

# FACTORS INFLUENCING QUALITY OF LIFE OF ELDERS IN CHIANG KHWAN DISTRICT, ROI-ET PROVINCE, THAILAND

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**ABSTRACT:** This descriptive research was the study about general population attributes in elders in Chiang Khwan district, Roi-Et province, Thailand: basic needs of life, social and environmental factors, health factors towards the level of quality of life in 400 elders, 60 years old and above having their names registered at Chiang Khwan district and currently living in Chiang Khwan district. The research was conducted by using systematic random sampling and face-to-face questionnaire with a reliability value of 0.80. The period of data collection was from June – July 2010. Data analysis employed frequency, percentage, means, standard deviation, as well as chi-square test to investigate the relationship among studied variables. The research result showed that there were more females (60%) than males (40%) with an average age of 68 years. The minimum age was 60 years and the maximum age 91 years. 60.2 percent of the samples were married. Their average income was 3,221.75 baht per month. 56.2 percent were working in the agricultural sector. Regarding food, 56.0 percent of them still ate uncooked food. 93.0 percent of them were living in stable houses built for more than 5 years ago. For their clothing, 84.0 percent of them had sufficient clothes to wear for each season. For healthcare, 81.5 percent of them have to received their initial treatment at available health station. 84.5 percent were satisfied with the service provided by the public health officers. 88.5 percent of them caught up news on television. 62.0 percent were involved in community activities during important religious ceremonies. As for health aspect, 74.5 percent were not sick and 66.2 percent had no personal infirmity. Regarding the level of life quality, physical and mental aspects were considered normal while social and environmental aspects were good. The overall level of life quality was good. With statistical significance at 0.05, it was found that factors influencing elders' quality of life were gender ( $p$ -value = 0.050), age ( $p$ -value = 0.019), still working ( $p$ -value = 0.003), suitability of work with their ages ( $p$ -value = 0.022), clothing ( $p$ -value = 0.001), healthcare ( $p$ -value = 0.001), general health ( $p$ -value = 0.001); involvement in the community ( $p$ -value = 0.001). In the future, there should be more studies on the impact of elders' lifestyle on their health conditions, both physical and mental aspects, and on important diseases that may affect elders.

**Keywords:** Quality of life, Elders, Chiang Khwan District, Roi-Et province, Thailand

## INTRODUCTION

The advancement of science and technology, especially in medical science and public health, has significantly changed and improved Thai people's health. As a result of the development of the public health plan according to Thailand National Economic and Social Development Plan [1], the average life expectancy of the Thai people has increased. The average life expectancy of Thai males and Thai females has increased to 70.1 years and 75.2 years respectively. Due to the change in population structure, the number of elders who are 60 years old and above has and will be increased significantly and continuously. The proportion of elderly population in Thailand increased 10.56 percent from 9.43 percent. The proportion in 2000 was 19.99 percent in 2025 [2], it is then necessary to prepare and find approaches to support this aging population, including Thailand.

Roi-Et province in northeastern Thailand has a total population of 1,307,212 with 144,651 elders. The average age for male elders and female elders was 69.07 years and 74.31 years respectively. In the province, there are 231 health stations, three private hospitals, and His Majesty King Buddha Yod Fa Chulalok Army Camp Hospital [3]. During 2007 – 2009, the number of elders has increased by 9,965 people and there were 13,577 more female elders than male elders in 2009. Chiang Khwan, a district of Roi-Et Province, is currently the coordinating and information center for the other seven health stations locating in the district. Chiang Khwan's elder population kept on increasing steadily by more than 3,000 in 2009. The researcher wanted to explore the elders' quality of life in the district by focusing on a variety of variables to investigate the factors influencing their quality of life.

The objectives of this research were to study general population attributes (gender, age, marital status, income and sufficiency of saving, occupation, suitability of work with their ages, and status within the community); basic needs of life (food, dwelling,

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clothing and healthcare); social and environmental factors (information awareness, relationship and involvement with the community); health factors (medical history, personal illnesses, medical record and general health condition) towards the elders' level of quality of life within the community as well as to investigate the factors influencing elders' life quality in Chiang Khwan district, Roi-Et province, Thailand.

## MATERIALS AND METHODS

### Population

The elders aged 60 and above living in Chiang Khwan district was the targeted population. Data collection was from June to July 2010. The sample size formula in use was;

$$n = \frac{N}{1 + Ne^2}$$

by using the systematic random sampling method and TaroYamane formula [4], the total number of 3,331 elders in Chiang Khwan District yielded a sample size of 359 persons, with a round up of 400 persons. The inclusion criteria were elders aged 60 and above, both male and female, living in Chiang Khwan District for at least 6 months; with no difficulty in speaking, listening and memorizing, understanding Thai language, no physical or mental disabilities, and not receiving medical treatment in any medical centers, willing to participate in the study.

### Research tools

Face-to-face questionnaire in use had a reliability value with Cronbach's Alpha Coefficient at 0.80 and had a validity test by three experts. The pilot test of the questionnaire was used with 150 elders living in Changharn district, Roi-Et province. Changharn district had many factors similar to Chiang Khwan district. As for the details of the questionnaire, there were items on general attributes (8), basic needs of life (12), social and environmental factors (10), general health factors (15) and quality of life, items from the World Health Organization (26) [5].

