a social support evaluation form by Nanthamongkolchai S et al[11] based upon the social support concept of Cobb S[12] and Schaefer C et al[13]. Again, social support was scored as either high or low. Part V was composed of 10 questions to determine either a high or low level of social activity at which the subject participated and was based on a concept by Lemon BW et al[14]. Part VI was composed of 7 questions related to perception towards unrest in the southern areas and these were generated by the researcher, again classifying responses as either low level or high level. Part VII contained 28 questions related to mental health of the elderly, based upon the Thai GHQ-28 evaluation form. The subjects were then classified as having either good or poor mental health, according to the standard criteria established by Nilchaikovit T et al[15].

The interview questionnaire was examined by three experts for content validity. Reliability was accomplished through a pilot study among 35 elderly people with similar characteristics to those of the present study population. The results were analyzed for reliability by using Cronbach's Alpha Coefficient. The reliability values of the questionnaire were as follows: self-esteem = 0.73, family relationship = 0.80, social support = 0.78, social activity participation = 0.87, perception regarding the insurgency in southern areas = 0.72 and mental health = 0.81.

Data was analyzed by frequency, percentage, mean and standard deviation and was employed for

developing the overview narrative. Data analyzed utilizing multiple logistic regression was employed to determine factors influencing mental health of the elderly. A p-value of less than 0.05 was considered statistically significant.

Ethical consideration

The research proposal was reviewed and approved by the Ethics Committee for Human Research, Faculty of Public Health, Mahidol University, Bangkok Thailand: Ref. No. MUPH 2011-097.

Results
Statistical information regarding the elderly

The finding revealed that 66.4% were females, 47.6% were aged between 60-69 years, with an average age of 70.67 years. 62.0% were still working. Most of them finished primary school (78.4%), 55.6% were married and almost all (91.6%) were Buddhist. 86.4% reported having good physical health status. More than half (57.6%) had chronic diseases and 74.4% had high levels of self-esteem. About 52.0% lived with their extended family, 79.6% had good family relationships, 79.2% had sufficient monthly income for the family, 58.4% had low levels of social support, 82.4% had low levels of participation in social activities, 56.8% were not a member of a civic or social group and almost all (98.4%) had a low level of perception concerning the political unrest in the three southern provinces (Table 1).

Mental health of the elderly

Most seniors (79.2%) in Songkhla had good mental health while 20.8% had poor mental health (Table 2).

Factors influencing mental health

When analyzing the factors influencing mental health using multiple logistic regression, it was found that age, physical health status, presence of chronic diseases, family relationships and membership in civic or social groups had an influence on mental health of the seniors at a statistically significant level (p-value < 0.05). Those aged 60-79 years old were more likely to have 2.9 times better mental health than those aged 80-94 years. Those who reported good physical health were 6.5 times more likely to also report good mental health than those reporting poor physical health. Seniors with no chronic diseases were more likely to have 3.5 times better mental health than those who reported having chronic diseases. Those reporting

good family relationships were 4.9 times more likely to have good mental health than those reporting having a poor family relationship. Moreover, seniors who were members of civic or social clubs and related activities were 2.4 times more likely to have good mental health over those who did not participate in such events or organizations.

Sex, occupation, education, marital status, self-esteem, family type, sufficient family earnings, social support, social activities and a perception of unrest in the three southern provinces were factors that had no influence upon the mental health of the seniors surveyed (Table 3).

Discussion

The results showed that 79.2% of the elderly had good mental health while 20.8% had poor mental health. It might be because of these people (84.4%) on the younger end of the survey population (60-79 years old), still had enough physical condition which enabled them to help themselves in daily activities. Additionally, it was found that 54.8% of them felt that they are of value to others and 92.4% were happy with daily activities. These reasons greatly contributed to their sense of overall happiness. The finding was inconsistent with the present study by Sitthisran T and Naruthum C[16], who found that 91.1% of Thai elderly in the Kamphaeng Saen Hospital Elderly Club had good mental health while 8.1% had moderate mental health.

The findings revealed that age directly influenced the mental health of the elderly in Songkhla Province at a statistically significant level. As people get older and their bodies begin to degenerate, their social status also declines. According to Age Level Theory, an individual's role, rights and authority might change when he or she gets older. If the elderly cannot adjust themselves to cope with the new situation, they might face poor mental health. This was similar to a study by Aghamolaei T et al[17] who found that age was a factor influencing the quality of life among older people in Iran. The present study found that as the elderly, aged 75 years, were more likely to face diminished quality in both terms of physical and mental health, than those aged from 60-75 years. Another factor influencing the mental health of the elderly was the status of their physical health. The elderly who had good physical health were more likely to have good mental health. This finding was consistent with Sitthisran T and Naruthum C[16], who found that the status of physical health was related to mental health in all aspects of the elderly. The same point was found

Table 1. Number and percentage by statistical information (n = 250)

Characteristics	n	%
Sex		
Male	84	33.6
Female	166	66.4
Age (year)		
60-69	119	47.6
70-79	92	36.8
80-94	39	15.6
Mean = 70.68, Median = 70.00, SD = 7.61, MIN = 60.00, MAX = 94.00		
Occupation		
No	95	38.0
Yes	155	62.0
Education		
Uneducated	42	16.8
Primary school	196	78.4
Secondary school or higher	12	4.8
Marital Status		
Married	139	55.6
Single	8	3.2
Widow/Divorced	103	41.2
Religion		
Buddhism	229	91.6
Islam	21	8.4
Physical health status		
Good	216	86.4
Poor	34	13.6
Present of chronic diseases		
No	106	42.4
Yes	144	57.6
Self-esteem		
Low (21-49)	64	25.6
High (50-63)	186	74.4
Family type		
Nuclear	120	48.0
Extended	130	52.0
Family relationship		
Poor (15-35)	51	20.4
Good (36-45)	199	79.6
The sufficiency of family income		
Sufficient	198	79.2
Insufficient	52	20.8
Social support		
Low (16-37)	146	58.4
High (38-48)	104	41.6
Participation in social activities		
Low (10-23)	206	82.4
High (24-30)	44	17.6
Membership in civic or social groups		
Yes	108	43.2
No	142	56.8
Perception of unrest in the 3 southern provinces		
Low (7-12)	246	98.4
High (17-21)	4	1.6

Table 2. Number and percentage of mental health status (n = 250)

Mental health	n	%
Good mental health	198	79.2
Poor mental health	52	20.8

in a study of Bishop AJ et al[18], where it was mentioned that one's health condition was directly related with happiness in United States of America, as poor physical health led to a low level of happiness. A study of Garatachea N et al[19] showed that health conditions positively related with the well-being of the elderly, especially those who were in good physical health and thus more likely to have a high level of well-being. In terms of chronic diseases, it was found that seniors who had no chronic diseases were more likely to have better mental health. It might be that when the elderly face chronic diseases, they tend to have emotional problems including feelings of inconvenience, annoyance, stress, despair and fear of being a burden. Dealing with problems of this nature can cause anyone to experience feelings such as these[20]. Furthermore, this finding was also in accordance with a study of Aghamolaei T et al[17] who found that chronic diseases faced by seniors led to a low quality of life condition in Iran because those with chronic diseases had lower physical and mental health than those who were healthy.

Moreover, family relationships significantly influenced the mental health of senior citizens. Good care and family support helped seniors feel more comfortable and happy and this finding is implicit from the study result that indicated 84.8% of those families feeling family warmth led the entire family to be happy. This finding was congruent with the present study of Sitthisran T and Naruthum C[16] who found that family relationships were related to the mental health of the elderly in all aspects. Also, a study of Phillips DR[21], who found that family relationships related to life satisfaction among female elderly persons in Hong Kong. The same was true in Nanthamongkolchai S et al[22], where it was found that family relationships influenced life happiness among female elderly people. The last factor influencing the mental health of the elderly was being a member of a civic or social group or club. The present study found that more than half of the elderly (52.4%) were not a members of a elderly club or social group. Those who joined in a club or social group tended to be happier because they could meet their friends as well as share valuable experiences and join in interesting activities. Also, those who joined clubs or social groups were more likely to have a chance to attend patterned activities. A theory of Lemon BW et al[14] revealed that levels of patterned activities and activity participation directly related to mental well-being. The more activities they joined means that the more mental well-being they had. Thus, it could be concluded that those who joined in clubs or social groups were more likely to have good mental health.

Perception of political unrest in the three southern provinces was not influence on the mental health of seniors because almost all of them (98.4%) in Songkhla had a low level of perception about the troubles. They were happy with their everyday life because there were no acts of violence or unrest in the area in which they lived. This was also because the areas studied had not experienced any of the political unrest that others in the region had.

From the result of the present study, there are recommendations for responsible organizations at a provincial level that indicate they should promote good mental health among the elderly through the promotion of good family relationships, encouraging seniors to become active in social activities. Programs promoting good mental health should be instituted at the local level for the benefit of all.

Acknowledgement

Potential conflicts of interest

None.

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Table 3. Factors influencing the mental health (n = 250)

Factors	B	OR	95% CI	p-value
Predisposing factors				
Sex				
Female		1		
Male	-0.244	1.28	(0.53-3.06)	0.584
Age (year)				
80 and over		1		
60-79	1.055	2.88	(1.01-8.18)	0.048*
Occupation				
No		1		
Yes	-0.548	0.58	(0.23-1.44)	0.238
Education				
Uneducated		1		
Primary school level or higher	-0.428	0.65	(0.22-1.91)	0.435
Marital status				
Single/Widow/Divorced		1		
Married	-0.608	0.55	(0.23-1.27)	0.160
Physical health status				
Poor		1		
Good	1.872	6.50	(2.33-17.10)	< 0.001*
Present of chronic diseases				
Yes		1		
No	1.247	3.48	(1.42-8.52)	0.006*
Self-esteem				
Low		1		
High	0.414	1.51	(0.60-3.81)	0.379
Enabling factors				
Family type				
Extended		1		
Nuclear	-0.582	0.56	(0.26-1.21)	0.140
Family relationship				
Poor		1		
Good	1.587	4.89	(1.92-12.47)	0.001*
The sufficient of family income				
Insufficient		1		
Sufficient	0.177	1.19	(0.46-3.13)	0.719
Reinforcing factors				
Social support				
Low				
High	0.503	1.65	(0.62-4.39)	0.312
Participation in social activities				
Low		1		
High	-0.114	0.89	(0.23-3.49)	0.870
Membership in civic or social group				
No		1		
Yes	0.867	2.38	(1.00-5.66)	0.049*
Perception of unrest in the 3 southern provinces				
Low		1		
High	-0.838	0.43	(0.03-6.60)	0.547