### Data analysis

SPSS program version 17 licensed for Chulalongkorn University was employed. Descriptive statistics was used with the chi-square test for an investigation of the relationship among studied variables.

## RESULTS

The research result showed that there were more females (60%) than males (40%) with an average age of 68.7 years. The minimum age was 60 years and the maximum age was 91 years. Among 60.2 percent of the samples were married. Their average

income was 3,221.75 baht per month, 56.2 percent were working in the agricultural sector. Regarding food, 56.0 percent of them still ate uncooked food. Over 93.0 percent of them were living in stable houses built for more than 5 years ago. For their clothing, 84.0 percent of them had sufficient clothes to wear for each season. For healthcare, 81.5 percent of them have received their initial treatment at available health station. In addition, 84.5 percent were satisfied with the service provided by the public health officers. 88.5 percent of them caught up news on television. As for health aspect, 74.5 percent were not sick and 66.2 percent of them had no personal infirmity. Items on the elders' quality of life by World Health Organization indicated that elders were satisfied with their present dwellings ( $\bar{X} = 4.23$ , S.D. = 0.89); assistance from neighbors ( $\bar{X} = 4.06$ , S.D. = 0.82); sense of self-esteem and meaning in life ( $\bar{X} = 4.13$ , S.D. = 0.94) and getting sufficient sleep ( $\bar{X} = 3.69$ , S.D. = 0.90). However, they had low satisfaction of their sexual relationship ( $\bar{X} = 2.07$ , S.D. = 1.23). When considering the three criteria of World Health Organization, it was found that the scores obtained for quality of life of elders were higher than 61 points. Hence, only two comparison criteria were applicable. Overall, the level of quality of life of elders was high. With statistical significance at 0.05, it was found that factors influencing elders' quality of life were gender ( $p$ -value = 0.050), age ( $p$ -value = 0.019), still working ( $p$ -value = 0.003), suitability of work with their ages ( $p$ -value = 0.022), clothing ( $p$ -value = 0.001), healthcare ( $p$ -value = 0.001), general health ( $p$ -value = 0.001), Table 1.

## DISCUSSION

The United Nation prescribes that elders are persons aged 60 and above, both male and female. They are divided into two groups which are elders in the early period (between 60 – 69 years old) and elders in the late period (70 years old and above). The result of this research showed that the average age of the sample group was between 60 – 64 years classified as elders in the early period. Most of the elders in Chiang Khwan District felt that their health conditions were good and they had suitable clothing to wear for each season. This helps to maintain their self-esteem, confidence, improvement of their personality as well as enhancement of their quality of life [6].

From their medical history, the elders had good health condition and could conduct their daily routine. This result was consistent with the study of Caffrey [7] which stated that if elders could conduct their daily routines such as walking to temples, participating in community activities, taking bath and changing clothes by themselves, they already had good quality of life. When elders were sick, they were cared for by their family. This was another healthcare factor which could influence

**Table 1** Factors influencing the elders' quality of life in Chiangkhwan district, Roi-Et province, Thailand

Independent variables	Quality of life		Total (%)	$\chi^2$	p-value
	Moderate (%)	High (%)			
Gender				3.840	0.050
Male	70 (43.75)	90 (56.25)	160 (100)		
Female	129 (53.75)	111 (46.25)	240 (100)		
Age (years)				11.769	0.019
60-64	55 (39.01)	86 (60.99)	141 (100)		
65-69	65 (56.03)	51 (43.97)	116 (100)		
70-74	32 (55.17)	26 (44.83)	58 (100)		
75-79	23 (48.94)	24 (51.06)	47 (100)		
Over 80	24 (63.16)	14 (36.84)	38 (100)		
Still working				9.067	0.003
No	102 (58.29)	73 (41.71)	175 (100)		
Yes	97 (43.11)	128 (56.89)	225 (100)		
Physical work				7.639	0.022
Suitable to age	81 (47.09)	91 (52.91)	172 (100)		
Not suitable	33 (40.24)	49 (59.76)	82 (100)		
Does not work	85 (58.22)	61 (41.78)	146 (100)		
Clothes				17.101	0.001
Partly true	47 (73.44)	17 (26.56)	64 (100)		
Extremely true	152 (45.24)	184 (54.76)	336 (100)		
Healthcare				13.627	<0.001
Partly true	24 (82.76)	5 (17.24)	29 (100)		
Extremely true	175 (47.17)	196 (52.83)	371 (100)		
General health				11.335	0.001
Partly true	30 (75.00)	10 (25.00)	40 (100)		
Extremely true	169 (46.94)	191 (53.06)	360 (100)		

\* Statistical significance level of 0.05

quality of life of the elders. This result was in consistent with the study of Boonta [8].

In conclusion, the result of this study among elders living in Chiang Khwan district does not represent the entirety of elders of the Roi-Et province. In general, to allow elders to enjoy a good quality in life, suitable physical, mental, social, and environmental factors may play an important role.

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