Mental health of the elderly: poor mental health = 0, good mental health = 1
*p-value < 0.05, B = Coefficient, OR = Odds Ratio, 1 = reference group

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ปัจจัยที่มีอิทธิพลต่อสุขภาพจิตของผู้สูงอายุในจังหวัดสงขลา

สุตตมา สุวรรณมณี, สุธรรม นันทมงคลชัย, โชคชัย หมั่นแสวงทรัพย์, พิมพ์สุรางค์ เตชะบุญเสริมศักดิ์

วัตถุประสงค์: เพื่อศึกษาปัจจัยที่มีอิทธิพลต่อสุขภาพจิตของผู้สูงอายุในจังหวัดสงขลา ประเทศไทย

วัสดุและวิธีการ: เป็นการศึกษาเชิงสำรวจภาคตัดขวาง เก็บข้อมูลโดยการสัมภาษณ์ผู้สูงอายุระหว่างวันที่ 22 กุมภาพันธ์ ถึง 22 มีนาคม พ.ศ. 2554 กลุ่มตัวอย่างคือผู้สูงอายุที่มีอายุตั้งแต่ 60-94 ปี จำนวน 250 คน ได้จากการสุ่ม ตัวอย่างแบบหลายขั้นตอน วิเคราะห์ข้อมูลโดยใช้ความถี่ร้อยละ และการวิเคราะห์ถดถอยแบบ โลจีสติก

ผลการศึกษา: ผู้สูงอายุมีสุขภาพจิตดี ร้อยละ 79.2 และสุขภาพจิตไม่ดี ร้อยละ 20.8 ปัจจัยที่มีอิทธิพลต่อสุขภาพจิต ของผู้สูงอายุ ได้แก่ อายุ ภาวะสุขภาพทางกาย โรคประจำตัวเรื้อรัง สัมพันธภาพในครอบครัว และการเป็นสมาชิกชมรม หรือกลุ่มทางสังคม โดยผู้สูงอายุ อายุ 60-79 ปี มีโอกาสที่จะมีสุขภาพจิตดีเป็น 2.9 เท่า ของผู้สูงอายุที่มีอายุ 80 ปี ขึ้นไป ผู้สูงอายุที่มีสุขภาพทางกายในระดับดีมีโอกาสที่จะมีสุขภาพจิตดี คิดเป็น 6.5 เท่าของผู้สูงอายุที่มีสุขภาพทางกาย ในระดับไม่ดี ผู้สูงอายุที่ไม่มีโรคประจำตัวเรื้อรัง มีโอกาสที่จะมีสุขภาพจิตดี 3.5 เท่า เมื่อเทียบกับผู้สูงอายุที่มี โรคประจำตัวเรื้อรัง ผู้สูงอายุที่มีสัมพันธภาพในครอบครัวดี มีโอกาสที่จะมีสุขภาพจิตดีเป็น 4.9 เท่าของผู้สูงอายุ ที่มีสัมพันธภาพในครอบครัวไม่ดี และผู้สูงอายุที่เป็นสมาชิกชมรมและเข้าร่วมกิจกรรมของทางชมรม มีโอกาส ที่จะมีสุขภาพจิตดี คิดเป็น 2.4 เท่าเมื่อเทียบกับผู้สูงอายุที่ไม่เป็นสมาชิกชมรมหรือไม่ได้เข้าร่วมกิจกรรมของทางชมรม

สรุป: ปัจจัยที่มีอิทธิพลต่อสุขภาพจิตของผู้สูงอายุ ได้แก่ อายุ ภาวะสุขภาพทางกาย โรคประจำตัวเรื้อรังสัมพันธภาพ ในครอบครัว และการเป็นสมาชิกชมรมหรือกลุ่มทางสังคมดังนั้น หน่วยงานที่รับผิดชอบควรส่งเสริม สุขภาพจิตของผู้สูงอายุ โดยเน้นการสร้างเสริมสัมพันธภาพในครอบครัว และรณรงค์ให้ผู้สูงอายุมีส่วนร่วม ในการทำกิจกรรมทางสังคมต่างๆ รวมถึงสนับสนุนให้ผู้สูงอายุเข้าร่วมเป็นสมาชิกของทางชมรมหรือกลุ่มทางสังคม